1R - 85

REPORTS

DATE:

October '09

PLAINS
PIPELINE, L.P.

November 30, 2009

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

RECEIVED OCD
2009 DEC -9 P 12:54

RE: Plains Pipeline, L.P. Red Byrd Ranch Historical Site
NMOCD Reference # 1RP-1299
Unit Letter H of Section 1, Township 20 South, Range 36 East
Lea County, New Mexico

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached *Remediation Summary and Soil Closure Request*, dated October 2009, for the Red Byrd Ranch Historical site. This site is located in Section 1 of Township 20 South, and Range 36 East of Lea County, New Mexico. This document details the soil remediation activities performed at the site.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry
Remediation Coordinator
Plains Pipeline, L.P.

CC: Larry Johnson, NMOCD, Hobbs Office

Enclosure

Basin Environmental Consulting, LLC

2800 Plains Highway
P. O. Box 381
Lovington, New Mexico 88260
cdstanley@basin-consulting.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY

AND

SOIL CLOSURE REQUEST

PLAINS MARKETING, L.P. (231735)
Red Byrd Ranch Historical
Lea County, New Mexico
Plains SRS # Red Byrd Ranch-TNM Historical
UNIT "H" (SE/NE), Section 01, Township 20 South, Range 36 East
Latitude 32° 36' 12.84" North, Longitude 103° 18' 08.31" West
NMOCD Reference # 1RP-1299

Prepared For:

Plains Marketing, L.P.
333 Clay Street
Suite 1600
Houston, Texas 77002

RECEIVED OCD
2009 DEC -9 P 12:54

Prepared By:
Basin Environmental Consulting, LLC
2800 Plains Highway
Lovington, New Mexico 88260

October 2009

Curt D. Stanley
Project Manager

Camille J. Bryant
Project Manager

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INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Consulting, LLC (Basin), on behalf of Plains Marketing, L.P. (Plains), has prepared this Remediation Summary and Soil Closure Request for the release site known as Red Byrd Ranch Historical (SRS # Red Byrd Ranch-TNM Historical). The legal description of the release site is Unit Letter "H" (SE ¼ NE ¼), Section 01, Township 20 South, Range 36 East, in Lea County, New Mexico. The property affected by the release is owned by Mr. J.R. "Red" Byrd. The release site GPS coordinates are 32° 36' 12.84" North and 103° 18' 08.31" West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map. General site photographs are provided as Appendix A and the Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

On April 24, 2007, Plains reported a historical release of an unknown volume of crude oil from an inactive Plains pipeline. An area of asphaltine attributed to the release measured approximately fifteen (15) feet in width and two hundred eighty (280) feet in length, along the Plains pipeline right-of-way. The Red Byrd Ranch Historical release is located within the confines of the Plains Marketing, L.P. Red Byrd #1 release (NMOCD Reference # 1R-0085)

On November 17, 2008, Plains assigned excavation oversight activities to Basin.

NMOCD SITE CLASSIFICATION

According to data obtained from the New Mexico Office of the State Engineer (NMOSE), one (1) water well is recorded in Section 01 of the above referenced township. According to a depth to groundwater reference map utilized by the New Mexico Oil Conservation Division (NMOCD), groundwater should be encountered at approximately twenty-five (25) feet below ground surface (bgs). During the installation of monitor wells at the Red Byrd #1 site, Plains has encountered groundwater at approximately thirty-one (31) feet bgs. This depth to groundwater results in a score of twenty (20) being assigned to the site based on the New Mexico Oil Conservation Division (NMOCD) depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

There is no surface water body located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

The *Guidelines for Remediation of Leaks, Spills and Releases* (NMOCD, 1993) indicates the Red Byrd Ranch Historical release site has a ranking score of twenty (20). Based on this score, the soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 mg/Kg (ppm)

In May 2008, a previous contractor submitted a *Site Investigation Report* to the NMOCD-Santa Fe Office. The report detailed the remediation efforts to date at the Red Byrd #1 (NMOCD reference #1R-0085) and Red Byrd Ranch Historical release site. The report proposed a closure strategy for the Red Byrd Ranch Historical release site, employing a risk-based closure using a twenty (20) mil polyethylene liner. Following the liner installation, remediated soil exhibiting a TPH concentration less than 1,000 mg/Kg was to be used as backfill material.

On February 18, 2009, Plains received NMOCD approval to commence activities as stated in the *Site Investigation Report,* dated May 2008.

SUMMARY OF FIELD ACTIVITIES

On April 23, 2007, Plains began soil investigation activities at the Red Byrd Ranch Historical site. The pipeline overburden soil was "stripped" by the previous contractor, to allow visual inspection of the pipeline for damage and/or releases. Visual inspection of the pipeline and the surrounding soil indicated a historical release had occurred at the site. On April 25, 2007, Plains representatives submitted Release Notification and Corrective Action to the NMOCD Hobbs District Office. Following the submission of the Release Notification, excavation activities continued. Impacted soil was stockpiled on-site pending final disposition.

On May 30, 2007, the previous contractor collected four (4) excavation sidewall soil samples (PEW, PSEW, PNWW, and PSEW Low) and submitted the soil samples to the laboratory for total petroleum hydrocarbons (TPH) determination by Method SW 846-8015M. The analytical results indicated the TPH concentrations ranged from 5,930 mg/Kg in soil sample PEW to 19,850 mg/Kg in soil sample PNWW. A site and sample location map is provided as Figure 2. A summary of Concentrations of BTEX and TPH in Soil is provided as Table 1 and laboratory analytical reports are provided as Appendix B.

On May 30, 2007, the previous contractor collected two (2) excavation floor soil samples (PBNC and PBE) and submitted the soil samples to the laboratory for TPH determination. The analytical results indicated the TPH concentrations ranged from 7,699 mg/Kg in soil sample PBE to 8,428 mg/Kg in soil sample PBNC.

On June 1, 2007, the previous contractor collected three (3) excavation sidewall soil samples (E Wall E 8", W Wall 3', W Wall 13') and submitted the soil samples to the laboratory for TPH determination. The analytical results indicated the TPH concentrations ranged from less than the laboratory method detection limit (MDL) of 10 mg/Kg in soil sample E Wall E 8" to 5,652 mg/Kg in soil sample W Wall 13'.

On June 1, 2007, the previous contractor collected three (3) excavation floor soil samples (FLR East Exc., Floor Ext Ecs 1 and FLR Ext Ecs 2) and submitted the soil samples to the laboratory for TPH determination. The analytical results indicated the TPH concentrations ranged from 420.6 mg/Kg in soil sample FLR East Exc. to 6,037 mg/Kg in soil sample FLR Ext Ecs 2.

On June 5, 2007, the previous contractor excavated two (2) investigation trenches (T-1 and T-2) to further delineate the horizontal and vertical extent of impact at the site. Trench #1 (T-1) was

excavated to the northwest of the excavation, north of the DCP Midstream (DCP) low pressure gas line. A soil sample (T-1 Bottom @ 10') was collected from the floor of the trench and submitted to the laboratory. The analytical results indicated the TPH concentration was less than the laboratory MDL of 50 mg/Kg. Trench #2 (T-2) was excavated to the south of the excavation, parallel to the Plains pipeline. Soil samples (T-2 WBH @ 8' and T-2 EBH @ 8') were collected from the floor of Trench #2 and submitted to the laboratory. The analytical results indicated the TPH concentration ranged from 3.24 mg/Kg in soil sample T-2 EBH @ 8' to 6.79 mg/Kg in soil sample T-2 WBH @ 8'.

In addition to the trench soil samples, three (3) excavation sidewall samples (PNEW, PSWW and PWW) were collected and submitted to the laboratory. The analytical results indicated TPH concentrations ranged from less than the laboratory MDL of 50 mg/Kg in soil sample PNEW to 3,102 mg/Kg in soil sample PSWW. An excavation floor sample (PBC) was collected and submitted to the laboratory for TPH determination. The analytical results indicated the TPH concentration was 4,520 mg/Kg in soil sample PBC.

Preliminary soil samples (SPE, SPS, SPN, and SPW) were collected from the on-site stockpile. The analytical results indicated TPH concentrations ranged from 189.4 mg/Kg in soil sample SPW to 592.6 mg/Kg in soil sample SPS.

On June 25, 2007, a soil sample (PNW) was collected and submitted to the laboratory. The analytical results indicated the soil sample exhibited a TPH concentration of 3,477 mg/Kg,

On November 28, 2007, Plains advanced six (6) soil borings (SB-1-07, SB-2-07, SB-3-07, SB-4-07, SB-5-07, and SB-6-07) to further delineate the vertical and horizontal extent of impact at the site. Soil boring logs are provided as Appendix C. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo Ionization Detector (PID). Selected soil samples were submitted to the laboratory for determination of concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and TPH using Methods EPA SW-846 8021b and SW-846 8015M, respectively.

Soil boring SB-1-07 was located approximately forty (40) feet south of the excavation and was advanced to a total depth of approximately twenty (20) feet bgs. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL of 0.02 mg/Kg in the soil sample collected at twenty (20) feet bgs. The BTEX concentration was 0.1986 mg/Kg in the soil sample collected at twenty (20) feet bgs. The TPH concentration ranged from less than the laboratory MDL of 50 mg/Kg in the sample collected at ten (10) feet bgs to 864 mg/Kg in the soil sample collected at twenty (20) feet bgs.

Soil boring SB-2-07 was located approximately fifteen (15) feet south of the excavation and was advanced to a total depth of approximately twenty (20) feet bgs. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL of 0.05 mg/Kg in the soil sample collected at twenty (20) feet bgs. The BTEX concentration was 1.307 mg/Kg in the soil sample collected at twenty (20) feet bgs. The TPH concentration ranged from 1.12 mg/Kg in the sample collected at ten (10) feet bgs to 2,426 mg/Kg in the soil sample collected at twenty (20) feet bgs.

Soil boring SB-3-07 was located approximately thirty (30) feet north of the excavation and was advanced to a total depth of approximately twenty-nine (29) feet bgs. The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL of 0.01 mg/Kg in the soil sample collected at twenty-nine (29) feet bgs. The TPH concentration ranged from less than the laboratory MDL of 50 mg/Kg in the sample collected at twenty (20) feet bgs to 163.8 mg/Kg in the soil sample collected at twenty-nine (29) feet bgs.

Soil boring SB-4-07 was located approximately fifty (50) feet north of the excavation and was advanced to a total depth of approximately twenty-nine (29) feet bgs. The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL of 0.01 mg/Kg in the soil sample collected at twenty-nine (29) feet bgs. The TPH concentration was less than the laboratory MDL of 50 mg/Kg in all three (3) soil samples.

Soil boring SB-5-07 was located approximately one hundred (100) feet north of the excavation and was advanced to a total depth of approximately twenty-nine (29) feet bgs. The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL of 0.01 mg/Kg in the soil sample collected at twenty-nine (29) feet bgs. The TPH concentration was less than the laboratory MDL of 50 mg/Kg in all three (3) soil samples.

Soil boring SB-6-07 was located approximately fifty (50) feet east of the excavation and was advanced to a total depth of approximately twenty-nine (29) feet bgs. The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL of 0.01 mg/Kg in the soil sample collected at twenty-nine (29) feet bgs. The TPH concentration was less than the laboratory MDL of 50 mg/Kg in all three (3) soil samples.

In May 2008, a previous contractor submitted a *Site Investigation Report* (Report) to the NMOCD-Santa Fe Office. The report detailed the remediation efforts to date at the Red Byrd #1 (NMOCD reference #1R-0085) and Red Byrd Ranch Historical release site. The report proposed a closure strategy for the Red Byrd Ranch Historical release site, employing a risk-based closure using a twenty (20) mil polyethylene liner. Following the liner installation, remediated soil exhibiting a TPH concentration less than 1,000 mg/Kg was to be used as backfill material.

On December 10, 2008, two (2) baseline stockpile soil samples (E/S Stockpile and W/S Stockpile) were collected and submitted to the laboratory for TPH analysis. The analytical results indicated the E/S Stockpile and W/S Stockpile exhibited TPH concentrations of 631 mg/Kg and 1,244 mg/Kg, respectively.

Based on the analytical results of the baseline stockpile soil samples, blending of the stockpiles began at the site. Following the blending of the stockpiles, soil samples were collected for each approximately 500 cubic yards (cy) of stockpiled soil.

On January 5, 2009, eleven (11) soil samples (Blended Soil-1 through Blended Soil-10 and SP-1) were collected from the blended soil stockpiles. The analytical results indicated nine (9) of the eleven (11) collected soil samples (Blended Soil-3 through Blended Soil-10 and SP-1) exhibited TPH concentrations less than 1,000 mg/Kg, ranging from 23.6 mg/Kg for soil sample Blended

Soil-8 to 771.3 mg/Kg for soil sample Blended Soil-7. The analytical results indicated soil samples Blended Soil-3 through Blended Soil-10 and SP-1 exhibited benzene concentrations less than the laboratory MDL of 0.0011 mg/Kg. The analytical results indicated soil samples Blended Soil-3 through Blended Soil -10 and SP-1 exhibited BTEX concentrations ranging from less than the laboratory MDL of 0.0022 mg/Kg in soil sample Blended Soil-8 to 0.0267 mg/Kg in soil sample Blended Soil-4.

Based on the analytical results of the January 5, 2009 sampling event, soil represented by samples Blended Soil-3 through Blended Soil-10 and SP-1 was deemed suitable as backfill material. Soil represented by soil samples Blended Soil-1 and Blended Soil-2 exhibited TPH concentrations ranging from 1,108.2 mg/Kg in Blended Soil-2 to 1,244.5 mg/Kg in soil sample Blended Soil-1. Based on the analytical results soil represented by soil samples Blended Soil-1 and Blended Soil-2 was reblended.

On January 14, 2009, three (3) stockpile soil samples (SP-2, SP-3 and SP-4) were collected and submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL in all three (3) soil samples. The laboratory analytical results indicated BTEX concentrations ranged from 0.0051 mg/Kg in soil sample SP-2 to 0.0694 mg/Kg in soil sample SP-4. The laboratory analytical results indicated TPH concentrations ranged from 256 mg/Kg in soil sample SP-2 to 1,123 mg/Kg in soil sample SP-3.

Based on the analytical results of the January 14, 2009 stockpile sampling event, soil represented by sample SP-2 was deemed suitable as backfill material and stockpiled. Soil represented by soil samples SP-3 and SP-4 exhibited TPH concentrations 1,123 mg/Kg and 1,017 mg/Kg, respectively. Based on the analytical results, soil represented by soil samples SP-3 and SP-4 was reblended.

On January 14, 2009, six (6) excavation sidewall soil samples (NSW 1A, NSW 1B, WSW 1A, SSW 1A, SSW 1B and SSW 1C) were collected and submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory MDL in all six (6) soil samples. The laboratory analytical results indicated BTEX concentrations ranged from less than the appropriate laboratory MDL to 22.261 mg/Kg in soil sample WSW 1A. The laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL of 17.6 mg/Kg and 15.9 mg/Kg in soil samples SSW 1A and SSW 1C to 12,630 mg/Kg in soil sample NSW 1A. Based on the analytical results of the January 14, 2009 sidewall sampling event, additional excavation was required in areas represented by soil samples NSW 1A, WSW 1A and SSW 1B.

On January 26, 2009, ten (10) blended stockpile soil samples (Blended-11 through Blended-20) were collected and submitted to the laboratory. The laboratory analytical results indicated TPH concentrations ranged from 418.4 mg/Kg in soil sample Blended-13 to 2,510 mg/Kg in soil sample Blended-15.

Based on the analytical results of the January 26, 2009 stockpile sampling event, soil represented by soil samples Blended-12, Blended-13 and Blended-20 was deemed suitable as backfill material and stockpiled for use as backfill. The three (3) soil samples deem suitable for backfill

were analyzed for benzene and BTEX constituents. The analytical results indicated benzene concentrations were less than the laboratory MDL of 0.0011 mg/Kg and BTEX constituent concentrations ranged from 0.0929 mg/Kg in soil sample Blended–13 to 0.4293 mg/Kg in soil sample Blended–12.

Soil represented by soil samples Blended-11 and Blended-14 through Blended-19 exhibited TPH concentrations ranging from 1,351 mg/Kg in soil sample Blended–16 to 2,510 mg/Kg in soil sample Blended-15. Based on the analytical results, soil represented by soil samples Blended–11 and Blended-14 through Blended-19 were reblended.

On January 26, 2009, five (5) excavation sidewall soil samples (WSW – 2A, SSW – 2B, SSW – 1D, West Wall 13' A and NSW – 2A) were collected and submitted to the laboratory. The laboratory analytical results indicated TPH concentrations ranged from less than the appropriate laboratory MDL to 424.4 mg/Kg in soil sample WSW–2A. Soil samples exhibiting a TPH concentration less than 100 mg/Kg (SSW – 2B, SSW–1D and West Wall 13' A) were analyzed for benzene and BTEX constituent concentrations. The analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL.

Based on the analytical results of the January 26, 2009 excavation sidewall sampling event, additional excavation was required in areas represented by soil samples WSW – 2A and NSW – 2A.

On February 6, 2009, two (2) excavation sidewall soil samples (NSW – 3A and WSW – 3A) were collected and submitted to the laboratory. The laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL of 17.9 mg/Kg in soil sample WSW–3A to 32.1 mg/Kg in soil sample NSW – 3A. The analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL.

On February 6, 2009, four (4) stockpile soil samples (Blended Soil-1A, Blended Soil-2A, SP–3A and SP–4A) were collected and submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL of 0.0011 mg/Kg in all four (4) soil samples. The laboratory analytical results indicated BTEX concentrations ranged from 0.0103 mg/Kg in soil sample Blended Soil-2A to 0.0859 mg/Kg in soil sample SP-3A. The laboratory analytical results indicated TPH concentrations ranged from 729.5 mg/Kg in soil sample SP-4A to 1,715 mg/Kg in soil sample Blended Soil-1A.

Based on the analytical results of the February 6, 2009 stockpile sampling event, soil represented by soil samples SP-3A and SP-4A was deemed suitable as backfill material and stockpiled. Soil represented by soil samples Blended Soil-1A and Blended Soil-2A exhibited TPH concentrations 1,715 mg/Kg and 1,035.3 mg/Kg, respectively. Based on the analytical results, soil represented by soil samples Blended-1A and Blended-2A was reblended.

On February 18, 2009, Plains received NMOCD approval to commence backfill activities as stated in the *Site Investigation Report,* dated May 2008. Following NMOCD approval soil closure activities commenced. Prior to the NMOCD proposal approval, soil was mechanically

screened and stockpiled for use as pad material above and beneath the twenty (20) mil polyethylene liner.

On February 20, 2009, a four (4) inch diameter PVC casing was installed around monitor well MW-12 casing, the outer casing was designed to protect the monitor well casing from damage during excavation backfill activities. Following the installation of the protective casing the polyethylene liner was installed on the floor of the excavation. A boot was installed on the protective casing and chemically welded to the liner to maintain the impermeable quality of the liner. Following the installation of the liner and placement of the pad material above the liner, backfilling activities commenced.

On March 17, 2009, six (6) stockpile soil samples (Blended-1B, Blended-2B, Blended-11A, Blended-14A, Blended-15A and Blended-16A) were collected and submitted to the laboratory. The laboratory analytical results indicated TPH concentrations ranged from 1,031.3 mg/Kg in soil sample Blended-1B to 2,095 mg/Kg in soil sample Blended-16A.

Based on the analytical results of the March 17, 2009 stockpile sampling event, soil represented by soil samples Blended-1B, Blended-2B, Blended-11A, Blended-14A, Blended-15A and Blended-16A was reblended.

On April 2, 2009, five (5) stockpile soil samples (Blended-1C, Blended-2C, Blended-17A, Blended-18A, and Blended-19A) were collected and submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL of 0.0011 mg/Kg in all five (5) soil samples. The laboratory analytical results indicated BTEX concentrations ranged from less than the laboratory MDL of 0.0021 mg/Kg in soil samples Blended Soil-1C, Blended-2C, Blended-17A and Blended-18A to 0.0064 mg/Kg in soil sample Blended-19A. The laboratory analytical results indicated TPH concentrations ranged from 593.1 mg/Kg in soil sample Blended-1C to 754.0 mg/Kg in soil sample Blended-18A.

Based on the analytical results of the April 2, 2009 stockpile sampling event, soil represented by soil samples Blended-1C, Blended-2C, Blended-17A, Blended-18A, and Blended-19A was deemed suitable as backfill material and stockpiled.

On April 17, 2009, four (4) stockpile soil samples (Blended-11B, Blended-14B, Blended-15B and Blended-16B) were collected and submitted to the laboratory. The laboratory analytical results indicated TPH concentrations ranged from 1,198.2 mg/Kg in soil sample Blended-16B to 1,723 mg/Kg in soil sample Blended-15B.

Based on the analytical results of the April 17, 2009 stockpile sampling event, soil represented by soil samples Blended-11B, Blended-14B, Blended-15B, and Blended-16B was reblended.

On June 24, 2009, two (2) stockpile soil samples (Blended-11C, and Blended-14C) were collected and submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were 0.0011 mg/Kg in soil sample Blended-11C and less than the laboratory MDL of 0.001 mg/Kg in soil sample Blended-14C. BTEX concentrations were 0.0488 mg/Kg in

soil sample Blended-11C and 0.0142 in soil sample Blended-14C. TPH concentrations ranged from 623.3 mg/Kg in soil sample Blended-11C to 943.4 mg/Kg in soil sample Blended-14C.

Based on the analytical results of the June 24, 2009 stockpile sampling event, soil represented by soil samples Blended-11C and Blended-14C was deemed suitable as backfill material and stockpiled.

On August 5, 2009, one (1) stockpile soil sample (Blended-15C) was collected and submitted to the laboratory. The laboratory analytical results indicated the benzene and BTEX concentrations were less than the laboratory MDL of 0.0016 mg/Kg and 0.0033 mg/Kg, respectively and the TPH concentration was 206 mg/Kg.

On August 7, 2009, one (1) stockpile soil sample (Blended-16C) was collected and submitted to the laboratory. The laboratory analytical results indicated the benzene and BTEX concentrations were less than the laboratory MDL of 0.0011 mg/Kg and 0.0021 mg/Kg, respectively and the TPH concentration was 953 mg/Kg.

Based on the analytical results of the August 5 and 7, 2009 stockpile sampling events, soil represented by soil samples Blended-15C and Blended-16C was deemed suitable as backfill material and stockpiled.

Following the backfilling of the site, the site was contoured to fit the surrounding topography and seeded with vegetation acceptable to the landowner.

On September 9, 2009, remediation and restoration activities were completed.

SOIL CLOSURE REQUEST

Based on the analytical results of confirmation soil samples collected from the sidewalls of the excavation and as approved by the NMOCD, Basin recommends Plains provide the NMOCD Santa Fe Office a copy of this Remediation Summary and Soil Closure Request and request the NMOCD grant soil closure to the Red Byrd Ranch Historical release site.

LIMITATIONS

Basin Environmental Consulting, LLC has prepared this Remediation Summary and Soil Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

DISTRIBUTION:

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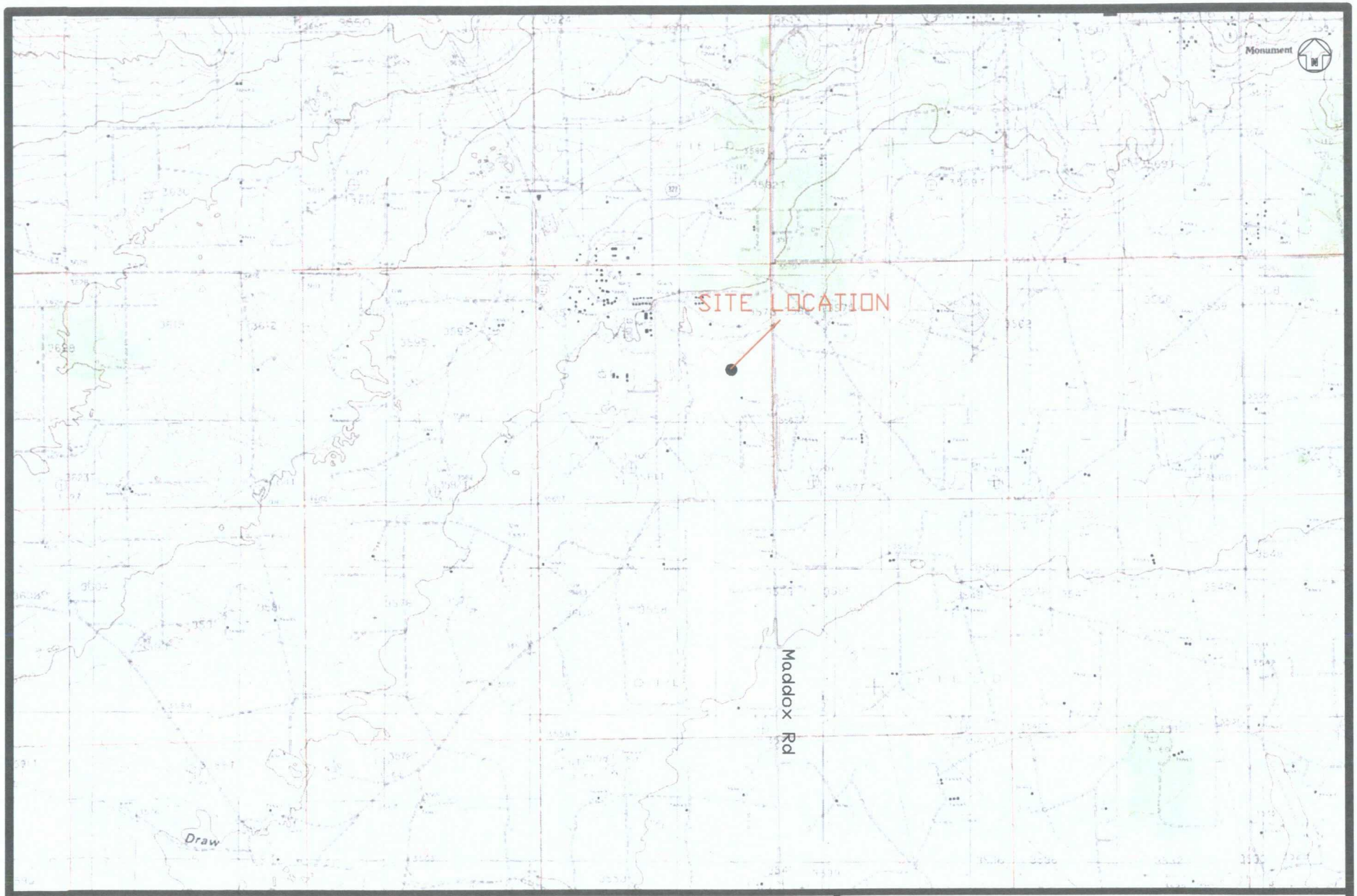
Figures



3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Plains Marketing, L.P.
Red Byrd Ranch Historical
Lea County, New Mexico
SRS: Red Bryd Ranch - TNM Historical
1RP-1299

Basin Environmental Consulting

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

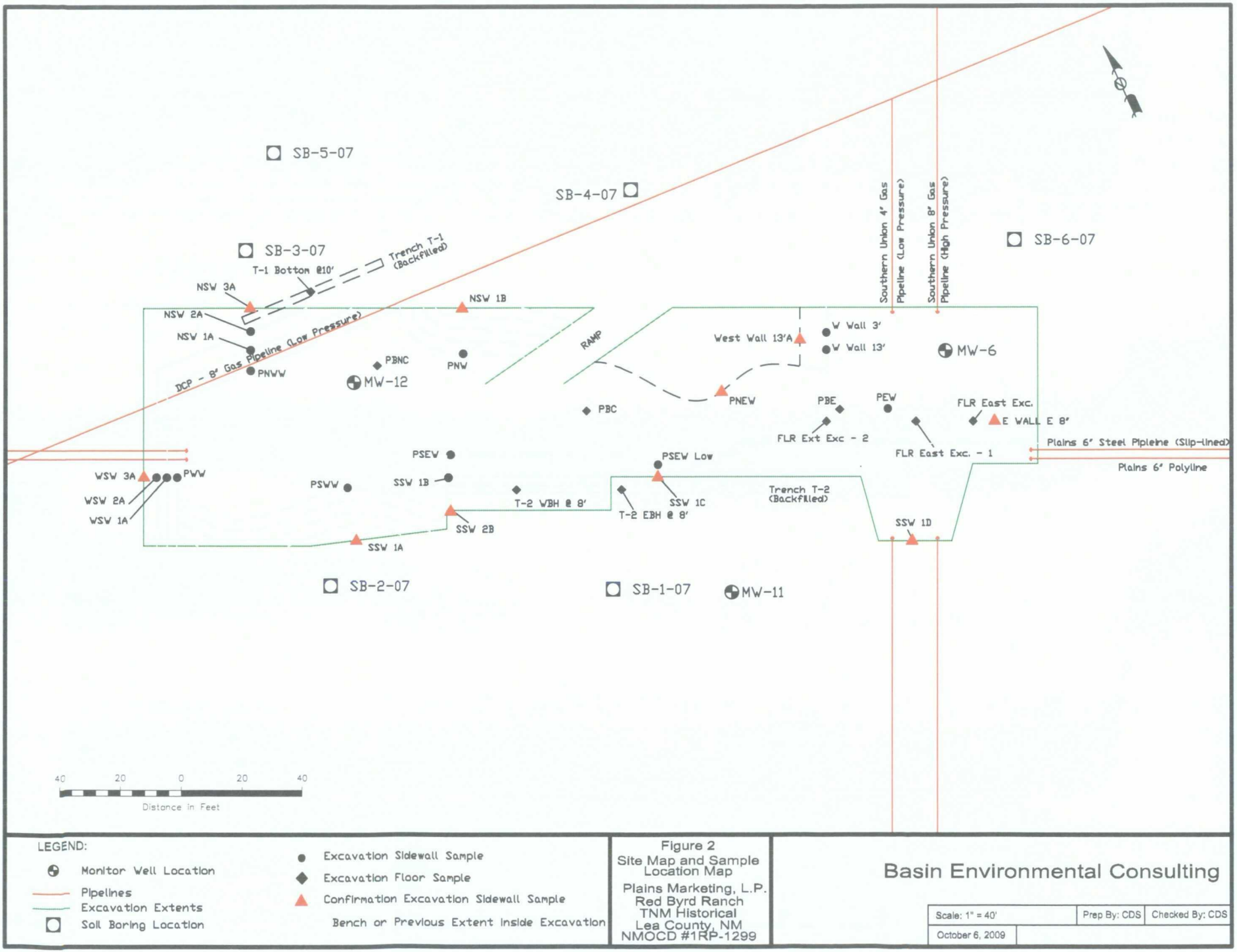


Figure 2
Site Map and Sample Location Map
Plains Marketing, L.P.
Red Byrd Ranch
TNM Historical
Lea County, NM
NMOCD #1RP-1299

Basin Environmental Consulting

Scale: 1" = 40'	Prep By: CDS	Checked By: CDS
October 6, 2009		

Tables

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.
RED BYRD RANCH HISTORICAL
LEA COUNTY, NEW MEXICO
SRS# RED BYRD RANCH TNM HISTORICAL
NMOCD REF. # 1RP-1299

SAMPLE LOCATION	SAMPLE DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M / 8015B			
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)
PEW	17 Feet	05/30/07	In-Situ	-	-	-	-	-	-	1,350	3,580	1,000	5,930
PSEW	16 Feet	05/30/07	Excavated	-	-	-	-	-	-	1,660	8,510	1,060	11,230
PNWW	16 Feet	05/30/07	Excavated	-	-	-	-	-	-	2,890	14,900	2,060	19,850
PBNC	17 Feet	05/30/07	In-Situ	-	-	-	-	-	-	2,270	5,230	928	8,428
PBE	17 Feet	05/30/07	In-Situ	-	-	-	-	-	-	2,370	4,540	789	7,699
PSEW Low	16 Feet	05/30/07	Excavated	-	-	-	-	-	-	1,420	5,150	810	7,380
** E Wall E 8"	8 Inches	06/01/07	In-Situ	-	-	-	-	-	-	<10	<10	<10	<10
FLR East Exc.	17 Feet	06/01/07	In-Situ	-	-	-	-	-	-	80.6	286	54.0	420.6
FLR Ext Ecs 1	17 Feet	06/01/07	In-Situ	-	-	-	-	-	-	1,320	2,590	360	4,270
FLR Ext Ecs 2	17 Feet	06/01/07	In-Situ	-	-	-	-	-	-	1,880	3,710	447	6,037
W Wall 3'	3 Feet	06/01/07	Excavated	-	-	-	-	-	-	12.2	75.6	16.7	104.5
W Wall 13'	13 Feet	06/01/07	Excavated	-	-	-	-	-	-	1,810	3,420	422	5,652
T1Bottom @ 10'	10 Feet	06/05/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
** PNEW	13 Feet	06/05/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
PBC	17 Feet	06/05/07	In-Situ	-	-	-	-	-	-	1,230	3,290	-	4,520
PSWW	13 Feet	06/05/07	Excavated	-	-	-	-	-	-	272	2,830	-	3,102
PWW	13 Feet	06/05/07	Excavated	-	-	-	-	-	-	7.64	183	-	190.64
SPE	-	06/05/07	-	-	-	-	-	-	-	28.2	183	-	211.2
SPS	-	06/05/07	-	-	-	-	-	-	-	66.6	526	-	592.6
SPN	-	06/05/07	-	-	-	-	-	-	-	71.1	489	-	560.1
SPW	-	06/05/07	-	-	-	-	-	-	-	56.4	133	-	189.4
T-2 WBH @8'	8 Feet	06/05/07	Excavated	-	-	-	-	-	-	6.79	<50	-	6.79
T-2 EBH @ 8'	8 Feet	06/05/07	In-Situ	-	-	-	-	-	-	3.24	<50	-	3.24
PNW	13 Feet	06/25/07	Excavated	-	-	-	-	-	-	227	3,250	-	3,477
SB1-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.
RED BYRD RANCH HISTORICAL
LEA COUNTY, NEW MEXICO
SRS# RED BYRD RANCH TNM HISTORICAL
NMOCD REF. # 1RP-1299

SAMPLE LOCATION	SAMPLE DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M / 8015B			
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)
SB1-07-20'	20 Feet	11/28/07	In-Situ	<0.0200	0.0399	0.0926	0.0661		0.1986	104	760	-	864
SB2-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	1.12	<50	-	1.12
SB2-07-20'	20 Feet	11/28/07	In-Situ	<0.0500	0.250	0.249	0.808		1.307	426	2,000	-	2,426
SB3-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	3.09	<50	-	3.09
SB3-07-20'	20 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB3-07-29'	29 Feet	11/28/07	In-Situ	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	11.8	152.0	-	163.8
SB4-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB4-07-20'	20 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB4-07-29'	29 Feet	11/28/07	In-Situ	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<1	<50	-	<50
SB5-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB5-07-20'	20 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB5-07-29'	29 Feet	11/28/07	In-Situ	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<1	<50	-	<50
SB6-07-10'	10 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB6-07-20'	20 Feet	11/28/07	In-Situ	-	-	-	-	-	-	<1	<50	-	<50
SB6-07-29'	29 Feet	11/28/07	In-Situ	<0.0100	<0.0100	<0.0100	<0.0100		<0.0100	<1	<50	-	<50
E/S Stockpile	N/A	12/10/08	Baseline	-	-	-	-	-	-	<89.6	514	117	631
W/S Stockpile	N/A	12/10/08	Baseline	-	-	-	-	-	-	140	927	177	1,244
Blended Soil-1	N/A	01/05/09	Reblended	-	-	-	-	-	-	95.5	958	191	1,244.5
Blended Soil-2	N/A	01/05/09	Reblended	-	-	-	-	-	-	72.2	864	172	1,108.2
Blended Soil-3	N/A	01/05/09	Backfill	<0.0011	<0.0022	0.0035	0.0064	0.0098	0.0197	49.3	374	124	547.3
Blended Soil-4	N/A	01/05/09	Backfill	<0.0011	<0.0022	0.0052	0.008	0.0267	0.0399	64.7	508	104	676.7
Blended Soil-5	N/A	01/05/09	Backfill	<0.0011	<0.0022	0.0018	0.0041	0.0057	0.0116	38.8	350	127	516
Blended Soil-6	N/A	01/05/09	Backfill	<0.0011	<0.0022	<0.0011	<0.0022	0.0012	0.0012	<16.4	59.3	30.4	89.7
Blended Soil-7	N/A	01/05/09	Backfill	<0.0011	<0.0021	0.0027	0.0051	0.0082	0.016	44.3	592	135	771.3
Blended Soil-8	N/A	01/05/09	Backfill	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	23.6	<16.2	23.6
Blended Soil -9	N/A	01/05/09	Backfill	<0.0011	<0.0022	0.0012	0.0073	0.0084	0.0169	29.1	98.3	<16.8	127.4
Blended Soil-10	N/A	01/05/09	Backfill	<0.0011	<0.0022	<0.0011	<0.0022	0.0015	0.0015	28.3	114	<16.4	142.3

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.
RED BYRD RANCH HISTORICAL
LEA COUNTY, NEW MEXICO
SRS# RED BYRD RANCH TNM HISTORICAL
NMOCD REF. # 1RP-1299

SAMPLE LOCATION	SAMPLE DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M / 8015B			
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)
SP-1	N/A	01/05/09	Backfill	<0.0011	0.0176	0.2528	0.042	0.1545	0.4669	147	395	<83.7	542
SP-2	N/A	01/14/09	Backfill	<0.0011	<0.0022	0.0011	<0.0022	0.004	0.0051	38	135	83	256
SP-3	N/A	01/14/09	Reblended	<0.0010	<0.0021	0.0087	0.017	0.0247	0.0504	129	735	259	1,123
SP-4	N/A	01/14/09	Reblended	<0.0011	<0.0021	0.0086	0.0264	0.0344	0.0694	97	761	160	1,017
NSW 1A	17 Feet	01/14/09	Excavated	<0.0010	0.0435	0.0269	0.1214	0.0422	0.234	490	10,100	2,040	12,630
** NSW 1B	17 Feet	01/14/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.8	48	27	75
WSW 1A	17 Feet	01/14/09	Excavated	<0.0512	2.996	2.993	11.86	4.412	22.261	1,480	3500	493	5,473
** SSW 1A	17 Feet	01/14/09	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.6	<17.6	<17.6	<17.6
SSW 1B	17 Feet	01/14/09	Excavated	<0.0514	0.9294	2.237	9.197	2.203	14.5664	2,050	5,260	701	8,011
** SSW 1C	17 Feet	01/14/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.9	<15.9	<15.9	<15.9
Blended -11	N/A	01/26/09	Reblended	-	-	-	-	-	-	507	1,610	172	2,289
Blended -12	N/A	01/26/09	Backfill	<0.0011	0.0259	0.0639	0.269	0.0705	0.4293	166	590	63.2	819.2
Blended -13	N/A	01/26/09	Backfill	<0.0011	<0.0022	0.0124	0.0589	0.0216	0.0929	63.4	312	43	418.4
Blended -14	N/A	01/26/09	Reblended	-	-	-	-	-	-	297	1,220	171	1,688
Blended -15	N/A	01/26/09	Reblended	-	-	-	-	-	-	408	1,840	262	2,510
Blended -16	N/A	01/26/09	Reblended	-	-	-	-	-	-	236	975	140	1,351
Blended -17	N/A	01/26/09	Reblended	-	-	-	-	-	-	546	1,650	289	2,485
Blended -18	N/A	01/26/09	Reblended	-	-	-	-	-	-	521	1,160	162	1,843
Blended -19	N/A	01/26/09	Reblended	-	-	-	-	-	-	320	904	133	1,357
Blended -20	N/A	01/26/09	Backfill	<0.0011	0.0204	0.0323	0.155	0.079	0.2867	89.5	612	97.7	799.2
WSW - 2A	17 Feet	01/26/09	Excavated	-	-	-	-	-	-	41.5	341	41.9	424.4
** SSW - 2B	17 Feet	01/26/09	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2
** SSW - 1D	17 Feet	01/26/09	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.3	<16.3	<16.3	<16.3
** West Wall 13' A	13 Feet	01/26/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1
NSW - 2A	17 Feet	01/26/09	Excavated	-	-	-	-	-	-	<16.2	133.0	<16.2	133
** NSW - 3A	17 Feet	02/06/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	32.1	<15.5	32.1
** WSW - 3A	17 Feet	02/06/09	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.9	<17.9	<17.9	<17.9

TABLE 1

CONCENTRATIONS OF TPH AND BTEX IN SOIL

PLAINS MARKETING, L.P.
RED BYRD RANCH HISTORICAL
LEA COUNTY, NEW MEXICO
SRS# RED BYRD RANCH TNM HISTORICAL
NMOCD REF. # 1RP-1299

SAMPLE LOCATION	SAMPLE DEPTH (BELOW GROUND SURFACE)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M / 8015B			
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)
Blended Soil 1A	N/A	02/06/09	Reblended	<0.0011	<0.0022	0.0104	0.0175	0.0053	0.0332	131	1,370	214	1,715
Blended Soil 2A	N/A	02/06/09	Reblended	<0.0011	<0.0022	0.0029	0.0052	0.0022	0.0103	54.3	831	150	1,035.3
SP - 3A	N/A	02/06/09	Backfill	<0.0011	<0.0021	0.0137	0.0246	0.0476	0.0859	111	718	118	947
SP - 4A	N/A	02/06/09	Backfill	<0.0011	<0.0022	0.0048	0.0078	0.0043	0.0169	67.9	565	96.6	729.5
Blended 1B	N/A	03/17/09	Reblended	-	-	-	-	-	-	99.4	856	75.9	1,031.3
Blended 2B	N/A	03/17/09	Reblended	-	-	-	-	-	-	132	1,370	129	1,631
Blended 11A	N/A	03/17/09	Reblended	-	-	-	-	-	-	193	1,300	102	1,595
Blended 14A	N/A	03/17/09	Reblended	-	-	-	-	-	-	253	1520	114	1887
Blended 15A	N/A	03/17/09	Reblended	-	-	-	-	-	-	235	1,210	84.8	1,529.8
Blended 16A	N/A	03/17/09	Reblended	-	-	-	-	-	-	355	1,620	120	2,095
Blended 1C	N/A	04/02/09	Backfill	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	31.4	481	80.7	593.1
Blended 2C	N/A	04/02/09	Backfill	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	28.7	547	93.5	669.2
Blended 17A	N/A	04/02/09	Backfill	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	36.9	543	126	705.9
Blended 18A	N/A	04/02/09	Backfill	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	31.0	595	128	754
Blended 19A	N/A	04/02/09	Backfill	<0.0011	<0.0021	<0.0011	0.0033	0.0031	0.0064	32.9	514	88.6	635.5
Blended 11B	N/A	04/17/09	Reblended	-	-	-	-	-	-	103	1,180	94.7	1,377.7
Blended 14B	N/A	04/17/09	Reblended	-	-	-	-	-	-	172	1,230	103	1,505
Blended 15B	N/A	04/17/09	Reblended	-	-	-	-	-	-	201	1,400	122	1,723
Blended 16B	N/A	04/17/09	Reblended	-	-	-	-	-	-	106	1,010	82.2	1,198.2
Blended 11C	N/A	06/24/09	Backfill	0.0011	0.0171	0.0063	0.0152	0.0091	0.0488	<15.3	554	69.3	623.3
Blended 14C	N/A	06/24/09	Backfill	<0.0010	0.0062	0.0021	0.0039	0.002	0.0142	18.4	828	97	943.4
Blended 15C	N/A	08/05/09	Backfill	<0.0016	<0.0033	<0.0016	<0.0033	<0.0016	<0.0033	<24.3	178	27.9	206
Blended 16C	N/A	08/07/09	Backfill	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	32.4	841	79.1	953

Appendices

Appendix A
Photographs

Red Byrd Ranch Historical Site prior to remediation activities (Monitor Well MW-12) in photo center

Red Byrd Ranch Historical, Excavation Completed, Pad Sand for liner placed in Excavation (Looking East)

Red Byrd Ranch Historical Liner Installation Completed (Looking East)

Red Byrd Ranch Historical, Chemically Welded Boot to liner

Red Byrd Ranch Historical, Remediation Completed (Looking Northeast)

Red Byrd Ranch Historical, Remediation Completed (Looking North)

Appendix B
Laboratory Reports

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Red Bryd Ranch and Historical

Project Number: SRS# Red Bryd Ranch & Historical

Location: Monumnt, NM

Lab Order Number: 7E31014

Report Date: 06/01/07

Plains All American EH & S	Project: Red Bryd Ranch and Historical	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PEW	7E31014-01	Soil	05/30/07 16:45	05-31-2007 10:20
PSEW	7E31014-02	Soil	05/30/07 16:53	05-31-2007 10:20
PNWW	7E31014-03	Soil	05/30/07 17:00	05-31-2007 10:20
PBNC	7E31014-04	Soil	05/30/07 17:02	05-31-2007 10:20
PBE	7E31014-05	Soil	05/30/07 17:07	05-31-2007 10:20
PSEW Low	7E31014-06	Soil	05/30/07 17:12	05-31-2007 10:20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S	Project: Red Bryd Ranch and Historical	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PEW (7E31014-01) Soil									
Carbon Ranges C6-C12	**1350**	100	mg/kg dry	10	EE73005	05/31/07	05/31/07	EPA 8015M	
Carbon Ranges C12-C28	**3580**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**1000**	100	"	"	"	"	"	"	
Total Hydrocarbons	**5930**	100	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*8.42 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*6.94 %*	*70-130*		"	"	"	"	*S-06*
PSEW (7E31014-02) Soil									
Carbon Ranges C6-C12	**1660**	50.0	mg/kg dry	5	EE73005	05/31/07	06/01/07	EPA 8015M	
Carbon Ranges C12-C28	**8510**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**1060**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**11200**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*18.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*22.8 %*	*70-130*		"	"	"	"	*S-06*
PNWW (7E31014-03) Soil									
Carbon Ranges C6-C12	**2890**	100	mg/kg dry	10	EE73005	05/31/07	06/01/07	EPA 8015M	
Carbon Ranges C12-C28	**14900**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**2060**	100	"	"	"	"	"	"	
Total Hydrocarbons	**19800**	100	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*11.7 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*15.1 %*	*70-130*		"	"	"	"	*S-06*
PBNC (7E31014-04) Soil									
Carbon Ranges C6-C12	**2270**	50.0	mg/kg dry	5	EE73005	05/31/07	06/01/07	EPA 8015M	
Carbon Ranges C12-C28	**5230**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**928**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**8430**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*13.9 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*22.0 %*	*70-130*		"	"	"	"	*S-06*

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PBE (7E31014-05) Soil									
Carbon Ranges C6-C12	**2370**	50.0	mg/kg dry	5	EE73005	05/31/07	06/01/07	EPA 8015M	
Carbon Ranges C12-C28	**4540**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**789**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**7700**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*24.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*21.0 %*	*70-130*		"	"	"	"	*S-06*
PSEW Low (7E31014-06) Soil									
Carbon Ranges C6-C12	**1420**	50.0	mg/kg dry	5	EE73005	05/31/07	06/01/07	EPA 8015M	
Carbon Ranges C12-C28	**5150**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**810**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**7380**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*20.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*24.0 %*	*70-130*		"	"	"	"	*S-06*

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Plains All American EH & S	Project: Red Bryd Ranch and Historical	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PEW (7E31014-01) Soil									
% Moisture	**20.4**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	
PSEW (7E31014-02) Soil									
% Moisture	**1.9**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	
PNWW (7E31014-03) Soil									
% Moisture	**1.8**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	
PBNC (7E31014-04) Soil									
% Moisture	**6.0**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	
PBE (7E31014-05) Soil									
% Moisture	**8.6**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	
PSEW Low (7E31014-06) Soil									
% Moisture	**4.9**	0.1	%	1	EF70108	05/31/07	05/31/07	% calculation	

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE73005 - Solvent Extraction (GC)										
Blank (EE73005-BLK1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*55.8*		*mg/kg*	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.8*		*"*	*50.0*		*104*	*70-130*			
LCS (EE73005-BS1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Carbon Ranges C6-C12	613	10.0	mg/kg wet	500		123	75-125			
Carbon Ranges C12-C28	423	10.0	"	500		84.6	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1040	10.0	"	1000		104	75-125			
Surrogate: 1-Chlorooctane	*64.2*		*mg/kg*	*50.0*		*128*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.2*		*"*	*50.0*		*126*	*70-130*			
Calibration Check (EE73005-CCV1)				Prepared: 05/30/07 Analyzed: 06/01/07						
Carbon Ranges C6-C12	221		mg/kg	250		88.4	80-120			
Carbon Ranges C12-C28	205		"	250		82.0	80-120			
Total Hydrocarbons	426		"	500		85.2	80-120			
Surrogate: 1-Chlorooctane	*63.9*		*"*	*50.0*		*128*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.9*		*"*	*50.0*		*130*	*70-130*			
Matrix Spike (EE73005-MS1)	**Source: 7E31001-01**			Prepared: 05/30/07 Analyzed: 06/01/07						
Carbon Ranges C6-C12	574	10.0	mg/kg dry	510	ND	113	75-125			
Carbon Ranges C12-C28	473	10.0	"	510	ND	92.7	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1050	10.0	"	1020	ND	103	75-125			
Surrogate: 1-Chlorooctane	*56.6*		*mg/kg*	*50.0*		*113*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.3*		*"*	*50.0*		*109*	*70-130*			

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE73005 - Solvent Extraction (GC)										
Matrix Spike Dup (EE73005-MSD1)	**Source: 7E31001-01**			Prepared: 05/30/07 Analyzed: 06/01/07						
Carbon Ranges C6-C12	549	10.0	mg/kg dry	510	ND	108	75-125	4.52	20	
Carbon Ranges C12-C28	416	10.0	"	510	ND	81.6	75-125	12.7	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	965	10.0	"	1020	ND	94.6	75-125	8.50	20	
Surrogate: 1-Chlorooctane	*53.4*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*52.7*		"	*50.0*		*105*	*70-130*			

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Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70108 - General Preparation (Prep)										
Blank (EF70108-BLK1)				Prepared & Analyzed: 05/31/07						
% Solids	100		%							
Duplicate (EF70108-DUP1)	**Source: 7E31001-01**			Prepared & Analyzed: 05/31/07						
% Solids	97.9		%		98.0			0.102	20	
Duplicate (EF70108-DUP2)	**Source: 7E31009-06**			Prepared & Analyzed: 05/31/07						
% Solids	95.6		%		94.7			0.946	20	
Duplicate (EF70108-DUP3)	**Source: 7E31013-01**			Prepared & Analyzed: 05/31/07						
% Solids	89.2		%		89.1			0.112	20	

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1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 6/1/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant
James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

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

Rush

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Todd Choban 238-0061 cell

Company Name: Nova Training, Inc

Company Address: 2057 Commerce Dr

City/State/Zip: Midland Tx 79703

Telephone No: 432-520-7720

Fax No: 520-7701

Sampler Signature: Britton E Byrd

Project Name: Red Bryd Ranch Historic

Project #: RBR TNM Historical

Project Loc: Monument Addex

PO #: RBR TNM Historical

Grd/Dro

24 hr

Analyze For: TCLP: TOTAL:

LAB # (lab use only) 283431 7E31014	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Water	Sludge	Soil	Other (specify):	TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	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.	RUSH TAT (Pre-Schedule)	Standard TAT
01	PEW	5-30-07	4:45	1	X									X		X										X	
02	PSEW	5-30-07	4:53	1	X									X		X											
03	PNWW	5-30-07	5:00	1	X									X		X											
04	PBNC	5-30-07	5:02	1	X									X		X											
05	PBE	5-30-07	5:07	1	X									X		X											
06	PSEW Low	5-30-07	5:12	1	X									X		X											

Special Instructions: Bill to Plains
RBR TNM Historical

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 11.0
Laboratory Comments: 4029455

Call w/ results for verbal
Todd 432 238 0061

Relinquished by:	Date	Time	Received by:	Date	Time
Britton E Byrd	5-31-07	9:20 am	Todd Choban	5-31-07	9:20
Todd Choban	5-31-07	10:20	Received by ELOT: Andrea Lam	5-31-07	10:20

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ent: Nova Training

Date/ Time: 5-31-07 10:20

b ID #: 7E31014

Initials: GL

Sample Receipt Checklist

					Client Initials
	Temperature of container/ cooler?	Yes	No	11.0 °C	
	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
	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		
	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	* TC
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

ontact: _____ Contacted by: _____ Date/ Time: _____

Regarding: #13, Not cold enough

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: Red Bryd Ranch and Historical

Project Number: SRS# Red Bryd Ranch & Historical

Location: None Given

Lab Order Number: 7F01016

Report Date: 06/08/07

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E WALL E 8"	7F01016-01	Soil	06/01/07 13:12	06-01-2007 16:23
FLR East Exc.	7F01016-02	Soil	06/01/07 13:09	06-01-2007 16:23
FLR Ext Ecx.-1	7F01016-03	Soil	06/01/07 13:07	06-01-2007 16:23
FLR Ext Ecx.-2	7F01016-04	Soil	06/01/07 13:03	06-01-2007 16:23
W Wall 3'	7F01016-05	Soil	06/01/07 12:59	06-01-2007 16:23
W Wall 13'	7F01016-06	Soil	06/01/07 12:56	06-01-2007 16:23

Plains All American EH & S	Project: Red Bryd Ranch and Historical	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E WALL E 8" (7F01016-01) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF70515	06/05/07	06/05/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.0 %*	*70-130*		"	"	"	"	
FLR East Exc. (7F01016-02) Soil									
Carbon Ranges C6-C12	**80.6**	10.0	mg/kg dry	1	EF70515	06/05/07	06/05/07	EPA 8015M	
Carbon Ranges C12-C28	**286**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**54.0**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**421**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*104 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*111 %*	*70-130*		"	"	"	"	
FLR Ext Ecx.-1 (7F01016-03) Soil									
Carbon Ranges C6-C12	**1320**	100	mg/kg dry	10	EF70516	06/05/07	06/07/07	EPA 8015M	
Carbon Ranges C12-C28	**2590**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**360**	100	"	"	"	"	"	"	
Total Hydrocarbons	**4270**	100	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*17.5 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*10.6 %*	*70-130*		"	"	"	"	*S-06*
FLR Ext Ecx.-2 (7F01016-04) Soil									
Carbon Ranges C6-C12	**1880**	50.0	mg/kg dry	5	EF70516	06/05/07	06/07/07	EPA 8015M	
Carbon Ranges C12-C28	**3710**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**447**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**6040**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*33.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*24.0 %*	*70-130*		"	"	"	"	*S-06*

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1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W Wall 3' (7F01016-05) Soil									
Carbon Ranges C6-C12	**12.2**	10.0	mg/kg dry	1	EF70516	06/05/07	06/07/07	EPA 8015M	
Carbon Ranges C12-C28	**75.6**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**16.7**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**104**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	
W Wall 13' (7F01016-06) Soil									
Carbon Ranges C6-C12	**1810**	50.0	mg/kg dry	5	EF70516	06/05/07	06/07/07	EPA 8015M	
Carbon Ranges C12-C28	**3420**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**422**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**5650**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*32.0 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*21.6 %*	*70-130*		"	"	"	"	*S-06*

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1301 S. County Road 1150	Project Number: SRS# Red Bryd Ranch & Historical	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E WALL E 8" (7F01016-01) Soil									
% Moisture	**10.4**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	
FLR East Exc. (7F01016-02) Soil									
% Moisture	**8.5**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	
FLR Ext Ecx.-1 (7F01016-03) Soil									
% Moisture	**10.6**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	
FLR Ext Ecx.-2 (7F01016-04) Soil									
% Moisture	**8.1**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	
W Wall 3' (7F01016-05) Soil									
% Moisture	**12.0**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	
W Wall 13' (7F01016-06) Soil									
% Moisture	**7.5**	0.1	%	1	EF70406	06/02/07	06/02/07	% calculation	

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Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70515 - Solvent Extraction (GC)										
Blank (EF70515-BLK1)				Prepared: 06/05/07 Analyzed: 06/07/07						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*46.2*		*mg/kg*	*50.0*		*92.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*43.6*		*"*	*50.0*		*87.2*	*70-130*			
LCS (EF70515-BS1)				Prepared & Analyzed: 06/05/07						
Carbon Ranges C6-C12	585	10.0	mg/kg wet	500		117	75-125			
Carbon Ranges C12-C28	415	10.0	"	500		83.0	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	1000	10.0	"	1000		100	75-125			
Surrogate: 1-Chlorooctane	*46.7*		*mg/kg*	*50.0*		*93.4*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.1*		*"*	*50.0*		*80.2*	*70-130*			
Calibration Check (EF70515-CCV1)				Prepared: 06/05/07 Analyzed: 06/07/07						
Carbon Ranges C6-C12	256		mg/kg	250		102	80-120			
Carbon Ranges C12-C28	203		"	250		81.2	80-120			
Total Hydrocarbons	459		"	500		91.8	80-120			
Surrogate: 1-Chlorooctane	*50.1*		*"*	*50.0*		*100*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.6*		*"*	*50.0*		*99.2*	*70-130*			
Matrix Spike (EF70515-MS1)	**Source: 7F01011-04**			Prepared: 06/05/07 Analyzed: 06/06/07						
Carbon Ranges C6-C12	651	10.0	mg/kg dry	557	ND	117	75-125			
Carbon Ranges C12-C28	454	10.0	"	557	ND	81.5	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1110	10.0	"	1110	ND	100	75-125			
Surrogate: 1-Chlorooctane	*49.9*		*mg/kg*	*50.0*		*99.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.9*		*"*	*50.0*		*83.8*	*70-130*			

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70515 - Solvent Extraction (GC)										
Matrix Spike Dup (EF70515-MSD1)	**Source: 7F01011-04**			Prepared: 06/05/07 Analyzed: 06/06/07						
Carbon Ranges C6-C12	676	10.0	mg/kg dry	557	ND	121	75-125	3.36	20	
Carbon Ranges C12-C28	466	10.0	"	557	ND	83.7	75-125	2.66	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1140	10.0	"	1110	ND	103	75-125	2.96	20	
Surrogate: 1-Chlorooctane	*51.9*		*mg/kg*	*50.0*		*104*	*70-130*			
Surrogate: 1-Chlorooctadecane	*40.0*		*"*	*50.0*		*80.0*	*70-130*			
Batch EF70516 - Solvent Extraction (GC)										
Blank (EF70516-BLK1)				Prepared: 06/05/07 Analyzed: 06/07/07						
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	"							
Carbon Ranges C28-C35	ND	10.0	"							
Total Hydrocarbons	ND	10.0	"							
Surrogate: 1-Chlorooctane	*50.1*		*mg/kg*	*50.0*		*100*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.3*		*"*	*50.0*		*98.6*	*70-130*			
LCS (EF70516-BS1)				Prepared: 06/05/07 Analyzed: 06/07/07						
Carbon Ranges C6-C12	531	10.0	mg/kg wet	500		106	75-125			
Carbon Ranges C12-C28	416	10.0	"	500		83.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	946	10.0	"	1000		94.6	75-125			
Surrogate: 1-Chlorooctane	*54.6*		*mg/kg*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.8*		*"*	*50.0*		*95.6*	*70-130*			
Calibration Check (EF70516-CCV1)				Prepared: 06/05/07 Analyzed: 06/08/07						
Carbon Ranges C6-C12	238		mg/kg wet	250		95.2	80-120			
Carbon Ranges C12-C28	202		"	250		80.8	80-120			
Total Hydrocarbons	440		"	500		88.0	80-120			
Surrogate: 1-Chlorooctane	*50.3*		*mg/kg*	*50.0*		*101*	*70-130*			
Surrogate: 1-Chlorooctadecane	*47.2*		*"*	*50.0*		*94.4*	*70-130*			

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70516 - Solvent Extraction (GC)										
Matrix Spike (EF70516-MS1)	**Source: 7F01016-05**			Prepared: 06/05/07 Analyzed: 06/08/07						
Carbon Ranges C6-C12	603	10.0	mg/kg dry	568	12.2	104	75-125			
Carbon Ranges C12-C28	493	10.0	"	568	75.6	73.5	75-125			M8
Carbon Ranges C28-C35	21.2	10.0	"	0.00	16.7		75-125			
Total Hydrocarbons	1120	10.0	"	1140	104	89.1	75-125			
Surrogate: 1-Chlorooctane	*56.2*		*mg/kg*	*50.0*		*112*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.9*		"	*50.0*		*124*	*70-130*			
Matrix Spike Dup (EF70516-MSD1)	**Source: 7F01016-05**			Prepared: 06/05/07 Analyzed: 06/08/07						
Carbon Ranges C6-C12	576	10.0	mg/kg dry	568	12.2	99.3	75-125	4.62	20	
Carbon Ranges C12-C28	506	10.0	"	568	75.6	75.8	75-125	3.08	20	
Carbon Ranges C28-C35	19.9	10.0	"	0.00	16.7		75-125		20	
Total Hydrocarbons	1100	10.0	"	1140	104	87.4	75-125	1.93	20	
Surrogate: 1-Chlorooctane	*60.8*		*mg/kg*	*50.0*		*122*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.2*		"	*50.0*		*114*	*70-130*			

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70406 - General Preparation (Prep)										
Blank (EF70406-BLK1)				Prepared & Analyzed: 06/02/07						
% Solids	100		%							
Duplicate (EF70406-DUP1)		**Source: 7F01011-01**		Prepared & Analyzed: 06/02/07						
% Solids	90.3		%		91.5			1.32	20	
Duplicate (EF70406-DUP2)		**Source: 7F01016-03**		Prepared & Analyzed: 06/02/07						
% Solids	88.4		%		89.4			1.12	20	

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: Red Bryd Ranch and Historical
Project Number: SRS# Red Bryd Ranch & Historical
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 6/8/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Environmental Lab of Texas

A Xenco Laboratories Company

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: Skip Baca

Company Name: NOVA Safety & Env.

Company Address: 2057 Commerce Dr.

City/State/Zip: Midland, Texas 79703

Telephone No: (432) 425-8329 Fax No:

Sampler Signature: Skip Baca e-mail: jlange@novatraining.cc

Project Name: ~~Red Bird Rch Unit~~ Red Bird Rch Unit

Project #: Red Bird Rch Unit

Project Loc:

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 283588

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	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	Analyze For: TCLP: 8015B	TOTAL: 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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	EWALLE8"			6-1-07	1:12p		1	X								S			X													
02	FLR East Exc.				1:09p		1																									
03	FLR Ext Exc-1				1:07p		1																									
04	FLR Ext Exc-2				1:03p		1																									
05	WWall3'				12:59p		1																									
06	WWall13'				12:56p		1																									

Special Instructions: Verbal Results by Tele

Relinquished by:	Date	Time	Received by:	Date	Time
Skip Baca	6/1/07	4:23p			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: ELOT: Andrea Kern	Date: 6.1.07	Time: 4:23

Laboratory Comments:

Sample Containers Intact? Y N

VOC 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

1029.1455

Temperature Upon Receipt: 1.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 6·1·07 4:23

Lab ID # : 7F01016

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	1.5 °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

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

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

Report Date: June 18, 2007

Work Order: 7060718

Project Location: Monument, NM
Project Name: Red Byrd Ranch - TNM Historical
Project Number: Red Byrd Ranch - TNM Historical

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
126676	T-1 Bottom @ 10'	soil	2007-06-05	14:20	2007-06-07
126677	PNEW	soil	2007-06-06	14:00	2007-06-07
126678	PBC	soil	2007-06-06	14:10	2007-06-07
126679	PSWW	soil	2007-06-06	14:20	2007-06-07
126680	PWW	soil	2007-06-06	14:30	2007-06-07
126681	SPE	soil	2007-06-06	15:05	2007-06-07
126682	SPS	soil	2007-06-06	15:00	2007-06-07
126683	SPN	soil	2007-06-06	15:10	2007-06-07
126684	SPW	soil	2007-06-06	15:15	2007-06-07
126685	T-2 WBH @ 8'	soil	2007-06-06	12:00	2007-06-07
126686	T-2 EBH @ 8'	soil	2007-06-06	12:05	2007-06-07

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

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

Dr. Blair Leftwich, Director

Standard Flags

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

Case Narrative

Samples for project Red Byrd Ranch - TNM Historical were received by TraceAnalysis, Inc. on 2007-06-07 and assigned to work order 7060718. Samples for work order 7060718 were received intact at a temperature of 3 deg C.

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

Test	Method
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7060718 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Analytical Report

Sample: 126676 - T-1 Bottom @ 10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		131	mg/Kg	1	150	87	32.9 - 167

Sample: 126676 - T-1 Bottom @ 10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.783	mg/Kg	1	1.00	78	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.920	mg/Kg	1	1.00	92	67.5 - 140.3

Sample: 126677 - PNEW

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	32.9 - 167

Sample: 126677 - PNEW

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.786	mg/Kg	1	1.00	79	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.904	mg/Kg	1	1.00	90	67.5 - 140.3

Sample: 126678 - PBC

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**3290**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		222	mg/Kg	1	150	148	32.9 - 167

Sample: 126678 - PBC

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38219	Date Analyzed:	2007-06-15	Analyzed By:	KB
Prep Batch:	33088	Sample Preparation:	2007-06-15	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**1230**	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.936	mg/Kg	20	1.00	94	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.76	mg/Kg	20	1.00	176	10 - 227

Sample: 126679 - PSWW

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**2830**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		231	mg/Kg	1	150	154	32.9 - 167

Sample: 126679 - PSWW

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**272**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.71	mg/Kg	5	5.00	74	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[1]	11.7	mg/Kg	5	5.00	234	67.5 - 140.3

Sample: 126680 - PWW

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**128**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	32.9 - 167

Sample: 126680 - PWW

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**7.64**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.776	mg/Kg	1	1.00	78	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.998	mg/Kg	1	1.00	100	67.5 - 140.3

[1] High surrogate recovery due to peak interference.

Sample: 126681 - SPE

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**183**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	32.9 - 167

Sample: 126681 - SPE

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**28.2**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.784	mg/Kg	1	1.00	78	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[2]	1.42	mg/Kg	1	1.00	142	67.5 - 140.3

Sample: 126682 - SPS

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**526**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	150	72	32.9 - 167

Sample: 126682 - SPS

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

[2]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**66.6**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.714	mg/Kg	1	1.00	71	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[3]	3.32	mg/Kg	1	1.00	332	67.5 - 140.3

Sample: 126683 - SPN

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**489**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	150	73	32.9 - 167

Sample: 126683 - SPN

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38219	Date Analyzed:	2007-06-15	Analyzed By:	KB
Prep Batch:	33088	Sample Preparation:	2007-06-15	Prepared By:	KB

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**71.1**	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.957	mg/Kg	10	1.00	96	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.91	mg/Kg	10	1.00	191	10 - 227

Sample: 126684 - SPW

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**133**	mg/Kg	1	50.0

[3]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	150	72	32.9 - 167

Sample: 126684 - SPW

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**56.4**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.702	mg/Kg	1	1.00	70	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[4]	2.84	mg/Kg	1	1.00	284	67.5 - 140.3

Sample: 126685 - T-2 WBH @ 8'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		111	mg/Kg	1	150	74	32.9 - 167

Sample: 126685 - T-2 WBH @ 8'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**6.79**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.774	mg/Kg	1	1.00	77	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.948	mg/Kg	1	1.00	95	67.5 - 140.3

[4] High surrogate recovery due to peak interference.

Sample: 126686 - T-2 EBH @ 8'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		111	mg/Kg	1	150	74	32.9 - 167

Sample: 126686 - T-2 EBH @ 8'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	Sample Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**3.24**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.774	mg/Kg	1	1.00	77	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.935	mg/Kg	1	1.00	94	67.5 - 140.3

Method Blank (1) QC Batch: 38003

QC Batch:	38003	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32909	QC Preparation:	2007-06-08	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
DRO		<14.6	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		177	mg/Kg	1	150	118	44.7 - 133.6

Method Blank (1) QC Batch: 38006

QC Batch:	38006	Date Analyzed:	2007-06-08	Analyzed By:	AG
Prep Batch:	32868	QC Preparation:	2007-06-08	Prepared By:	JW

Parameter	Flag	MDL Result	Units	RL
GRO		<0.739	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.876	mg/Kg	1	1.00	88	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.835	mg/Kg	1	1.00	84	67.5 - 140.3

Method Blank (1) QC Batch: 38219

QC Batch: 38219 | Date Analyzed: 2007-06-15 | Analyzed By: KB
Prep Batch: 33088 | QC Preparation: 2007-06-15 | Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.10	mg/Kg	1	1.00	110	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.873	mg/Kg	1	1.00	87	51.9 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 38003 | Date Analyzed: 2007-06-08 | Analyzed By: AG
Prep Batch: 32909 | QC Preparation: 2007-06-08 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	318	mg/Kg	1	250	<14.6	127	47.5 - 144.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	298	mg/Kg	1	250	<14.6	119	47.5 - 144.1	6	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	122	122	mg/Kg	1	150	81	81	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 38006 | Date Analyzed: 2007-06-08 | Analyzed By: AG
Prep Batch: 32868 | QC Preparation: 2007-06-08 | Prepared By: JW

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.39	mg/Kg	1	10.0	<0.739	94	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.48	mg/Kg	1	10.0	<0.739	95	57.7 - 102.5	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.03	1.10	mg/Kg	1	1.00	103	110	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.996	0.989	mg/Kg	1	1.00	100	99	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 38219 | Date Analyzed: 2007-06-15 | Analyzed By: KB
Prep Batch: 33088 | QC Preparation: 2007-06-15 | Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.28	mg/Kg	1	10.0	<0.459	93	79.6 - 113

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.41	mg/Kg	1	10.0	<0.459	94	79.6 - 113	1	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.934	0.956	mg/Kg	1	1.00	93	96	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.947	0.963	mg/Kg	1	1.00	95	96	78.1 - 118

Matrix Spike (MS-1) Spiked Sample: 126586

QC Batch: 38003 | Date Analyzed: 2007-06-08 | Analyzed By: AG
Prep Batch: 32909 | QC Preparation: 2007-06-08 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	238	mg/Kg	1	250	<14.6	95	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	278	mg/Kg	1	250	<14.6	111	11.7 - 152.3	16	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	124	126	mg/Kg	1	150	83	84	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 126588

QC Batch: 38006 | Date Analyzed: 2007-06-08 | Analyzed By: AG
Prep Batch: 32868 | QC Preparation: 2007-06-08 | Prepared By: JW

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	5.77	mg/Kg	1	10.0	<0.739	58	10 - 141.5

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	6.62	mg/Kg	1	10.0	<0.739	66	10 - 141.5	14	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.697	0.694	mg/Kg	1	1	70	69	40 - 125.3
4-Bromofluorobenzene (4-BFB)	0.964	0.971	mg/Kg	1	1	96	97	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 127454

QC Batch: 38219 | Date Analyzed: 2007-06-15 | Analyzed By: KB
Prep Batch: 33088 | QC Preparation: 2007-06-15 | Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.53	mg/Kg	1	10.0	<0.459	75	40.7 - 157

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.98	mg/Kg	1	10.0	<0.459	80	40.7 - 157	6	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.790	0.828	mg/Kg	1	1	79	83	34.9 - 155
4-Bromofluorobenzene (4-BFB)	0.891	0.948	mg/Kg	1	1	89	95	58.5 - 153

Standard (ICV-1)

QC Batch: 38003 | Date Analyzed: 2007-06-08 | Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	85 - 115	2007-06-08

Standard (CCV-1)

QC Batch: 38003 Date Analyzed: 2007-06-08 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	109	85 - 115	2007-06-08

Standard (CCV-2)

QC Batch: 38003 Date Analyzed: 2007-06-08 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	264	106	85 - 115	2007-06-08

Standard (ICV-1)

QC Batch: 38006 Date Analyzed: 2007-06-08 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.888	89	85 - 115	2007-06-08

Standard (CCV-1)

QC Batch: 38006 Date Analyzed: 2007-06-08 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.912	91	85 - 115	2007-06-08

Standard (ICV-1)

QC Batch: 38219 Date Analyzed: 2007-06-15 Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.968	97	85 - 115	2007-06-15

Standard (CCV-1)

QC Batch: 38219 Date Analyzed: 2007-06-15 Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.977	98	85 - 115	2007-06-15

LAB Order ID # 706 0718 Page 1 of 1

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Contact Person: CURT STANLEY E-mail: cstanley@NOVATEAM.COM

Invoice to: (If different from above) PLAINS

Project #: RED BLUFF RANCH - TNM HISTORICAL Project Name: (SAME)

Project Location (including state): MONUMENT, NM Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
126076	T-1 BOTTOM @ 10'	1	4oz		X							X		6/5/07	14:20
77	PNEW	1	4oz		X							X		6/6	14:00
78	PBC														14:10
79	PSWW														14:20
80	PWW														14:30
81	SPE														15:05
82	SPS														15:00
83	SPN														15:10
84	SPW														15:15
85	T-2 WBH @ 8'														12:00
86	T-2 EBH @ 8'														12:05

Analysis columns: MTBE 8021B / 602 / 8260B / 624; BTEX 8021B / 602 / 8260B / 624; TPH 418.1 / TX1005 / TX1005 Ext(C35); TPH 8015 GRO / DRO / TVHC; PAH 8270C / 625; Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7; TCLP Metals Ag As Ba Cd Cr Pb Se Hg; TCLP Volatiles; TCLP Semi Volatiles; TCLP Pesticides; RCI; GC/MS Vol. 8260B / 624; GC/MS Semi. Vol. 8270C / 625; PCB's 8082 / 608; Pesticides 8081A / 608; BOD, TSS, pH; Moisture Content; Turn Around Time if different from standard; Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	6/7/07	8:25	Skip Boca	6/7/07	8:26A
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Skip Boca	6/7/07	8:27A			
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
				6/7/07	8:27

LAB USE ONLY

Intact (Y) N

Headspace Y / N

Temp 3

Log-in-Review DS

REMARKS: all tests - midland

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

Carrier # carry-in

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

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Analytical and Quality Control Report

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

Report Date: July 2, 2007

Work Order: 7062721

Project Location: Monument, NM
Project Name: Red Byrd Ranch - TNM Historical
Project Number: Red Byrd Ranch - TNM Historical

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
128664	PNW	soil	2007-06-25	13:50	2007-06-27

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

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 128664 - PNW

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	38661	Date Analyzed:	2007-06-28	Analyzed By:	
Prep Batch:	33456	Sample Preparation:	2007-06-28	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**3250**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		206	mg/Kg	1	150	137	32.9 - 167

Sample: 128664 - PNW

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	38680	Date Analyzed:	2007-07-01	Analyzed By:	AG
Prep Batch:	33478	Sample Preparation:	2007-07-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**227**	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		3.49	mg/Kg	5	5.00	70	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	[1]	12.9	mg/Kg	5	5.00	258	67.5 - 140.3

Method Blank (1) QC Batch: 38661

QC Batch:	38661	Date Analyzed:	2007-06-28	Analyzed By:	
Prep Batch:	33456	QC Preparation:	2007-06-28	Prepared By:	

Parameter	Flag	MDL Result	Units	RL
DRO		<14.6	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		147	mg/Kg	1	150	98	44.7 - 133.6

Method Blank (1) QC Batch: 38680

QC Batch:	38680	Date Analyzed:	2007-07-01	Analyzed By:	AG
Prep Batch:	33478	QC Preparation:	2007-07-01	Prepared By:	AG

[1] High surrogate recovery due to peak interference.

Parameter	Flag	MDL Result	Units	RL
GRO		<0.739	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.762	mg/Kg	1	1.00	76	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.682	mg/Kg	1	1.00	68	67.5 - 140.3

Laboratory Control Spike (LCS-1)

QC Batch: 38661 | Date Analyzed: 2007-06-28 | Analyzed By:
Prep Batch: 33456 | QC Preparation: 2007-06-28 | Prepared By:

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	156	mg/Kg	1	250	<14.6	62	47.5 - 144.1

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	184	mg/Kg	1	250	<14.6	74	47.5 - 144.1	16	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	109	110	mg/Kg	1	150	73	73	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 38680 | Date Analyzed: 2007-07-01 | Analyzed By: AG
Prep Batch: 33478 | QC Preparation: 2007-07-01 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.40	mg/Kg	1	10.0	<0.739	94	57.7 - 102.5

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.52	mg/Kg	1	10.0	<0.739	85	57.7 - 102.5	10	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.03	0.932	mg/Kg	1	1.00	103	93	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.854	0.775	mg/Kg	1	1.00	85	78	70 - 130

Matrix Spike (MS-1) Spiked Sample: 128581

QC Batch: 38661 | Date Analyzed: 2007-06-28 | Analyzed By:
Prep Batch: 33456 | QC Preparation: 2007-06-28 | Prepared By:

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	283	mg/Kg	1	250	<14.6	113	11.7 - 152.3

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	208	mg/Kg	1	250	<14.6	83	11.7 - 152.3	30	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	153	119	mg/Kg	1	150	102	79	17 - 163.1

Matrix Spike (MS-1) Spiked Sample: 128584

QC Batch: 38680 | Date Analyzed: 2007-07-01 | Analyzed By: AG
Prep Batch: 33478 | QC Preparation: 2007-07-01 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.63	mg/Kg	1	10.0	2.5	51	10 - 141.5

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.45	mg/Kg	1	10.0	2.5	50	10 - 141.5	2	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.569	0.592	mg/Kg	1	1	57	59	40 - 125.3
4-Bromofluorobenzene (4-BFB) [2]	0.914	0.860	mg/Kg	1	1	91	86	86.7 - 144.5

Standard (CCV-1)

QC Batch: 38661 | Date Analyzed: 2007-06-28 | Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	236	94	85 - 115	2007-06-28

[2]Surrogate out due to peak interference.

Standard (CCV-2)

QC Batch: 38661 Date Analyzed: 2007-06-28 Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	230	92	85 - 115	2007-06-28

Standard (ICV-1)

QC Batch: 38680 Date Analyzed: 2007-07-01 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2007-07-01

Standard (CCV-1)

QC Batch: 38680 Date Analyzed: 2007-07-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.06	106	85 - 115	2007-07-01

LAB Order ID # 7062721 Page 1 of 1

TraceAnalysis, Inc.

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Contact Person: WRT STANLEY E-mail: JLOONCE@NOVATRAINING.CA

Invoice to: (If different from above) PLAINS

Project #: RED BYRD RANCH - TNM HISTORICAL Project Name: (SAME)

Project Location (including state): MONUMENT, NM Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
128664	PNW	1	4oz		X							X		6/25/07	11:50

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
			X															

Relinquished by: Date: 6/27/07 Time: 13:00 Received by: Date: Time:

Relinquished by: Date: Time: Received by: Date: Time:

Relinquished by: Date: Time: Received at Laboratory by: Date: 6/27/07 Time: 13:00

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 3.7
Log-In-Review MR

REMARKS: all tests - midland

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

Carrier # carry-in

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

ORIGINAL COPY

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

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

Report Date: December 10, 2007

Work Order: 7112916

Project Location: Monument, NM
Project Name: Red Byrd Ranch - TNM Historical
Project Number: Red Byrd Ranch - TNM Historical

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
143908	SB1-07-10'	soil	2007-11-28	09:00	2007-11-29
143909	SB1-07-20'	soil	2007-11-28	09:10	2007-11-29
143910	SB2-07-10'	soil	2007-11-28	09:50	2007-11-29
143911	SB2-07-20'	soil	2007-11-28	10:00	2007-11-29
143912	SB3-07-10'	soil	2007-11-28	10:35	2007-11-29
143913	SB3-07-20'	soil	2007-11-28	10:45	2007-11-29
143914	SB3-07-29'	soil	2007-11-28	10:55	2007-11-29
143915	SB4-07-10'	soil	2007-11-28	13:10	2007-11-29
143916	SB4-07-20'	soil	2007-11-28	13:20	2007-11-29
143917	SB4-07-29'	soil	2007-11-28	13:45	2007-11-29
143918	SB5-07-10'	soil	2007-11-28	14:45	2007-11-29
143919	SB5-07-20'	soil	2007-11-28	14:55	2007-11-29
143920	SB5-07-29'	soil	2007-11-28	15:10	2007-11-29
143921	SB6-07-10'	soil	2007-11-28	16:50	2007-11-29
143922	SB6-07-20'	soil	2007-11-28	17:05	2007-11-29
143923	SB6-07-29'	soil	2007-11-28	17:20	2007-11-29

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

This report consists of a total of 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 143908 - SB1-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	17.3 - 169.6

Sample: 143908 - SB1-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.892	mg/Kg	1	1.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		0.916	mg/Kg	1	1.00	92	70 - 130

Sample: 143909 - SB1-07-20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43487	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		**0.0399**	mg/Kg	2	0.0100
Ethylbenzene		**0.0926**	mg/Kg	2	0.0100
Xylene		**0.0661**	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.83	mg/Kg	2	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		1.93	mg/Kg	2	2.00	96	70 - 130

Sample: 143909 - SB1-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**760**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		218	mg/Kg	1	150	145	17.3 - 169.6

Sample: 143909 - SB1-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**104**	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.76	mg/Kg	2	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)		2.32	mg/Kg	2	2.00	116	70 - 130

Sample: 143910 - SB2-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	17.3 - 169.6

Sample: 143910 - SB2-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO	B	**1.12**		mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.889	mg/Kg	1	1.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		0.976	mg/Kg	1	1.00	98	70 - 130

Sample: 143911 - SB2-07-20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43487	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0500		mg/Kg	5	0.0100
Toluene		**0.250**		mg/Kg	5	0.0100
Ethylbenzene		**0.249**		mg/Kg	5	0.0100
Xylene		**0.808**		mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.35	mg/Kg	5	5.00	87	70 - 130
4-Bromofluorobenzene (4-BFB)		5.10	mg/Kg	5	5.00	102	70 - 130

Sample: 143911 - SB2-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**2000**		mg/Kg	5	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	5	150	86	17.3 - 169.6

Sample: 143911 - SB2-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		**426**		mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.30	mg/Kg	5	5.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)	[1]	6.95	mg/Kg	5	5.00	139	70 - 130

Sample: 143912 - SB3-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	87	17.3 - 169.6

Sample: 143912 - SB3-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	**3.09**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.895	mg/Kg	1	1.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.971	mg/Kg	1	1.00	97	70 - 130

Sample: 143913 - SB3-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		117	mg/Kg	1	150	78	17.3 - 169.6

[1] High surrogate recovery due to peak interference.

Sample: 143913 - SB3-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.893	mg/Kg	1	1.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		0.929	mg/Kg	1	1.00	93	70 - 130

Sample: 143914 - SB3-07-29'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43487	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.898	mg/Kg	1	1.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.928	mg/Kg	1	1.00	93	70 - 130

Sample: 143914 - SB3-07-29'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**152**	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		149	mg/Kg	1	150	99	17.3 - 169.6

Sample: 143914 - SB3-07-29'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**11.8**	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.889	mg/Kg	1	1.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	70 - 130

Sample: 143915 - SB4-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	17.3 - 169.6

Sample: 143915 - SB4-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.903	mg/Kg	1	1.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)		0.944	mg/Kg	1	1.00	94	70 - 130

Sample: 143916 - SB4-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43691	Date Analyzed:	2007-12-07	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	17.3 - 169.6

Sample: 143916 - SB4-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	Sample Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.892	mg/Kg	1	1.00	89	70 - 130
4-Bromofluorobenzene (4-BFB)		0.931	mg/Kg	1	1.00	93	70 - 130

Sample: 143917 - SB4-07-29'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43618	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.21	mg/Kg	1	1.00	121	70 - 130
4-Bromofluorobenzene (4-BFB)		0.854	mg/Kg	1	1.00	85	70 - 130

Sample: 143917 - SB4-07-29'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	17.3 - 169.6

Sample: 143917 - SB4-07-29'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	1	1.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)		0.922	mg/Kg	1	1.00	92	70 - 130

Sample: 143918 - SB5-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	17.3 - 169.6

Sample: 143918 - SB5-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.923	mg/Kg	1	1.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.932	mg/Kg	1	1.00	93	70 - 130

Sample: 143919 - SB5-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	17.3 - 169.6

Sample: 143919 - SB5-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.920	mg/Kg	1	1.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.933	mg/Kg	1	1.00	93	70 - 130

Sample: 143920 - SB5-07-29'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43618	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.20	mg/Kg	1	1.00	120	70 - 130
4-Bromofluorobenzene (4-BFB)		0.858	mg/Kg	1	1.00	86	70 - 130

Sample: 143920 - SB5-07-29'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		162	mg/Kg	1	150	108	17.3 - 169.6

Sample: 143920 - SB5-07-29'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.919	mg/Kg	1	1.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.930	mg/Kg	1	1.00	93	70 - 130

Sample: 143921 - SB6-07-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	150	90	17.3 - 169.6

Sample: 143921 - SB6-07-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.913	mg/Kg	1	1.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)		0.923	mg/Kg	1	1.00	92	70 - 130

Sample: 143922 - SB6-07-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	17.3 - 169.6

Sample: 143922 - SB6-07-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.919	mg/Kg	1	1.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.931	mg/Kg	1	1.00	93	70 - 130

Sample: 143923 - SB6-07-29'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	43618	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.19	mg/Kg	1	1.00	119	70 - 130
4-Bromofluorobenzene (4-BFB)		0.849	mg/Kg	1	1.00	85	70 - 130

Sample: 143923 - SB6-07-29'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	43692	Date Analyzed:	2007-12-08	Analyzed By:	AG
Prep Batch:	37678	Sample Preparation:	2007-12-07	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	91	17.3 - 169.6

Sample: 143923 - SB6-07-29'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	43619	Date Analyzed:	2007-12-05	Analyzed By:	DC
Prep Batch:	37578	Sample Preparation:	2007-12-04	Prepared By:	DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.912	mg/Kg	1	1.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)		0.920	mg/Kg	1	1.00	92	70 - 130

Method Blank (1) QC Batch: 43475

QC Batch:	43475	Date Analyzed:	2007-11-29	Analyzed By:	DC
Prep Batch:	37494	QC Preparation:	2007-11-29	Prepared By:	DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.527	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.939	mg/Kg	1	1.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)		0.924	mg/Kg	1	1.00	92	70 - 130

Method Blank (1) QC Batch: 43487

QC Batch: 43487 | Date Analyzed: 2007-11-29 | Analyzed By: DC
Prep Batch: 37494 | QC Preparation: 2007-11-29 | Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00300	mg/Kg	0.01
Toluene		<0.00300	mg/Kg	0.01
Ethylbenzene		<0.00400	mg/Kg	0.01
Xylene		<0.0140	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.952	mg/Kg	1	1.00	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.950	mg/Kg	1	1.00	95	70 - 130

Method Blank (1) QC Batch: 43618

QC Batch: 43618 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00300	mg/Kg	0.01
Toluene		<0.00300	mg/Kg	0.01
Ethylbenzene		<0.00400	mg/Kg	0.01
Xylene		<0.0140	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.20	mg/Kg	1	1.00	120	70 - 130
4-Bromofluorobenzene (4-BFB)		0.850	mg/Kg	1	1.00	85	70 - 130

Method Blank (1) QC Batch: 43619

QC Batch: 43619 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.585	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.953	mg/Kg	1	1.00	95	70 - 130
4-Bromofluorobenzene (4-BFB)		0.936	mg/Kg	1	1.00	94	70 - 130

Method Blank (1) QC Batch: 43691

QC Batch: 43691 | Date Analyzed: 2007-12-07 | Analyzed By: AG
Prep Batch: 37678 | QC Preparation: 2007-12-07 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
DRO		<13.4	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	32.9 - 156.1

Method Blank (1) QC Batch: 43692

QC Batch: 43692 | Date Analyzed: 2007-12-08 | Analyzed By: AG
Prep Batch: 37678 | QC Preparation: 2007-12-07 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
DRO		<13.4	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		153	mg/Kg	1	150	102	32.9 - 156.1

Laboratory Control Spike (LCS-1)

QC Batch: 43475 | Date Analyzed: 2007-11-29 | Analyzed By: DC
Prep Batch: 37494 | QC Preparation: 2007-11-29 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.36	mg/Kg	1	10.0	<0.0118	84	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.96	mg/Kg	1	10.0	<0.0118	80	70 - 130	5	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.985	0.985	mg/Kg	1	1.00	98	98	70 - 130
4-Bromofluorobenzene (4-BFB)	0.959	0.962	mg/Kg	1	1.00	96	96	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 43487 | Date Analyzed: 2007-11-29 | Analyzed By: DC
Prep Batch: 37494 | QC Preparation: 2007-11-29 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.826	mg/Kg	1	1.00	<0.00300	83	70 - 130
Toluene	0.808	mg/Kg	1	1.00	<0.00300	81	70 - 130
Ethylbenzene	0.792	mg/Kg	1	1.00	<0.00400	79	70 - 130
Xylene	2.36	mg/Kg	1	3.00	<0.0140	79	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.809	mg/Kg	1	1.00	<0.00300	81	70 - 130	2	
Toluene	0.807	mg/Kg	1	1.00	<0.00300	81	70 - 130	0	
Ethylbenzene	0.812	mg/Kg	1	1.00	<0.00400	81	70 - 130	2	
Xylene	2.44	mg/Kg	1	3.00	<0.0140	81	70 - 130	3	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.974	0.954	mg/Kg	1	1.00	97	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.948	0.978	mg/Kg	1	1.00	95	98	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 43618 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.21	mg/Kg	1	1.00	<0.00300	121	70 - 130
Toluene	1.21	mg/Kg	1	1.00	<0.00300	121	70 - 130
Ethylbenzene	1.19	mg/Kg	1	1.00	<0.00400	119	70 - 130
Xylene	3.54	mg/Kg	1	3.00	<0.0140	118	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.24	mg/Kg	1	1.00	<0.00300	124	70 - 130	2	
Toluene	1.24	mg/Kg	1	1.00	<0.00300	124	70 - 130	2	
Ethylbenzene	1.23	mg/Kg	1	1.00	<0.00400	123	70 - 130	3	
Xylene	3.67	mg/Kg	1	3.00	<0.0140	122	70 - 130	4	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.20	1.21	mg/Kg	1	1.00	120	121	70 - 130
4-Bromofluorobenzene (4-BFB)	0.859	0.861	mg/Kg	1	1.00	86	86	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 43619 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.59	mg/Kg	1	10.0	<0.0118	86	70 - 130

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.54	mg/Kg	1	10.0	<0.0118	85	70 - 130	1	

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.02	1.02	mg/Kg	1	1.00	102	102	70 - 130
4-Bromofluorobenzene (4-BFB)	0.991	1.00	mg/Kg	1	1.00	99	100	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 43691 Date Analyzed: 2007-12-07 Analyzed By: AG
Prep Batch: 37678 QC Preparation: 2007-12-07 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	225	mg/Kg	1	250	<13.4	90	49.1 - 142.3

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	251	mg/Kg	1	250	<13.4	100	49.1 - 142.3	11	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	124	138	mg/Kg	1	150	83	92	49 - 133.2

Laboratory Control Spike (LCS-1)

QC Batch: 43692 Date Analyzed: 2007-12-08 Analyzed By: AG
Prep Batch: 37678 QC Preparation: 2007-12-07 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	245	mg/Kg	1	250	<13.4	98	49.1 - 142.3

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	269	mg/Kg	1	250	<13.4	108	49.1 - 142.3	9	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	147	165	mg/Kg	1	150	98	110	49 - 133.2

Matrix Spike (MS-1) Spiked Sample: 143897

QC Batch: 43475 | Date Analyzed: 2007-11-29 | Analyzed By: DC
Prep Batch: 37494 | QC Preparation: 2007-11-29 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.71	mg/Kg	1	10.0	<0.0118	97	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	11.1	mg/Kg	1	10.0	<0.0118	111	70 - 130	13	

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.793	0.878	mg/Kg	1	1	79	88	70 - 130
4-Bromofluorobenzene (4-BFB)	0.956	0.966	mg/Kg	1	1	96	97	70 - 130

Matrix Spike (MS-1) Spiked Sample: 143897

QC Batch: 43487 | Date Analyzed: 2007-11-29 | Analyzed By: DC
Prep Batch: 37494 | QC Preparation: 2007-11-29 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.800	mg/Kg	1	1.00	<0.00300	80	70 - 130
Toluene	0.798	mg/Kg	1	1.00	<0.00300	80	70 - 130
Ethylbenzene	0.798	mg/Kg	1	1.00	<0.00400	80	70 - 130
Xylene	2.40	mg/Kg	1	3.00	<0.0140	80	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.802	mg/Kg	1	1.00	<0.00300	80	70 - 130	0	
Toluene	0.814	mg/Kg	1	1.00	<0.00300	81	70 - 130	2	
Ethylbenzene	0.826	mg/Kg	1	1.00	<0.00400	83	70 - 130	3	
Xylene	2.49	mg/Kg	1	3.00	<0.0140	83	70 - 130	4	

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.910	0.893	mg/Kg	1	1	91	89	70 - 130
4-Bromofluorobenzene (4-BFB)	0.904	0.920	mg/Kg	1	1	90	92	70 - 130

Matrix Spike (MS-1) Spiked Sample: 143917

QC Batch: 43618 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.27	mg/Kg	1	1.00	<0.00300	127	70 - 130
Toluene	1.29	mg/Kg	1	1.00	<0.00300	129	70 - 130
Ethylbenzene	1.30	mg/Kg	1	1.00	<0.00400	130	70 - 130
Xylene	3.91	mg/Kg	1	3.00	<0.0140	130	70 - 130

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

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[2]	1.31	mg/Kg	1	1.00	<0.00300	131	70 - 130	3	
Toluene	[3]	1.33	mg/Kg	1	1.00	<0.00300	133	70 - 130	3	
Ethylbenzene	[4]	1.37	mg/Kg	1	1.00	<0.00400	137	70 - 130	5	
Xylene	[5]	4.10	mg/Kg	1	3.00	<0.0140	136	70 - 130	5	

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.13	1.12	mg/Kg	1	1	113	112	70 - 130
4-Bromofluorobenzene (4-BFB)	0.847	0.836	mg/Kg	1	1	85	84	70 - 130

Matrix Spike (MS-1) Spiked Sample: 143918

QC Batch: 43619 | Date Analyzed: 2007-12-05 | Analyzed By: DC
Prep Batch: 37578 | QC Preparation: 2007-12-04 | Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.14	mg/Kg	1	10.0	<0.0118	81	70 - 130

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	8.07	mg/Kg	1	10.0	<0.0118	81	70 - 130	1	

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.913	0.885	mg/Kg	1	1	91	88	70 - 130
4-Bromofluorobenzene (4-BFB)	0.964	0.968	mg/Kg	1	1	96	97	70 - 130

[2]Matrix spike recovery out of control limits due to extraction process. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to extraction process. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to extraction process. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery out of control limits due to extraction process. Use LCS/LCSD to demonstrate analysis is under control.

Matrix Spike (MS-1) Spiked Sample: 144687

QC Batch: 43691 | Date Analyzed: 2007-12-07 | Analyzed By: AG
Prep Batch: 37678 | QC Preparation: 2007-12-07 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	600	mg/Kg	1	250	438	65	30.2 - 201.4

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	594	mg/Kg	1	250	438	62	30.2 - 201.4	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	145	144	mg/Kg	1	150	97	96	10 - 194

Matrix Spike (MS-1) Spiked Sample: 143917

QC Batch: 43692 | Date Analyzed: 2007-12-08 | Analyzed By: AG
Prep Batch: 37678 | QC Preparation: 2007-12-07 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	220	mg/Kg	1	250	<13.4	88	30.2 - 201.4

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	245	mg/Kg	1	250	<13.4	98	30.2 - 201.4	11	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	131	163	mg/Kg	1	150	87	109	10 - 194

Standard (ICV-1)

QC Batch: 43475 | Date Analyzed: 2007-11-29 | Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.976	98	85 - 115	2007-11-29

Standard (CCV-1)

QC Batch: 43475 | Date Analyzed: 2007-11-29 | Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.970	97	85 - 115	2007-11-29

Standard (ICV-1)

QC Batch: 43487 Date Analyzed: 2007-11-29 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0857	86	85 - 115	2007-11-29
Toluene		mg/Kg	0.100	0.0864	86	85 - 115	2007-11-29
Ethylbenzene		mg/Kg	0.100	0.0872	87	85 - 115	2007-11-29
Xylene		mg/Kg	0.300	0.262	87	85 - 115	2007-11-29

Standard (CCV-1)

QC Batch: 43487 Date Analyzed: 2007-11-29 Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0995	100	85 - 115	2007-11-29
Toluene		mg/Kg	0.100	0.0965	96	85 - 115	2007-11-29
Ethylbenzene		mg/Kg	0.100	0.0993	99	85 - 115	2007-11-29
Xylene		mg/Kg	0.300	0.284	95	85 - 115	2007-11-29

Standard (ICV-1)

QC Batch: 43618 Date Analyzed: 2007-12-05 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0986	99	85 - 115	2007-12-05
Toluene		mg/Kg	0.100	0.0998	100	85 - 115	2007-12-05
Ethylbenzene		mg/Kg	0.100	0.0990	99	85 - 115	2007-12-05
Xylene		mg/Kg	0.300	0.295	98	85 - 115	2007-12-05

Standard (CCV-1)

QC Batch: 43618 Date Analyzed: 2007-12-05 Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.115	115	85 - 115	2007-12-05
Toluene		mg/Kg	0.100	0.115	115	85 - 115	2007-12-05
Ethylbenzene		mg/Kg	0.100	0.113	113	85 - 115	2007-12-05

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene		mg/Kg	0.300	0.337	112	85 - 115	2007-12-05

Standard (ICV-1)

QC Batch: 43619 Date Analyzed: 2007-12-05 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.09	109	85 - 115	2007-12-05

Standard (CCV-1)

QC Batch: 43619 Date Analyzed: 2007-12-05 Analyzed By: DC

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.12	112	85 - 115	2007-12-05

Standard (CCV-1)

QC Batch: 43691 Date Analyzed: 2007-12-07 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	229	92	85 - 115	2007-12-07

Standard (CCV-2)

QC Batch: 43691 Date Analyzed: 2007-12-07 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	236	94	85 - 115	2007-12-07

Standard (CCV-3)

QC Batch: 43691 Date Analyzed: 2007-12-07 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	220	88	85 - 115	2007-12-07

Standard (ICV-1)

QC Batch: 43692 Date Analyzed: 2007-12-08 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	216	86	85 - 115	2007-12-08

Standard (CCV-1)

QC Batch: 43692 Date Analyzed: 2007-12-08 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	221	88	85 - 115	2007-12-08

Standard (CCV-2)

QC Batch: 43692 Date Analyzed: 2007-12-08 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	230	92	85 - 115	2007-12-08

LAB Order ID # 711291G Page 1 of 2

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: NOVA — Phone #: Fax

Address: (Street, City, Zip) MIDLAND — Fax #: Fax

Contact Person: Kurt Stanley — E-mail: File

Invoice to: (If different from above) Plains

Project #: NA — Project Name: REO Byrd Ranch TNM Historical

Project Location (including state): Monument NM — Sampler Signature: Craig Easley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE (2007)	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC modified	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content						Turn Around Time if different from standard	Hold
1439108	SB1-07-10'	1	402		X							X		11/29	9:00				X																			
909	SB1-07-20'	1			X							X		"	9:10				X																			
910	SB2-07-10'	1			X							X		"	9:50				X																			
911	SB2-07-20'	1			X							X		"	10:00				X																			
912	SB3-07-10'	1			X							X		"	10:35				X																			
913	SB3-07 20'	1			X							X		"	10:45		X		X																			
914	SB3-07-29'	1			X							X		"	10:55		X		X																			
915	SB4-07-10'	1			X							X		"	1:10				X																			
916	SB4-07-20'	1			X							X		"	1:20				X																			
917	SB4-07-29'	1			X							X		"	1:45		X		X																			

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Craig Easley	NOVA	11/29/07	8:45		TRACE	11/29/07	8:45	3.2 c
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.2
Log-In Review

REMARKS:
For SB1 + SB2 - Run BTEX if GRO > 100 ppm.
All tests - Midland

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

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

Carrier # Camp-in

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LAB Order ID # 7112916 Page 2 of 2

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: NOVA
Phone #: on File
Address: (Street, City, Zip) MIDLAND
Fax #: on File
Contact Person: Kurt Stanley
E-mail: on file
Invoice to: (If different from above) Plains
Project #: NA
Project Name: Red Bird Ranch TNM Release
Project Location (including state): Monument NM
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE (2007)	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC Modified	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
114918	SB5-07 -10'	1	4oz		X							X		11/26	2:45				X															
919	SB5-07 -20'	1			X							X		11	2:55				X															
920	SB5-07 -29'	1			X							X		11	3:10		X		X															
921	SB6-07 -10'	1			X							X		11	4:30				X															
922	SB6-07 -20'	1			X							X		11	5:05				X															
923	SB6-07 -29'	1			X									11	5:20		X		X															

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	NOVA	11/29/07	8:45		TRACE	11/29/07	8:45	3.2 C
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
3.2
Log-In Review

REMARKS:
All tests - Midland

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

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

Carrier # Courier

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Analytical Report 320259

for

PLAINS ALL AMERICAN EH&S

Project Manager: Daniel Bryant

Red Byrd Historical

Red Byrd Ranch TNM Historical

16-DEC-08

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
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

16-DEC-08

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

Reference: XENCO Report No: **320259**
Red Byrd Historical
Project Address: Lea County, NM

Daniel Bryant:

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 320259. 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. 320259 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 320259

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
E/S Stockpile	S	Dec-10-08 13:10		320259-001
W/S Stockpile	S	Dec-10-08 13:40		320259-002

Certificate of Analysis Summary 320259

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Daniel Bryant
Project Location: Lea County, NM

Date Received in Lab: Fri Dec-12-08 01:30 pm
Report Date: 16-DEC-08
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	320259-001		320259-002				
	Field Id:	E/S Stockpile		W/S Stockpile				
	Depth:							
	Matrix:	SOIL		SOIL				
	Sampled:	Dec-10-08 13:10		Dec-10-08 13:40				
Percent Moisture	*Extracted:*							
	Analyzed:	Dec-12-08 17:00		Dec-12-08 17:00				
	Units/RL:	%	RL	%	RL			
Percent Moisture		16.32	1.00	9.45	1.00			
TPH By SW8015 Mod	*Extracted:*	Dec-15-08 14:00		Dec-15-08 14:00				
	Analyzed:	Dec-16-08 01:40		Dec-16-08 02:28				
	Units/RL:	mg/kg	RL	mg/kg	RL			
C6-C12 Gasoline Range Hydrocarbons		ND	89.6	140	16.6			
C12-C28 Diesel Range Hydrocarbons		514	89.6	927	16.6			
C28-C35 Oil Range Hydrocarbons		117	89.6	177	16.6			
Total TPH		631	89.6	1244	16.6			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd Historical

Work Orders : 320259,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 743601 **Sample:** 320235-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 743601 **Sample:** 320235-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	54.8	50.0	110	70-135	

Lab Batch #: 743601 **Sample:** 320259-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.6	100	86	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 743601 **Sample:** 320259-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.9	100	88	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

Lab Batch #: 743601 **Sample:** 521181-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

** 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 Historical

Work Orders : 320259,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 743601 **Sample:** 521181-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.3	100	88	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

Lab Batch #: 743601 **Sample:** 521181-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	50.0	50.0	100	70-135	

** 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 Historical

Work Order #: 320259
Project ID: Red Byrd Ranch TNM Historical
Analyst: BHW
Date Prepared: 12/15/2008
Date Analyzed: 12/15/2008
Lab Batch ID: 743601
Sample: 521181-1-BKS
Batch #: 1
Matrix: Solid
Units: mg/kg

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	ND	1000	879	88	1000	877	88	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	949	95	1000	938	94	1	70-135	35	

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 Historical

Work Order # : 320259 **Project ID:** Red Byrd Ranch TNM Historical

Lab Batch ID: 743601 **QC- Sample ID:** 320235-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/16/2008 **Date Prepared:** 12/15/2008 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1160	997	86	1160	992	86	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	79.4	1160	1120	90	1160	1110	89	1	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Historical

Work Order #: 320259

Lab Batch #: 743418 **Project ID:** Red Byrd Ranch TNM Historical

Date Analyzed: 12/12/2008 **Date Prepared:** 12/12/2008 **Analyst:** BEV

QC- Sample ID: 320213-019 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.36	8.72	4	20	

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: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)605-7210 Fax No: (505) 396-1429
Sampler Signature: Jody Walters
e-mail: cjbryant@basin-consulting.com

Project Name: Red Byrd Historical
Project #: Red Byrd Ranch TNM Historical
Project Loc: Lea County, NM
PO #: PAA - D. Bryant
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 320259

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 SL - Sludge; GW - Groundwater S - Soil/Solid; NP - Non-Potable Specify Other	Analyze For: 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 H M	RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT 4 DAY
01	E/S Stockpile			10-Dec-08	1310		1	X								SOIL	X												X
02	W/S Stockpile			10-Dec-08	1340		1	X								SOIL	X												X

TCLP:
TOTAL: X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Jody Walters	12-10-08	1500	BC Blakemore	12-10-08	1500
BC Blakemore	12-12-08	1:30			
			Received by ELOT: Andrea Lam	12-17-08	1:30

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
4 23 glass
Temperature Upon Receipt: 1.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin | Plains

Date/ Time: 12.17.08 13:30

Lab ID #: 320299

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	1.5 °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 321683

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

TNM-Red Byrd Ranch Historical

15-JAN-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
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

15-JAN-09

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

Reference: XENCO Report No: **321683**
Red Byrd Ranch Historical
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 321683. 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. 321683 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 321683

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended - 1	S	Jan-05-09 10:40		321683-001
Blended - 2	S	Jan-05-09 10:50		321683-002
Blended - 3	S	Jan-05-09 11:00		321683-003
Blended - 4	S	Jan-05-09 11:10		321683-004
Blended - 5	S	Jan-05-09 11:20		321683-005
Blended - 6	S	Jan-05-09 11:30		321683-006
Blended - 7	S	Jan-05-09 11:40		321683-007
Blended - 8	S	Jan-05-09 11:50		321683-008
Blended - 9	S	Jan-05-09 12:00		321683-009
Blended - 10	S	Jan-05-09 12:10		321683-010

Certificate of Analysis Summary 321683

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Tue Jan-06-09 09:45 am
Report Date: 15-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321683-001		321683-002		321683-003		321683-004		321683-005		321683-006	
	Field Id:	Blended - 1		Blended - 2		Blended - 3		Blended - 4		Blended - 5		Blended - 6	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-05-09 10:40		Jan-05-09 10:50		Jan-05-09 11:00		Jan-05-09 11:10		Jan-05-09 11:20		Jan-05-09 11:30	
BTEX by EPA 8021B	*Extracted:*					Jan-14-09 12:15		Jan-14-09 12:15		Jan-14-09 12:15		Jan-14-09 12:15	
	Analyzed:					Jan-14-09 17:55		Jan-14-09 18:16		Jan-14-09 18:38		Jan-14-09 18:59	
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene						ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011
Toluene						ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022
Ethylbenzene						0.0035	0.0011	0.0052	0.0011	0.0018	0.0011	ND	0.0011
m,p-Xylenes						0.0064	0.0022	0.0080	0.0022	0.0041	0.0022	ND	0.0022
o-Xylene						0.0098	0.0011	0.0267	0.0011	0.0057	0.0011	0.0012	0.0011
Total Xylenes						0.0162	0.0022	0.0347	0.0022	0.0098	0.0022	0.0012	0.0022
Total BTEX						0.0197	0.0011	0.0399	0.0011	0.0116	0.0011	0.0012	0.0011
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.18	1.00	7.35	1.00	7.87	1.00	7.30	1.00	8.27	1.00	8.78	1.00
TPH By SW8015 Mod	*Extracted:*	Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10	
	Analyzed:	Jan-06-09 18:49		Jan-06-09 19:36		Jan-06-09 19:59		Jan-06-09 20:22		Jan-06-09 20:45		Jan-06-09 21:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		95.5	16.2	72.2	16.2	49.3	16.3	64.7	16.2	38.8	16.4	ND	16.4
C12-C28 Diesel Range Hydrocarbons		958	16.2	864	16.2	374	16.3	508	16.2	350	16.4	59.3	16.4
C28-C35 Oil Range Hydrocarbons		191	16.2	172	16.2	124	16.3	104	16.2	127	16.4	30.4	16.4
Total TPH		1244.5	16.2	1108.2	16.2	547.3	16.3	676.7	16.2	515.8	16.4	89.7	16.4

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321683

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Tue Jan-06-09 09:45 am
Report Date: 15-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321683-007		321683-008		321683-009		321683-010					
	Field Id:	Blended - 7		Blended - 8		Blended - 9		Blended - 10					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jan-05-09 11:40		Jan-05-09 11:50		Jan-05-09 12:00		Jan-05-09 12:10					
BTEX by EPA 8021B	*Extracted:*	Jan-14-09 12:15		Jan-14-09 12:15		Jan-14-09 12:15		Jan-14-09 12:15					
	Analyzed:	Jan-14-09 19:21		Jan-14-09 19:42		Jan-14-09 20:03		Jan-14-09 20:24					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011				
Toluene		ND	0.0021	ND	0.0022	ND	0.0022	ND	0.0022				
Ethylbenzene		0.0027	0.0011	ND	0.0011	0.0012	0.0011	ND	0.0011				
m,p-Xylenes		0.0051	0.0021	ND	0.0022	0.0073	0.0022	ND	0.0022				
o-Xylene		0.0082	0.0011	ND	0.0011	0.0084	0.0011	0.0015	0.0011				
Total Xylenes		0.0133	0.0021	ND	0.0022	0.0157	0.0022	0.0015	0.0022				
Total BTEX		0.016	0.0011	ND	0.0011	0.0169	0.0011	0.0015	0.0011				
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00		Jan-06-09 17:00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		6.11	1.00	7.49	1.00	10.64	1.00	8.56	1.00				
TPH By SW8015 Mod	*Extracted:*	Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10		Jan-06-09 12:10					
	Analyzed:	Jan-06-09 21:32		Jan-06-09 21:56		Jan-06-09 22:19		Jan-06-09 22:43					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		44.3	16.0	ND	16.2	29.1	16.8	28.3	16.4				
C12-C28 Diesel Range Hydrocarbons		592	16.0	23.6	16.2	98.3	16.8	114	16.4				
C28-C35 Oil Range Hydrocarbons		135	16.0	ND	16.2	ND	16.8	ND	16.4				
Total TPH		771.3	16.0	23.6	16.2	127.4	16.8	142.3	16.4				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746552 **Sample:** 321683-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0464	0.0300	155	80-120	*

Lab Batch #: 746552 **Sample:** 321683-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0408	0.0300	136	80-120	*

Lab Batch #: 746552 **Sample:** 321683-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 746552 **Sample:** 321683-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0669	0.0300	223	80-120	*

Lab Batch #: 746552 **Sample:** 321683-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0408	0.0300	136	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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746552 **Sample:** 321683-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 746552 **Sample:** 321683-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0455	0.0300	152	80-120	*

Lab Batch #: 746552 **Sample:** 321683-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0376	0.0300	125	80-120	*

Lab Batch #: 746552 **Sample:** 321683-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0625	0.0300	208	80-120	*

Lab Batch #: 746552 **Sample:** 321683-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0477	0.0300	159	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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746552 **Sample:** 522943-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 746552 **Sample:** 522943-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0322	0.0300	107	80-120	

Lab Batch #: 746552 **Sample:** 522943-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 745673 **Sample:** 321601-019 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	59.8	50.0	120	70-135	

Lab Batch #: 745673 **Sample:** 321601-019 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	54.6	50.0	109	70-135	

** 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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 745673 **Sample:** 321683-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	54.9	50.0	110	70-135	

Lab Batch #: 745673 **Sample:** 321683-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	54.2	50.0	108	70-135	

Lab Batch #: 745673 **Sample:** 321683-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	54.0	50.0	108	70-135	

Lab Batch #: 745673 **Sample:** 321683-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

Lab Batch #: 745673 **Sample:** 321683-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	53.2	50.0	106	70-135	

** 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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 745673 **Sample:** 321683-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	55.3	50.0	111	70-135	

Lab Batch #: 745673 **Sample:** 321683-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	55.1	50.0	110	70-135	

Lab Batch #: 745673 **Sample:** 321683-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 745673 **Sample:** 321683-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 745673 **Sample:** 321683-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

** 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 Ranch Historical

Work Orders : 321683,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 745673 **Sample:** 522478-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	60.8	50.0	122	70-135	

Lab Batch #: 745673 **Sample:** 522478-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	53.4	50.0	107	70-135	

Lab Batch #: 745673 **Sample:** 522478-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	64.5	50.0	129	70-135	

** 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 Ranch Historical

Work Order #: 321683 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 01/14/2009 **Date Analyzed:** 01/14/2009

Lab Batch ID: 746552 **Sample:** 522943-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.0990	99	0.1	0.1049	105	6	70-130	35	
Toluene	ND	0.1000	0.0997	100	0.1	0.1020	102	2	70-130	35	
Ethylbenzene	ND	0.1000	0.1044	104	0.1	0.1076	108	3	71-129	35	
m,p-Xylenes	ND	0.2000	0.1961	98	0.2	0.2123	106	8	70-135	35	
o-Xylene	0.0186	0.1000	0.0997	100	0.1	0.1017	102	2	71-133	35	

Analyst: BHW **Date Prepared:** 01/06/2009 **Date Analyzed:** 01/06/2009

Lab Batch ID: 745673 **Sample:** 522478-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	1000	1010	101	1000	1000	100	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1060	106	1000	1050	105	1	70-135	35	

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 Ranch Historical

Work Order # : 321683 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 746552 **QC- Sample ID:** 321683-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/15/2009 **Date Prepared:** 01/14/2009 **Analyst:** ASA

Reporting Units: mg/kg

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	0.1085	0.0636	59	0.1085	0.0561	52	13	70-130	35	X
Toluene	ND	0.1085	0.0438	40	0.1085	0.0370	34	16	70-130	35	X
Ethylbenzene	0.0035	0.1085	0.0331	27	0.1085	0.0285	23	16	71-129	35	X
m,p-Xylenes	0.0064	0.2171	0.0566	23	0.2171	0.0401	16	36	70-135	35	XF
o-Xylene	0.0098	0.1085	0.0296	18	0.1085	0.0257	15	18	71-133	35	X

Lab Batch ID: 745673 **QC- Sample ID:** 321601-019 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/06/2009 **Date Prepared:** 01/06/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1070	1070	100	1070	1070	100	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1070	1130	106	1070	1150	107	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 321683

Lab Batch #: 745691 **Project ID:** TNM-Red Byrd Ranch Historical

Date Analyzed: 01/06/2009 **Date Prepared:** 01/06/2009 **Analyst:** BEV

QC- Sample ID: 321675-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.33	3.94	9	20	

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 01 Project Name: Red Byrd Ranch Historical

Company Name: Basin Environmental Consulting, LLC Project #: TNM-Red Byrd Ranch Historical

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

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

Telephone No: (575) 441-2244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: for C.T. Bergen e-mail: cdstanley@basin-consulting.com

(lab use only)
ORDER #: 321483

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	HNO3	HCl (VOA x 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW - Drinking Water SL - Sludge GW - Groundwater S - Soil/Sol NP - Non-Potable Specify Other	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	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	EPA Plant Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Blended - 1			1/5/2008	1040		1	X								Soil	X									X							X
02	Blended - 2			1/5/2008	1050		1	X								Soil	X									X							X
03	Blended - 3			1/5/2008	1100		1	X								Soil	X									X							X
04	Blended - 4			1/5/2008	1110		1	X								Soil	X									X							X
05	Blended - 5			1/5/2008	1120		1	X								Soil	X									X							X
06	Blended - 6			1/5/2008	1130		1	X								Soil	X									X							X
07	Blended - 7			1/5/2008	1140		1	X								Soil	X									X							X
08	BLENDED - 8			1/5/08	1150		1	X								SOIL	X																X
09	BLENDED - 9			1/5/08	1200		1	X								SOIL	X																X
10	BLENDED - 10			1/5/08	1210		1	X								SOIL	X																X

Special Instructions:
BILL TO PLAINS

Relinquished by:	Date: 1/6/09	Time: 945	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by ELOT: Andrea Dean	Date: 1/6/09	Time: 945

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 DHL FedEx Lone Star
407916455
Temperature Upon Receipt: 2.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env / Plains

Date/ Time: 1.6.09 9 45

Lab ID #: 321685

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.5 °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

Andrea Lam

From: "Curt D. Stanley" <cstanley@basinenv.com>
To: "Andrea Lam" <andrea.lam@xenco.com>
Sent: Thursday, January 08, 2009 2:24 PM
Subject: Re: WO 321683 / Red Byrd Ranch Historical

Please correct the error.

Thank you

Curt Stanley

----- Original Message -----
From: Andrea Lam
To: Curt Stanley
Sent: Tuesday, January 06, 2009 9:06 AM
Subject: WO 321683 / Red Byrd Ranch Historical

Curt- I just want to confirm per our phone call that the sample year should be 2009 not 2008.

Thank You,
Andrea Lam
Sample Receiving / Project Assistant

Environmental Lab of Texas
A Xenco Company
12600 W I-20 E
Odessa, TX 79765
432-563-1800

1/8/2009

Gracie Avalos

From: Camille J. Bryant [cjbryant@basin-consulting.com]
Sent: Monday, January 12, 2009 3:44 PM
To: Gracie Avalos
Subject: Fw: WO 321686 / Red Byrd Ranch Historical
Attachments: 2009_321686_TNM-Red_Byrd_Ranch_Historical.pdf

Gracie,

Would you please test the soil samples with TPH concentrations under 1,000 ppm for BTEX concentrations method 8021B. Please do this for WO 321683 also.

Thanks,
Camille Bryant
----- Original Message -----
From: Curt D. Stanley
To: cjbryant@basin-consulting.com
Sent: Friday, January 09, 2009 7:36 AM
Subject: Fw: WO 321686 / Red Byrd Ranch Historical

----- Original Message -----
From: Gracie Avalos
To: cdstanley@basin-consulting.com ; Jason Henry
Sent: Wednesday, January 07, 2009 2:42 PM
Subject: WO 321686 / Red Byrd Ranch Historical

Gracie Avalos
Project Assistant
Xenco Labs - Odessa
432-563-1800 Office
432-4563-1713 Fax
gracie.avalos@xenco.com

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Please consider the environment before printing this email.

1/12/2009

Analytical Report 321686

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

TNM-Red Byrd Ranch Historical

16-JAN-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
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

16-JAN-09

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

Reference: XENCO Report No: **321686**
Red Byrd Ranch Historical
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 321686. 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. 321686 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 321686

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1	S	Jan-05-09 10:30		321686-001

Certificate of Analysis Summary 321686

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Tue Jan-06-09 09:45 am
Report Date: 16-JAN-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	321686-001					
	Field Id:	SP-1					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Jan-05-09 10:30					
BTEX by EPA 8021B	*Extracted:*	Jan-15-09 09:00					
	Analyzed:	Jan-15-09 13:13					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.0011				
Toluene		0.0176	0.0022				
Ethylbenzene		0.2528	0.0011				
m,p-Xylenes		0.0420	0.0022				
o-Xylene		0.1545	0.0011				
Total Xylenes		0.1965	0.0022				
Total BTEX		0.4669	0.0011				
Percent Moisture	*Extracted:*						
	Analyzed:	Jan-06-09 17:00					
	Units/RL:	%	RL				
Percent Moisture		10.42	1.00				
TPH By SW8015 Mod	*Extracted:*	Jan-06-09 12:10					
	Analyzed:	Jan-06-09 23:06					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		147	83.7				
C12-C28 Diesel Range Hydrocarbons		395	83.7				
C28-C35 Oil Range Hydrocarbons		ND	83.7				
Total TPH		542	83.7				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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.

Form 2 - Surrogate Recoveries

Project Name: Red Byrd Ranch Historical

Work Orders : 321686,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746674 **Sample:** 321686-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.7372	0.0300	2457	80-120	**

Lab Batch #: 746674 **Sample:** 523001-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0284	0.0300	95	80-120	

Lab Batch #: 746674 **Sample:** 523001-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 746674 **Sample:** 523001-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 745673 **Sample:** 321601-019 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	59.8	50.0	120	70-135	

** 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 Ranch Historical

Work Orders : 321686,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 745673 **Sample:** 321601-019 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	54.6	50.0	109	70-135	

Lab Batch #: 745673 **Sample:** 321686-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	55.8	50.0	112	70-135	

Lab Batch #: 745673 **Sample:** 522478-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	60.8	50.0	122	70-135	

Lab Batch #: 745673 **Sample:** 522478-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	53.4	50.0	107	70-135	

Lab Batch #: 745673 **Sample:** 522478-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	64.5	50.0	129	70-135	

** 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 Ranch Historical

Work Order #: 321686 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 01/15/2009 **Date Analyzed:** 01/15/2009

Lab Batch ID: 746674 **Sample:** 523001-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	0.1010	101	0.1	0.0966	97	4	70-130	35	
Toluene	ND	0.1000	0.0978	98	0.1	0.0943	94	4	70-130	35	
Ethylbenzene	ND	0.1000	0.1032	103	0.1	0.1000	100	3	71-129	35	
m,p-Xylenes	ND	0.2000	0.2045	102	0.2	0.1980	99	3	70-135	35	
o-Xylene	ND	0.1000	0.0979	98	0.1	0.0946	95	3	71-133	35	

Analyst: BHW **Date Prepared:** 01/06/2009 **Date Analyzed:** 01/06/2009

Lab Batch ID: 745673 **Sample:** 522478-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	ND	1000	1010	101	1000	1000	100	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1060	106	1000	1050	105	1	70-135	35	

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 Ranch Historical

Work Order # : 321686 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 745673 **QC- Sample ID:** 321601-019 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/06/2009 **Date Prepared:** 01/06/2009 **Analyst:** BHW

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **Analytes**	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
C6-C12 Gasoline Range Hydrocarbons	ND	1070	1070	100	1070	1070	100	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1070	1130	106	1070	1150	107	1	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 321686

Lab Batch #: 745691 **Project ID:** TNM-Red Byrd Ranch Historical

Date Analyzed: 01/06/2009 **Date Prepared:** 01/06/2009 **Analyst:** BEV

QC- Sample ID: 321675-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4.33	3.94	9	20	

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 01 Project Name: Red Byrd Ranch Historical

Company Name: Basin Environmental Consulting, LLC Project #: TNM-Red Byrd Ranch Historical

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

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

Telephone No: (575) 441-2244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Curt Stanley for C.J. Beyhan e-mail: cdstanley@basin-consulting.com

(lab use only) ORDER #: 321086

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; S - Sludge; GW - Groundwater; SW/Soil; NP - Non Potable Specify Other	Analyze For: 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	SP-1			1/5/2008	1030		1	X								Soil	X									X								X

Special Instructions:
BILL TO PLAINS

Relinquished by:	Date	Time	Received by	Date	Time
[signature]	1/6/09	945			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	Date 1/6/09	Time 9.45

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: 2.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env / Plains

Date/ Time: 1.6.09 9:45

Lab ID # : 321036

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.5 °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

Andrea Lam

From: "Curt D. Stanley" <cstanley@basinenv.com>
To: "Andrea Lam" <andrea.lam@xenco.com>
Sent: Thursday, January 08, 2009 2:24 PM
Subject: Re: WO 321686 / Red Byrd Ranch Historical

Please correct the error.

Thank you

Curt Stanley

> ---- Original Message -----
> **From:** Andrea Lam
> **To:** Curt Stanley
> **Sent:** Tuesday, January 06, 2009 9:13 AM
> **Subject:** WO 321686 / Red Byrd Ranch Historical
>
> *Curt- I just want to confirm per our phone call that the sample year should be 2009 not 2008.*
>
> *Thank You,*
> *Andrea Lam*
> *Sample Receiving / Project Assistant*
>
> *Environmental Lab of Texas*
> *A Xenco Company*
> *12600 W I-20 E*
> *Odessa, TX 79765*
> *432-563-1800*

1/8/2009

Gracie Avalos

From: Camille J. Bryant [cjbryant@basin-consulting.com]
Sent: Monday, January 12, 2009 3:44 PM
To: Gracie Avalos
Subject: Fw: WO 321686 / Red Byrd Ranch Historical
Attachments: 2009_321686_TNM-Red_Byrd_Ranch_Historical.pdf

Gracie,

Would you please test the soil samples with TPH concentrations under 1,000 ppm for BTEX concentrations method 8021B. Please do this for WO 321683 also.

Thanks.
Camille Bryant
----- Original Message -----
From: Curt D. Stanley
To: cjbryant@basin-consulting.com
Sent: Friday, January 09, 2009 7:36 AM
Subject: Fw: WO 321686 / Red Byrd Ranch Historical

----- Original Message -----
From: Gracie Avalos
To: cdstanley@basin-consulting.com ; Jason Henry
Sent: Wednesday, January 07, 2009 2:42 PM
Subject: WO 321686 / Red Byrd Ranch Historical

Gracie Avalos
Project Assistant
Xenco Labs - Odessa
432-563-1800 Office
432-4563-1713 Fax
gracie.avalos@xenco.com

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Please consider the environment before printing this email.

1/12/2009

Analytical Report 322657

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

TNM-Red Byrd Ranch Historical

27-JAN-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
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

27-JAN-09

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

Reference: XENCO Report No: **322657**
Red Byrd Ranch Historical
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 322657. 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. 322657 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 322657

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP # 2	S	Jan-14-09 13:00		322657-001
SP # 3	S	Jan-14-09 13:10		322657-002
SP # 4	S	Jan-14-09 13:20		322657-003
NSW-1A	S	Jan-14-09 13:30		322657-004
NSW-1B	S	Jan-14-09 13:40		322657-005
WSW-1A	S	Jan-14-09 13:50		322657-006
SSW-1A	S	Jan-14-09 14:00		322657-007
SSW-1B	S	Jan-14-09 14:10		322657-008
SSW-1C	S	Jan-14-09 14:20		322657-009

Certificate of Analysis Summary 322657

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Thu Jan-15-09 06:43 pm
Report Date: 27-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	322657-001		322657-002		322657-003		322657-004		322657-005		322657-006	
	Field Id:	SP # 2		SP # 3		SP # 4		NSW-1A		NSW-1B		WSW-1A	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-14-09 13:00		Jan-14-09 13:10		Jan-14-09 13:20		Jan-14-09 13:30		Jan-14-09 13:40		Jan-14-09 13:50	
BTEX by EPA 8021B	*Extracted:*	Jan-22-09 15:30		Jan-22-09 15:30		Jan-22-09 15:30		Jan-22-09 15:30		Jan-22-09 15:30		Jan-23-09 08:00	
	Analyzed:	Jan-23-09 01:46		Jan-23-09 02:06		Jan-23-09 02:27		Jan-23-09 02:48		Jan-23-09 03:52		Jan-23-09 13:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0011	ND	0.0512
Toluene		ND	0.0022	ND	0.0021	ND	0.0021	0.0435	0.0020	ND	0.0021	2.996	0.1024
Ethylbenzene		0.0011	0.0011	0.0087	0.0010	0.0086	0.0011	0.0269	0.0010	ND	0.0011	2.993	0.0512
m,p-Xylenes		ND	0.0022	0.0170	0.0021	0.0264	0.0021	0.1214	0.0020	ND	0.0021	11.86	0.1024
o-Xylene		0.0040	0.0011	0.0247	0.0010	0.0344	0.0011	0.0422	0.0010	ND	0.0011	4.412	0.0512
Total Xylenes		0.004	0.0022	0.0417	0.0021	0.0608	0.0021	0.1636	0.0020	ND	0.0021	16.272	0.1024
Total BTEX		0.0051	0.0011	0.0504	0.0010	0.0694	0.0011	0.234	0.0010	ND	0.0011	22.261	0.0512
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-16-09 17:00		Jan-16-09 17:00		Jan-16-09 17:00		Jan-16-09 17:00		Jan-16-09 17:00		Jan-16-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.42	1.00	2.52	1.00	4.72	1.00	1.50	1.00	5.07	1.00	2.39	1.00
TPH By SW8015 Mod	*Extracted:*	Jan-16-09 14:15		Jan-16-09 14:15		Jan-16-09 14:15		Jan-16-09 14:15		Jan-16-09 14:15		Jan-16-09 14:15	
	Analyzed:	Jan-17-09 06:19		Jan-17-09 06:41		Jan-17-09 07:04		Jan-17-09 07:27		Jan-17-09 07:50		Jan-17-09 08:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		38.2	16.2	129	76.9	96.5	15.7	490	76.1	ND	15.8	1480	76.8
C12-C28 Diesel Range Hydrocarbons		135	16.2	735	76.9	761	15.7	10100	76.1	48.1	15.8	3500	76.8
C28-C35 Oil Range Hydrocarbons		83.3	16.2	259	76.9	160	15.7	2040	76.1	26.6	15.8	493	76.8
Total TPH		256.5	16.2	1123	76.9	1017.5	15.7	12630	76.1	74.7	15.8	5473	76.8

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 322657

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Thu Jan-15-09 06:43 pm
Report Date: 27-JAN-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	322657-007		322657-008		322657-009					
	Field Id:	SSW-1A		SSW-1B		SSW-1C					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jan-14-09 14:00		Jan-14-09 14:10		Jan-14-09 14:20					
BTEX by EPA 8021B	*Extracted:*	Jan-22-09 15:30		Jan-26-09 10:00		Jan-22-09 15:30					
	Analyzed:	Jan-23-09 04:34		Jan-26-09 16:13		Jan-23-09 05:16					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.0012	ND	0.0514	ND	0.0011				
Toluene		ND	0.0023	0.9294	0.1028	ND	0.0021				
Ethylbenzene		ND	0.0012	2.237	0.0514	ND	0.0011				
m,p-Xylenes		ND	0.0023	9.197	0.1028	ND	0.0021				
o-Xylene		ND	0.0012	2.203	0.0514	ND	0.0011				
Total Xylenes		ND	0.0023	11.4	0.1028	ND	0.0021				
Total BTEX		ND	0.0012	14.5664	0.0514	ND	0.0011				
Percent Moisture	*Extracted:*										
	Analyzed:	Jan-16-09 17:00		Jan-16-09 17:00		Jan-16-09 17:00					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		14.66	1.00	2.73	1.00	5.54	1.00				
TPH By SW8015 Mod	*Extracted:*	Jan-16-09 14:15		Jan-16-09 14:15		Jan-16-09 14:15					
	Analyzed:	Jan-17-09 09:00		Jan-17-09 09:23		Jan-17-09 09:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	17.6	2050	154	ND	15.9				
C12-C28 Diesel Range Hydrocarbons		ND	17.6	5260	154	ND	15.9				
C28-C35 Oil Range Hydrocarbons		ND	17.6	701	154	ND	15.9				
Total TPH		ND	17.6	8011	154	ND	15.9				

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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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 747356 **Sample:** 322657-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0386	0.0300	129	80-120	*

Lab Batch #: 747356 **Sample:** 322657-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0671	0.0300	224	80-120	*

Lab Batch #: 747356 **Sample:** 322657-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0780	0.0300	260	80-120	*

Lab Batch #: 747356 **Sample:** 322657-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0391	0.0300	130	80-120	*
4-Bromofluorobenzene	0.0852	0.0300	284	80-120	*

Lab Batch #: 747356 **Sample:** 322657-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 747356 **Sample:** 322657-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0325	0.0300	108	80-120	

Lab Batch #: 747356 **Sample:** 322657-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 747356 **Sample:** 323065-007 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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	0.0296	0.0300	99	80-120	

Lab Batch #: 747356 **Sample:** 323065-007 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

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

Lab Batch #: 747356 **Sample:** 523469-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 747356 **Sample:** 523469-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0318	0.0300	106	80-120	

Lab Batch #: 747356 **Sample:** 523469-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0272	0.0300	91	80-120	

Lab Batch #: 747389 **Sample:** 322657-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0384	0.0300	128	80-120	**
4-Bromofluorobenzene	0.1170	0.0300	390	80-120	**

Lab Batch #: 747389 **Sample:** 322761-014 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 747389 **Sample:** 322761-014 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 747389 **Sample:** 523501-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0273	0.0300	91	80-120	

Lab Batch #: 747389 **Sample:** 523501-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0326	0.0300	109	80-120	

Lab Batch #: 747389 **Sample:** 523501-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0278	0.0300	93	80-120	

Lab Batch #: 747608 **Sample:** 322657-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0381	0.0300	127	80-120	**
4-Bromofluorobenzene	0.0898	0.0300	299	80-120	**

Lab Batch #: 747608 **Sample:** 523605-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 747608 **Sample:** 523605-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0337	0.0300	112	80-120	

Lab Batch #: 747608 **Sample:** 523605-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0287	0.0300	96	80-120	

Lab Batch #: 746816 **Sample:** 322641-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	64.3	50.0	129	70-135	

Lab Batch #: 746816 **Sample:** 322641-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	63.1	50.0	126	70-135	

Lab Batch #: 746816 **Sample:** 322657-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	58.0	50.0	116	70-135	

** 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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746816 **Sample:** 322657-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	59.3	50.0	119	70-135	

Lab Batch #: 746816 **Sample:** 322657-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	60.1	50.0	120	70-135	

Lab Batch #: 746816 **Sample:** 322657-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	117	50.0	234	70-135	**

Lab Batch #: 746816 **Sample:** 322657-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	57.2	50.0	114	70-135	

Lab Batch #: 746816 **Sample:** 322657-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	143	100	143	70-135	**
o-Terphenyl	67.4	50.0	135	70-135	

** 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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746816 **Sample:** 322657-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	58.1	50.0	116	70-135	

Lab Batch #: 746816 **Sample:** 322657-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	154	100	154	70-135	**
o-Terphenyl	69.9	50.0	140	70-135	**

Lab Batch #: 746816 **Sample:** 322657-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	57.8	50.0	116	70-135	

Lab Batch #: 746816 **Sample:** 523072-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	62.1	50.0	124	70-135	

Lab Batch #: 746816 **Sample:** 523072-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	57.6	50.0	115	70-135	

** 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 Ranch Historical

Work Orders : 322657,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 746816 **Sample:** 523072-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	63.4	50.0	127	70-135	

** 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 Ranch Historical

Work Order #: 322657 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 01/22/2009 **Date Analyzed:** 01/22/2009

Lab Batch ID: 747356 **Sample:** 523469-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.1002	100	0.1	0.1035	104	3	70-130	35	
Toluene	ND	0.1000	0.0952	95	0.1	0.0983	98	3	70-130	35	
Ethylbenzene	ND	0.1000	0.0987	99	0.1	0.1039	104	5	71-129	35	
m,p-Xylenes	ND	0.2000	0.1947	97	0.2	0.2059	103	6	70-135	35	
o-Xylene	ND	0.1000	0.0946	95	0.1	0.0981	98	4	71-133	35	

Analyst: ASA **Date Prepared:** 01/23/2009 **Date Analyzed:** 01/23/2009

Lab Batch ID: 747389 **Sample:** 523501-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.0967	97	0.1	0.0951	95	2	70-130	35	
Toluene	ND	0.1000	0.0944	94	0.1	0.0918	92	3	70-130	35	
Ethylbenzene	ND	0.1000	0.1025	103	0.1	0.0996	100	3	71-129	35	
m,p-Xylenes	ND	0.2000	0.2028	101	0.2	0.1976	99	3	70-135	35	
o-Xylene	ND	0.1000	0.0972	97	0.1	0.0948	95	3	71-133	35	

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 Ranch Historical

Work Order #: 322657 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 01/26/2009 **Date Analyzed:** 01/26/2009

Lab Batch ID: 747608 **Sample:** 523605-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.1040	104	1	70-130	35	
Toluene	ND	0.1000	0.1001	100	0.1	0.0987	99	1	70-130	35	
Ethylbenzene	ND	0.1000	0.1056	106	0.1	0.1039	104	2	71-129	35	
m,p-Xylenes	ND	0.2000	0.2103	105	0.2	0.2074	104	1	70-135	35	
o-Xylene	ND	0.1000	0.0996	100	0.1	0.0985	99	1	71-133	35	

Analyst: BHW **Date Prepared:** 01/16/2009 **Date Analyzed:** 01/17/2009

Lab Batch ID: 746816 **Sample:** 523072-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	1000	928	93	1000	918	92	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	974	97	1000	957	96	2	70-135	35	

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 Ranch Historical

Work Order # : 322657 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 747356 **QC- Sample ID:** 323065-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/23/2009 **Date Prepared:** 01/22/2009 **Analyst:** ASA

Reporting Units: mg/kg

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	0.1007	0.0827	82	0.1007	0.0875	87	6	70-130	35	
Toluene	0.0126	0.1007	0.1042	91	0.1007	0.1071	94	3	70-130	35	
Ethylbenzene	0.0069	0.1007	0.0805	73	0.1007	0.0809	73	0	71-129	35	
m,p-Xylenes	0.0218	0.2014	0.1711	74	0.2014	0.1807	79	7	70-135	35	
o-Xylene	0.0049	0.1007	0.0781	73	0.1007	0.0816	76	4	71-133	35	

Lab Batch ID: 747389 **QC- Sample ID:** 322761-014 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/23/2009 **Date Prepared:** 01/23/2009 **Analyst:** ASA

Reporting Units: mg/kg

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	0.1123	0.0682	61	0.1123	0.0789	70	14	70-130	35	X
Toluene	ND	0.1123	0.0650	58	0.1123	0.0756	67	14	70-130	35	X
Ethylbenzene	0.0013	0.1123	0.0705	62	0.1123	0.0831	73	16	71-129	35	X
m,p-Xylenes	0.0035	0.2246	0.1405	61	0.2246	0.1654	72	17	70-135	35	X
o-Xylene	0.0015	0.1123	0.0608	53	0.1123	0.0725	63	17	71-133	35	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

Form 3 - MS / MSD Recoveries

Project Name: Red Byrd Ranch Historical

Work Order # : 322657 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 746816 **QC- Sample ID:** 322641-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/19/2009 **Date Prepared:** 01/16/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1160	1170	101	1160	1100	95	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	46.7	1160	1220	101	1160	1190	99	2	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 322657

Lab Batch #: 746793 **Project ID:** TNM-Red Byrd Ranch Historical

Date Analyzed: 01/16/2009 **Date Prepared:** 01/16/2009 **Analyst:** ASA

QC- Sample ID: 322657-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.42	9.66	26	20	F

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: Camille Bryant PAGE 01 OF 01 Project Name: Red Byrd Ranch Historical

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

Company Address: 2890 Plains Hwy Project Loc: Lea County, NM

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

Telephone No: (575) 605-7210 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Camille Bryant e-mail: cibryant@basin-consulting.com

(lab use only)
ORDER #: 322657

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 SL - Sludge GW - Groundwater S - Soil/Solid NP - Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	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	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	EPA Rem Fiber Test	Chlorides E 300	RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT
01	SP #2			1/14/2009	1300		1	X								Soil	X															X
02	SP #3			1/14/2009	1310		1	X								Soil	X															X
03	SP #4			1/14/2009	1320		1	X								Soil	X															X
04	NSW - 1A			1/14/2009	1330		1	X								Soil	X															X
05	NSW - 1B			1/14/2009	1340		1	X								Soil	X															X
06	WSW - 1A			1/14/2009	1350		1	X								Soil	X															X
07	SSW - 1A			1/14/2009	1400		1	X								Soil	X															X
08	SSW - 1B			1/14/2009	1410		1	X								Soil	X															X
09	SSW - 1C			1/14/2009	1420		1	X								Soil	X															X

Special Instructions:
Please

Relinquished by: Camille Bryant	Date 1/15/09	Time 1458	Received by:		Date 1/15/09	Time 14:58
Relinquished by:	Date	Time	Received by:		Date	Time
Relinquished by:	Date 1/15/09	Time 18:43	Received by ELOT: Jeanne Fitch		Date 01-15-09	Time 1843

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s)/lab# 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
XENCO
Temperature Upon Receipt: 4.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin Env.

Date/ Time: 06-13-08 @ 1843

Lab ID #: 322691

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	4.0 °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? / Label	(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: Camille J. Bryant [cjbryant@basin-consulting.com]
Sent: Wednesday, January 21, 2009 1:46 PM
To: Gracie Avalos
Subject: Fw: WO 322657 / Red Byrd Ranch Historical
Attachments: 2009_322657_TNM-Red_Byrd_Ranch_Historical.pdf

Gracie,

Please run BTEX 8021b on all soil samples on this COC (322657).

Thank you,

Curt Stanley
Basin Environmental

---- Original Message ----
From: Gracie Avalos
To: 'Camille J. Bryant' ; Jason Henry
Sent: Monday, January 19, 2009 12:44 PM
Subject: WO 322657 / Red Byrd Ranch Historical

Gracie Avalos
Project Assistant
Xenco Labs - Odessa
432-563-1800 Office
432-4563-1713 Fax
gracie.avalos@xenco.com

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1/21/2009

Analytical Report 323416

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

Red Byrd Ranch TNM Historical

05-FEB-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
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

05-FEB-09

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

Reference: XENCO Report No: **323416**
Red Byrd Ranch Historical
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 323416. 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. 323416 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 323416

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended - 11	S	Jan-26-09 14:00		323416-001
Blended - 12	S	Jan-26-09 14:05		323416-002
Blended - 13	S	Jan-26-09 14:10		323416-003
Blended - 14	S	Jan-26-09 14:15		323416-004
Blended - 15	S	Jan-26-09 14:20		323416-005
Blended - 16	S	Jan-26-09 14:25		323416-006
Blended - 17	S	Jan-26-09 14:30		323416-007
Blended - 18	S	Jan-26-09 14:40		323416-008
Blended - 19	S	Jan-26-09 14:45		323416-009
Blended - 20	S	Jan-26-09 14:50		323416-010
WSW - 2A	S	Jan-26-09 15:00		323416-011
SSW - 2B	S	Jan-26-09 15:10		323416-012
SSW - 1D	S	Jan-26-09 15:20		323416-013
West Wall 13' A	S	Jan-26-09 15:30		323416-014
NSW - 2A	S	Jan-26-09 15:40		323416-015

Certificate of Analysis Summary 323416

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Jan-27-09 02:40 pm
Report Date: 05-FEB-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	323416-001		323416-002		323416-003		323416-004		323416-005		323416-006	
	Field Id:	Blended - 11		Blended - 12		Blended - 13		Blended - 14		Blended - 15		Blended - 16	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-26-09 14:00		Jan-26-09 14:05		Jan-26-09 14:10		Jan-26-09 14:15		Jan-26-09 14:20		Jan-26-09 14:25	
BTEX by EPA 8021B	*Extracted:*			Feb-04-09 13:23		Feb-04-09 13:23							
	Analyzed:			Feb-04-09 13:35		Feb-04-09 13:56							
	Units/RL:			mg/kg	RL	mg/kg	RL						
Benzene				ND	0.0011	ND	0.0011						
Toluene				0.0259	0.0023	ND	0.0022						
Ethylbenzene				0.0639	0.0011	0.0124	0.0011						
m,p-Xylenes				0.2690	0.0023	0.0589	0.0022						
o-Xylene				0.0705	0.0011	0.0216	0.0011						
Total Xylenes				0.3395	0.0023	0.0805	0.0022						
Total BTEX				0.4293	0.0011	0.0929	0.0011						
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.73	1.00	12.04	1.00	8.54	1.00	9.05	1.00	7.19	1.00	9.62	1.00
TPH By SW8015 Mod	*Extracted:*	Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00	
	Analyzed:	Jan-30-09 16:03		Jan-30-09 16:25		Jan-30-09 16:48		Jan-30-09 17:11		Jan-30-09 17:34		Jan-30-09 17:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		507	81.3	166	17.1	63.4	16.4	297	16.5	408	16.2	236	16.6
C12-C28 Diesel Range Hydrocarbons		1610	81.3	590	17.1	312	16.4	1220	16.5	1840	16.2	975	16.6
C28-C35 Oil Range Hydrocarbons		172	81.3	63.2	17.1	43.0	16.4	171	16.5	262	16.2	140	16.6
Total TPH		2289	81.3	819.2	17.1	418.4	16.4	1688	16.5	2510	16.2	1351	16.6

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 323416

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Jan-27-09 02:40 pm
Report Date: 05-FEB-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	323416-007		323416-008		323416-009		323416-010		323416-011		323416-012	
	Field Id:	Blended - 17		Blended - 18		Blended - 19		Blended - 20		WSW - 2A		SSW - 2B	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-26-09 14:30		Jan-26-09 14:40		Jan-26-09 14:45		Jan-26-09 14:50		Jan-26-09 15:00		Jan-26-09 15:10	
BTEX by EPA 8021B	*Extracted:*							Feb-04-09 13:23				Feb-04-09 13:23	
	Analyzed:							Feb-04-09 14:17				Feb-04-09 14:39	
	Units/RL:							mg/kg	RL			mg/kg	RL
Benzene								ND	0.0011			ND	0.0011
Toluene								0.0204	0.0022			ND	0.0022
Ethylbenzene								0.0323	0.0011			ND	0.0011
m,p-Xylenes								0.1550	0.0022			ND	0.0022
o-Xylene								0.0790	0.0011			ND	0.0011
Total Xylenes								0.234	0.0022			ND	0.0022
Total BTEX								0.2867	0.0011			ND	0.0011
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		12.48	1.00	13.85	1.00	14.48	1.00	9.27	1.00	10.53	1.00	7.59	1.00
TPH By SW8015 Mod	*Extracted:*	Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00	
	Analyzed:	Jan-30-09 18:19		Jan-30-09 18:42		Jan-30-09 19:06		Jan-30-09 19:29		Jan-30-09 20:15		Jan-30-09 20:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		546	85.7	521	17.4	320	17.5	89.5	16.5	41.5	16.8	ND	16.2
C12-C28 Diesel Range Hydrocarbons		1650	85.7	1160	17.4	904	17.5	612	16.5	341	16.8	ND	16.2
C28-C35 Oil Range Hydrocarbons		289	85.7	162	17.4	133	17.5	97.7	16.5	41.9	16.8	ND	16.2
Total TPH		2485	85.7	1843	17.4	1357	17.5	799.2	16.5	424.4	16.8	ND	16.2

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 323416

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Tue Jan-27-09 02:40 pm
Report Date: 05-FEB-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	323416-013		323416-014		323416-015					
	Field Id:	SSW - 1D		West Wall 13' A		NSW - 2A					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jan-26-09 15:20		Jan-26-09 15:30		Jan-26-09 15:40					
BTEX by EPA 8021B	*Extracted:*	Feb-04-09 13:23		Feb-04-09 13:23							
	Analyzed:	Feb-04-09 15:00		Feb-04-09 15:21							
	Units/RL:	mg/kg	RL	mg/kg	RL						
Benzene		ND	0.0011	ND	0.0011						
Toluene		ND	0.0022	ND	0.0021						
Ethylbenzene		ND	0.0011	ND	0.0011						
m,p-Xylenes		ND	0.0022	ND	0.0021						
o-Xylene		ND	0.0011	ND	0.0011						
Total Xylenes		ND	0.0022	ND	0.0021						
Total BTEX		ND	0.0011	ND	0.0011						
Percent Moisture	*Extracted:*										
	Analyzed:	Jan-27-09 17:00		Jan-27-09 17:00		Jan-27-09 17:00					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		7.93	1.00	6.93	1.00	7.14	1.00				
TPH By SW8015 Mod	*Extracted:*	Jan-30-09 14:00		Jan-30-09 14:00		Jan-30-09 14:00					
	Analyzed:	Jan-30-09 21:01		Jan-30-09 21:24		Jan-30-09 21:47					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	16.3	ND	16.1	ND	16.2				
C12-C28 Diesel Range Hydrocarbons		ND	16.3	ND	16.1	133	16.2				
C28-C35 Oil Range Hydrocarbons		ND	16.3	ND	16.1	ND	16.2				
Total TPH		ND	16.3	ND	16.1	133	16.2				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748495 **Sample:** 323416-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.1889	0.0300	630	80-120	**

Lab Batch #: 748495 **Sample:** 323416-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.1079	0.0300	360	80-120	**

Lab Batch #: 748495 **Sample:** 323416-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.1364	0.0300	455	80-120	**

Lab Batch #: 748495 **Sample:** 323416-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 748495 **Sample:** 323416-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748495 **Sample:** 323416-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 748495 **Sample:** 323708-007 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 748495 **Sample:** 323708-007 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0181	0.0300	60	80-120	**
4-Bromofluorobenzene	0.0170	0.0300	57	80-120	**

Lab Batch #: 748495 **Sample:** 524145-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0308	0.0300	103	80-120	

Lab Batch #: 748495 **Sample:** 524145-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748495 **Sample:** 524145-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 748060 **Sample:** 323416-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	63.7	50.0	127	70-135	

Lab Batch #: 748060 **Sample:** 323416-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	58.9	50.0	118	70-135	

Lab Batch #: 748060 **Sample:** 323416-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	58.1	50.0	116	70-135	

Lab Batch #: 748060 **Sample:** 323416-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	60.2	50.0	120	70-135	

** 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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748060 **Sample:** 323416-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	60.7	50.0	121	70-135	

Lab Batch #: 748060 **Sample:** 323416-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	59.9	50.0	120	70-135	

Lab Batch #: 748060 **Sample:** 323416-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	60.5	50.0	121	70-135	

Lab Batch #: 748060 **Sample:** 323416-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	61.4	50.0	123	70-135	

Lab Batch #: 748060 **Sample:** 323416-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	59.2	50.0	118	70-135	

** 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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748060 **Sample:** 323416-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	60.2	50.0	120	70-135	

Lab Batch #: 748060 **Sample:** 323416-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	58.0	50.0	116	70-135	

Lab Batch #: 748060 **Sample:** 323416-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 748060 **Sample:** 323416-012 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	62.4	50.0	125	70-135	

Lab Batch #: 748060 **Sample:** 323416-012 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	62.9	50.0	126	70-135	

** 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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748060 **Sample:** 323416-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	55.9	50.0	112	70-135	

Lab Batch #: 748060 **Sample:** 323416-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	59.3	50.0	119	70-135	

Lab Batch #: 748060 **Sample:** 323416-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	59.6	50.0	119	70-135	

Lab Batch #: 748060 **Sample:** 523906-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	62.6	50.0	125	70-135	

Lab Batch #: 748060 **Sample:** 523906-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	57.7	50.0	115	70-135	

** 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 Ranch Historical

Work Orders : 323416,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 748060 **Sample:** 523906-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	60.5	50.0	121	70-135	

** 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 Ranch Historical

Work Order #: 323416 **Project ID:** Red Byrd Ranch TNM Historical

Analyst: ASA **Date Prepared:** 02/04/2009 **Date Analyzed:** 02/04/2009

Lab Batch ID: 748495 **Sample:** 524145-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	0.1135	114	0.1	0.1123	112	1	70-130	35	
Toluene	ND	0.1000	0.1137	114	0.1	0.1131	113	1	70-130	35	
Ethylbenzene	ND	0.1000	0.1141	114	0.1	0.1142	114	0	71-129	35	
m,p-Xylenes	ND	0.2000	0.2392	120	0.2	0.2392	120	0	70-135	35	
o-Xylene	ND	0.1000	0.1182	118	0.1	0.1174	117	1	71-133	35	

Analyst: BHW **Date Prepared:** 01/30/2009 **Date Analyzed:** 01/30/2009

Lab Batch ID: 748060 **Sample:** 523906-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	ND	1000	959	96	1000	966	97	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1000	100	1000	1000	100	0	70-135	35	

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 Ranch Historical

Work Order # : 323416 **Project ID:** Red Byrd Ranch TNM Historical

Lab Batch ID: 748495 **QC- Sample ID:** 323708-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/04/2009 **Date Prepared:** 02/04/2009 **Analyst:** ASA

Reporting Units: mg/kg

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	0.1162	0.0802	69	0.1162	0.0489	42	49	70-130	35	XF
Toluene	ND	0.1162	0.0793	68	0.1162	0.0462	40	52	70-130	35	XF
Ethylbenzene	ND	0.1162	0.0812	70	0.1162	0.0507	44	46	71-129	35	XF
m,p-Xylenes	ND	0.2325	0.1713	74	0.2325	0.1108	48	43	70-135	35	XF
o-Xylene	ND	0.1162	0.0802	69	0.1162	0.0494	43	46	71-133	35	XF

Lab Batch ID: 748060 **QC- Sample ID:** 323416-012 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/31/2009 **Date Prepared:** 01/30/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1080	1030	95	1080	1020	94	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1080	1080	100	1080	1090	101	1	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 323416

Lab Batch #: 747671 **Project ID:** Red Byrd Ranch TNM Historical

Date Analyzed: 01/27/2009 **Date Prepared:** 01/27/2009 **Analyst:** BEV

QC- Sample ID: 323262-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.65	1.49	56	20	F

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

Company Name: Basin Environmental Service Technologies, LLC

Company Address: 2800 Plains Hwy

City/State/Zip: Lovington, NM 88260

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

Sampler Signature: C.S. Bryant email: cstanley@basinenv.com

Project Name: Red Byrd Ranch Historical

Project #: Red Byrd Ranch TNM Historical

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)
ORDER #: 323416

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 SL=Sludge SW=Surface Water SS=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: 8015M 8015B	TPH 418.1	TPH 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	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	Blended - 11			1/27/2009	1400		1	X								Soil	X																X
02	Blended - 12			1/27/2009	1405		1	X								Soil	X																X
03	Blended - 13			1/27/2009	1410		1	X								Soil	X																X
04	Blended - 14			1/27/2009	1415		1	X								Soil	X																X
05	Blended - 15			1/27/2009	1420		1	X								Soil	X																X
06	Blended - 16			1/27/2009	1425		1	X								Soil	X																X
07	Blended - 17			1/27/2009	1430		1	X								Soil	X																X
08	Blended - 18			1/27/2009	1440		1	X								Soil	X																X
09	Blended - 19			1/27/2009	1445		1	X								Soil	X																X
10	Blended - 20			1/27/2009	1450		1	X								Soil	X																X

Special Instructions:
BILL TO PLAINS

Relinquished by:	Date	Time	Received by:	Date	Time
C.S. Bryant	1/27/09	1440			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Perez	1.27.09	1440

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 DHL FedEx Lone Star	
Temperature Upon Receipt:	4.0 °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: 2800 Plains Hwy
City/State/Zip: Lovington, NM 88260
Telephone No: (575) 441-2244 Fax No: (575) 396-1429
Sampler Signature: [signature] e-mail: cstanley@basinenv.com

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

(lab use only)
ORDER #: 323416

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO₃	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
11	WSW - 2A			1/27/2009	1500		1	X								Soil	X															X
12	SSW - 2B			1/27/2009	1510		1	X								Soil	X															X
13	SSW - 1D			1/27/2009	1520		1	X								Soil	X															X
14	West Wall 13' A			1/27/2009	1530		1	X								Soil	X															X
15	NSW - 2A			1/27/2009	1540		1	X								Soil	X															X

Analyze For: TCLP: / TOTAL:

Special Instructions: BILL TO PLAINS

Relinquished by	Date	Time	Received by	Date	Time
[signature]	1/27/09	1440			
			Received by ELOT: [signature]	1-27-09	14:40

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
4.0 °C
Temperature Upon Receipt: 4.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin / Plains

Date/ Time: 1-27-09 14:40

Lab ID #: 32341G

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	4.0 °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	FCC
#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: CUT Contacted by: Celeste Date/ Time: 1-27-09 14:40

Regarding: Sample ID on labels + COC should be 1-26-09

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 D. Stanley [cstanley@basinenv.com]
Sent: Wednesday, February 04, 2009 12:29 PM
To: Gracie Avalos
Subject: Re: WO 323416 / Red Byrd Ranch Historical

Gracie,

Please run BTEX 8021b on samples:

323416-002
323416-003
323416-010
323416-012
323416-013
323416-014

Thanks,

Curt Stanley
Basin

----- Original Message -----
From: Gracie Avalos
To: cstanley@basinenv.com ; Jason Henry
Sent: Monday, February 02, 2009 7:08 AM
Subject: WO 323416 / Red Byrd Ranch Historical

Gracie Avalos
Project Assistant
Xenco Labs - Odessa
432-563-1800 Office
432-4563-1713 Fax
gracie.avalos@xenco.com

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Please consider the environment before printing this email.

Analytical Report 324356

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

Red Bryd Ranch TNM Historical

10-FEB-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
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

10-FEB-09

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

Reference: XENCO Report No: **324356**
Red Byrd Ranch Historical
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 324356. 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. 324356 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 324356

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NSW-3A	S	Feb-06-09 07:45		324356-001
WSW-3A	S	Feb-06-09 07:55		324356-002
Blended Soil 1A	S	Feb-06-09 08:10		324356-003
Blended Soil 2A	S	Feb-06-09 08:20		324356-004
SP-3A	S	Feb-06-09 08:30		324356-005
SP-4A	S	Feb-06-09 08:40		324356-006

Certificate of Analysis Summary 324356

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Bryd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Feb-06-09 12:20 pm
Report Date: 10-FEB-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	324356-001		324356-002		324356-003		324356-004		324356-005		324356-006	
	Field Id:	NSW-3A		WSW-3A		Blended Soil 1A		Blended Soil 2A		SP-3A		SP-4A	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-06-09 07:45		Feb-06-09 07:55		Feb-06-09 08:10		Feb-06-09 08:20		Feb-06-09 08:30		Feb-06-09 08:40	
Percent Moisture	*Extracted:*												
	Analyzed:	Feb-06-09 17:45		Feb-06-09 17:45		Feb-06-09 17:45		Feb-06-09 17:45		Feb-06-09 17:45		Feb-06-09 17:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.33		16.1		7.86		7.57		6.45		7.71	
TPH By SW8015 Mod	*Extracted:*	Feb-08-09 11:24		Feb-08-09 11:24		Feb-08-09 11:24		Feb-08-09 11:24		Feb-08-09 11:24		Feb-08-09 11:24	
	Analyzed:	Feb-08-09 18:31		Feb-08-09 18:54		Feb-08-09 19:17		Feb-08-09 19:40		Feb-08-09 20:02		Feb-08-09 20:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.5	ND	17.9	131	16.3	54.3	16.2	111	16.0	67.9	16.3
C12-C28 Diesel Range Hydrocarbons		32.1	15.5	ND	17.9	1370	16.3	831	16.2	718	16.0	565	16.3
C28-C35 Oil Range Hydrocarbons		ND	15.5	ND	17.9	214	16.3	150	16.2	118	16.0	96.6	16.3
Total TPH		32.1	15.0	ND	15.0	1715	15.0	1035.3	15.0	947	15.0	729.5	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 324356,

Project ID: Red Bryd Ranch TNM Historical

Lab Batch #: 748792 **Sample:** 324344-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	56.6	50.0	113	70-135	

Lab Batch #: 748792 **Sample:** 324344-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

Lab Batch #: 748792 **Sample:** 324356-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.3	100	95	70-135	
o-Terphenyl	47.6	50.0	95	70-135	

Lab Batch #: 748792 **Sample:** 324356-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 748792 **Sample:** 324356-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

** 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 Ranch Historical

Work Orders : 324356,

Project ID: Red Bryd Ranch TNM Historical

Lab Batch #: 748792 **Sample:** 324356-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	100	98	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 748792 **Sample:** 324356-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 748792 **Sample:** 324356-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.0	100	98	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 748792 **Sample:** 524290-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	51.0	50.0	102	70-135	

Lab Batch #: 748792 **Sample:** 524290-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	100	97	70-135	
o-Terphenyl	48.0	50.0	96	70-135	

** 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 Ranch Historical

Work Orders : 324356,

Project ID: Red Bryd Ranch TNM Historical

Lab Batch #: 748792 **Sample:** 524290-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51.6	50.0	103	70-135	

** 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 Ranch Historical

Work Order #: 324356
Analyst: BHW
Lab Batch ID: 748792
Sample: 524290-1-BKS
Units: mg/kg

Date Prepared: 02/08/2009
Batch #: 1

Project ID: Red Bryd Ranch TNM Historical
Date Analyzed: 02/08/2009
Matrix: Solid

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	6.50	1000	953	95	1000	958	96	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	12.3	1000	991	99	1000	995	100	0	70-135	35	

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 Ranch Historical

Work Order # : 324356 **Project ID:** Red Bryd Ranch TNM Historical

Lab Batch ID: 748792 **QC- Sample ID:** 324344-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/08/2009 **Date Prepared:** 02/08/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1030	986	96	1030	985	96	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1030	1060	103	1030	1060	103	0	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 324356

Lab Batch #: 748919 **Project ID:** Red Bryd Ranch TNM Historical

Date Analyzed: 02/06/2009 **Date Prepared:** 02/06/2009 **Analyst:** LATCOR

QC- Sample ID: 324356-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.33	3.72	11	20	

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: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)605-7210
Fax No: (505) 396-1429
Sampler Signature: Camille Bryant
e-mail: cjbryant@basin-consulting.com

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

(lab use only)
ORDER #: 324356

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	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	N SW - 3A			2/6/09	0745		1	X								Soil	X												X
02	W SW - 3A			2/6/09	0755		1	X								Soil	X												X
03	Blended Soil 1A			2/6/09	0810		1	X								Soil	X												X
04	Blended Soil 2A			2/6/09	0820		1	X								Soil	X												X
05	SP-3A			2/6/09	0830		1	X								Soil	X												X
06	SP-4A			2/6/09	0840		1	X								Soil	X												X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	2/6/09	0855	Lynda Blackwood	2/6/09	0855
Lynda Blackwood	2/6/09	12:20	Received by ELOT: Andrea Lam	2.6.09	12:20

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
4 02 9625
Temperature Upon Receipt: .5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env | Plains

Date/ Time: 2.6.09 12:20

Lab ID #: 324356

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	-.5 °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 327979

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

Red Byrd Ranch TNM Historical

23-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

23-MAR-09

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

Reference: XENCO Report No: **327979**
Red Byrd Ranch Historical
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 327979. 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. 327979 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 327979

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended 1 B	S	Mar-17-09 13:00		327979-001
Blended 2 B	S	Mar-17-09 13:30		327979-002
Blended 11 A	S	Mar-17-09 14:00		327979-003
Blended 14 A	S	Mar-17-09 14:30		327979-004
Blended 15 A	S	Mar-17-09 14:55		327979-005
Blended 16 A	S	Mar-17-09 15:25		327979-006

Certificate of Analysis Summary 327979

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Mar-19-09 04:52 pm
Report Date: 23-MAR-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	327979-001		327979-002		327979-003		327979-004		327979-005		327979-006	
	Field Id:	Blended 1 B		Blended 2 B		Blended 11 A		Blended 14 A		Blended 15 A		Blended 16 A	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-17-09 13:00		Mar-17-09 13:30		Mar-17-09 14:00		Mar-17-09 14:30		Mar-17-09 14:55		Mar-17-09 15:25	
Percent Moisture	*Extracted:*												
	Analyzed:	Mar-19-09 17:00		Mar-19-09 17:00		Mar-19-09 17:00		Mar-19-09 17:00		Mar-19-09 17:00		Mar-19-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.55	1.00	8.03	1.00	6.63	1.00	6.89	1.00	7.38	1.00	6.24	1.00
TPH By SW8015 Mod	*Extracted:*	Mar-20-09 12:12		Mar-20-09 12:12		Mar-20-09 12:12		Mar-20-09 12:12		Mar-20-09 12:12		Mar-20-09 12:12	
	Analyzed:	Mar-20-09 19:05		Mar-20-09 19:30		Mar-20-09 19:54		Mar-20-09 20:19		Mar-20-09 20:44		Mar-20-09 21:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		99.4	16.4	132	16.3	193	16.1	253	16.1	235	16.2	355	16.0
C12-C28 Diesel Range Hydrocarbons		856	16.4	1370	16.3	1300	16.1	1520	16.1	1210	16.2	1620	16.0
C28-C35 Oil Range Hydrocarbons		75.9	16.4	129	16.3	102	16.1	114	16.1	84.8	16.2	120	16.0
Total TPH		1031.3	16.4	1631	16.3	1595	16.1	1887	16.1	1529.8	16.2	2095	16.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 327979,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 753327 **Sample:** 526814-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/20/09 12:58

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	45.7	50.0	91	70-135	

Lab Batch #: 753327 **Sample:** 526814-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/20/09 13:23

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	44.6	50.0	89	70-135	

Lab Batch #: 753327 **Sample:** 526814-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/20/09 13:47

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	100	94	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 753327 **Sample:** 327979-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 19:05

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	100	98	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 753327 **Sample:** 327979-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 19:30

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.8	100	94	70-135	
o-Terphenyl	51.1	50.0	102	70-135	

** 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 Ranch Historical

Work Orders : 327979,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 753327 **Sample:** 327979-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 19:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.0	100	96	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 753327 **Sample:** 327979-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 20:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 753327 **Sample:** 327979-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 20:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.0	100	97	70-135	
o-Terphenyl	51.0	50.0	102	70-135	

Lab Batch #: 753327 **Sample:** 327979-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 21:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	100	98	70-135	
o-Terphenyl	50.4	50.0	101	70-135	

Lab Batch #: 753327 **Sample:** 327670-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 22:50

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	45.7	50.0	91	70-135	

** 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 Ranch Historical

Work Orders : 327979,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 753327 **Sample:** 327670-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/20/09 23:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

** 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 Ranch Historical

Work Order #: 327979 **Project ID:** Red Byrd Ranch TNM Historical

Analyst: BHW **Date Prepared:** 03/20/2009 **Date Analyzed:** 03/20/2009

Lab Batch ID: 753327 **Sample:** 526814-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	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	ND	1000	1090	109	1000	1100	110	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1030	103	1000	1040	104	1	70-135	35	

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 Ranch Historical

Work Order # : 327979 **Project ID:** Red Byrd Ranch TNM Historical

Lab Batch ID: 753327 **QC- Sample ID:** 327670-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/20/2009 **Date Prepared:** 03/20/2009 **Analyst:** BHW

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **Analytes**	**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**
C6-C12 Gasoline Range Hydrocarbons	ND	1040	1130	109	1040	1160	112	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	139	1040	1190	101	1040	1230	105	3	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 327979

Lab Batch #: 753155 **Project ID:** Red Byrd Ranch TNM Historical

Date Analyzed: 03/19/2009 **Date Prepared:** 03/19/2009 **Analyst:** BEV

QC- Sample ID: 327979-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.55	7.32	16	20	

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: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575) 605-7210 Fax No: (505) 396-1429
Sampler Signature: Camille Bryant e-mail: cibryant@basin-consulting.com

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

(lab use only)
ORDER #: 327979

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 SL = Sludge GW = Groundwater S = Soil/Sol NP = Non-Potable Specify Other	Analyze For: TPH: 418.1 / 8015M (8015)	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.	Chloride E 300	RUSH TAT (Pre-Scheduled 24, 48, 72 hrs)	Standard TAT 4 DAY
01	Blended 1B			3/17/2009	1300		1	X									X													X
02	Blended 2B			3/17/2009	1330		1	X									X													X
03	Blended 11A			3/17/2009	1400		1	X									X													X
04	Blended 14A			3/17/2009	1430		1	X									X													X
05	Blended 15A			3/17/2009	1455		1	X									X													X
06	Blended 16A			3/17/2009	1525		1	X									X													X

Special Instructions: Please run BTEX 8021b on all samples w/TPH Concentrations less than 1,000 mg/kg

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	3/18/09	1500		3/18/09	1500
	3/19/09	1652			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jaime Hitch	03-19-09	1652

Laboratory Comments:
Sample Containers intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s)/labels Y N (N/A)
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: 5.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env / Plains

Date/ Time: 03-19-09 @ 1652

Lab ID # : 327979

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.5 °C	
#2	Shipping container in good condition?	Yes	No	(N/A)	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present (N/A)	
#4	Custody Seals intact on sample bottles/ container? / label	(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 329162

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

Red Byrd Ranch-TNM Hist.

07-APR-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

07-APR-09

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

Reference: XENCO Report No: **329162**
Red Byrd Ranch Historical
Project Address: S of Monument, 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 329162. 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. 329162 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 329162

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended 1 C	S	Apr-02-09 09:00		329162-001
Blended 2 C	S	Apr-02-09 09:10		329162-002
Blended 17 A	S	Apr-02-09 09:20		329162-003
Blended 18 A	S	Apr-02-09 09:30		329162-004
Blended 19 A	S	Apr-02-09 09:40		329162-005

Certificate of Analysis Summary 329162

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch-TNM Hist.
Contact: Jason Henry
Project Location: S of Monument, NM

Date Received in Lab: Thu Apr-02-09 05:00 pm
Report Date: 07-APR-09
Project Manager: Brent Barron, II

Analysis Requested															
	Lab Id:	329162-001		329162-002		329162-003		329162-004		329162-005					
	Field Id:	Blended 1 C		Blended 2 C		Blended 17 A		Blended 18 A		Blended 19 A					
	Depth:														
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL					
	Sampled:	Apr-02-09 09:00		Apr-02-09 09:10		Apr-02-09 09:20		Apr-02-09 09:30		Apr-02-09 09:40					
Percent Moisture	*Extracted:*														
	Analyzed:	Apr-03-09 17:00		Apr-03-09 17:00		Apr-03-09 17:00		Apr-03-09 17:00		Apr-03-09 17:00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		5.81	1.00	6.10	1.00	6.43	1.00	5.41	1.00	5.95	1.00				
TPH By SW8015 Mod	*Extracted:*	Apr-06-09 14:11		Apr-06-09 14:11		Apr-06-09 14:11		Apr-06-09 14:11		Apr-06-09 14:11					
	Analyzed:	Apr-06-09 16:35		Apr-06-09 16:59		Apr-06-09 17:22		Apr-06-09 17:46		Apr-06-09 18:10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		31.4	15.9	28.7	16.0	36.9	16.0	31.0	15.9	32.9	15.9				
C12-C28 Diesel Range Hydrocarbons		481	15.9	547	16.0	543	16.0	595	15.9	514	15.9				
C28-C35 Oil Range Hydrocarbons		80.7	15.9	93.5	16.0	126	16.0	128	15.9	88.6	15.9				
Total TPH		593.1	15.9	669.2	16.0	705.9	16.0	754	15.9	635.5	15.9				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 329162,

Project ID: Red Byrd Ranch-TNM Hist.

Lab Batch #: 755046 **Sample:** 527839-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/06/09 15:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	58.6	50.0	117	70-135	

Lab Batch #: 755046 **Sample:** 527839-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/06/09 15:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	57.4	50.0	115	70-135	

Lab Batch #: 755046 **Sample:** 527839-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/06/09 15:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 755046 **Sample:** 329162-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/06/09 16:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 755046 **Sample:** 329162-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/06/09 16:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.3	50.0	105	70-135	

** 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 Ranch Historical

Work Orders : 329162,

Project ID: Red Byrd Ranch-TNM Hist.

Lab Batch #: 755046 **Sample:** 329162-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/06/09 17:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

Lab Batch #: 755046 **Sample:** 329162-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/06/09 17:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.5	50.0	101	70-135	

Lab Batch #: 755046 **Sample:** 329162-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/06/09 18:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 755046 **Sample:** 329162-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/07/09 01:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-135	
o-Terphenyl	57.1	50.0	114	70-135	

Lab Batch #: 755046 **Sample:** 329162-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/07/09 01:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	59.6	50.0	119	70-135	

** 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 Ranch Historical

Work Order #: 329162 **Project ID:** Red Byrd Ranch-TNM Hist.

Analyst: BHW **Date Prepared:** 04/06/2009 **Date Analyzed:** 04/06/2009

Lab Batch ID: 755046 **Sample:** 527839-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	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	ND	1000	910	91	1000	905	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	974	97	1000	975	98	0	70-135	35	

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 Ranch Historical

Work Order # : 329162 **Project ID:** Red Byrd Ranch-TNM Hist.

Lab Batch ID: 755046 **QC- Sample ID:** 329162-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/07/2009 **Date Prepared:** 04/06/2009 **Analyst:** BHW

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **Analytes**	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
C6-C12 Gasoline Range Hydrocarbons	32.9	1060	959	87	1060	978	89	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	514	1060	1420	85	1060	1470	90	3	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 329162

Lab Batch #: 754848 **Project ID:** Red Byrd Ranch-TNM Hist.

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

QC- Sample ID: 329147-041 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.72	4.50	19	20	

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

Xenco Laboratories
The Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: CAMILLE REYNOLDS

Company Name: BASIN ENVIRONMENTAL

Company Address: 2800 PLAINS HWY

City/State/Zip: LOVINGTON, NM 88260

Telephone No: 575-605-7210

Fax No:

Sampler Signature: [signature] for Camille Reynolds

e-mail:

Project Name: RED BYRD RANCH HISTORIC

Project #: RED BYRD RANCH - TWIN HIST.

Project Loc: SE of MONUMENT, NM

PO #: PAA - J. HENRY

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 329162

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled (2009)	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO$_3$	HCl	H$_2$SO$_4$	NaOH	Na$_2$S$_2$O$_3$	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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	BLENDED 1C			4/2	0900		1	X								SOIL	X												X
02	BLENDED 2C			↓	0910		↓	↓								↓	↓												↓
03	BLENDED 17A			↓	0920		↓	↓								↓	↓												↓
04	BLENDED 18A			↓	0930		↓	↓								↓	↓												↓
05	BLENDED 19A			↓	0940		↓	↓								↓	↓												↓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/2/09	1700			
			Received by ELOT: Andrea Lam	4.2.09	17:00

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
402 91455
Temperature Upon Receipt: 3.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Plains

Date/ Time: 4.2.09 17:00

Lab ID # : 329162

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.8 °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 330525

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Hist.

TNM-Red Byrd Ranch Hist.

21-APR-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

21-APR-09

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

Reference: XENCO Report No: **330525**
Red Byrd Ranch Hist.
Project Address: S of Monument, 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 330525. 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. 330525 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 330525

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Hist.

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended 11 B	S	Apr-17-09 14:00		330525-001
Blended 14 B	S	Apr-17-09 14:20		330525-002
Blended 15 B	S	Apr-17-09 14:40		330525-003
Blended 16 B	S	Apr-17-09 15:10		330525-004

Certificate of Analysis Summary 330525

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Hist.

Project Id: TNM-Red Byrd Ranch Hist.
Contact: Jason Henry
Project Location: S of Monument, NM

Date Received in Lab: Mon Apr-20-09 08:39 am
Report Date: 21-APR-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	330525-001		330525-002		330525-003		330525-004			
	Field Id:	Blended 11 B		Blended 14 B		Blended 15 B		Blended 16 B			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Apr-17-09 14:00		Apr-17-09 14:20		Apr-17-09 14:40		Apr-17-09 15:10			
Percent Moisture	*Extracted:*										
	Analyzed:	Apr-20-09 17:00		Apr-20-09 17:00		Apr-20-09 17:00		Apr-20-09 17:00			
	Units/RL:	%	RL	%	RL	%	RL	%	RL		
Percent Moisture		2.86	1.00	4.77	1.00	5.13	1.00	2.56	1.00		
TPH By SW8015 Mod	*Extracted:*	Apr-20-09 15:00		Apr-20-09 15:00		Apr-20-09 15:00		Apr-20-09 15:00			
	Analyzed:	Apr-20-09 22:36		Apr-20-09 23:02		Apr-20-09 23:27		Apr-20-09 23:52			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		103	15.4	172	15.8	201	15.8	106	15.4		
C12-C28 Diesel Range Hydrocarbons		1180	15.4	1230	15.8	1400	15.8	1010	15.4		
C28-C35 Oil Range Hydrocarbons		94.7	15.4	103	15.8	122	15.8	82.2	15.4		
Total TPH		1377.7	15.4	1505	15.8	1723	15.8	1198.2	15.4		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director

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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 Ranch Hist.

Work Orders : 330525,

Project ID: TNM-Red Byrd Ranch Hist.

Lab Batch #: 756418 **Sample:** 528558-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/20/09 16:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	60.3	50.0	121	70-135	

Lab Batch #: 756418 **Sample:** 528558-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/20/09 17:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	53.8	50.0	108	70-135	

Lab Batch #: 756418 **Sample:** 528558-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/20/09 17:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	58.8	50.0	118	70-135	

Lab Batch #: 756418 **Sample:** 330525-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/09 22:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.0	100	95	70-135	
o-Terphenyl	54.2	50.0	108	70-135	

Lab Batch #: 756418 **Sample:** 330525-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/09 23:02

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.9	100	94	70-135	
o-Terphenyl	53.5	50.0	107	70-135	

** 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 Ranch Hist.

Work Orders : 330525,

Project ID: TNM-Red Byrd Ranch Hist.

Lab Batch #: 756418 **Sample:** 330525-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/09 23:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.4	100	95	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 756418 **Sample:** 330525-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/20/09 23:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.1	100	90	70-135	
o-Terphenyl	51.0	50.0	102	70-135	

Lab Batch #: 756418 **Sample:** 330555-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/09 00:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.1	100	98	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 756418 **Sample:** 330555-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/21/09 00:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.4	100	99	70-135	
o-Terphenyl	44.1	50.0	88	70-135	

** 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 Ranch Hist.

Work Order #: 330525 **Project ID:** TNM-Red Byrd Ranch Hist.

Analyst: BHW **Date Prepared:** 04/20/2009 **Date Analyzed:** 04/20/2009

Lab Batch ID: 756418 **Sample:** 528558-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	ND	1000	1140	114	1000	1070	107	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1110	111	1000	1030	103	7	70-135	35	

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 Ranch Hist.

Work Order # : 330525 **Project ID:** TNM-Red Byrd Ranch Hist.

Lab Batch ID: 756418 **QC- Sample ID:** 330555-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/21/2009 **Date Prepared:** 04/20/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1010	982	97	1010	1010	100	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	64.7	1010	996	92	1010	1010	94	1	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Hist.

Work Order #: 330525

Lab Batch #: 756421 **Project ID:** TNM-Red Byrd Ranch Hist.

Date Analyzed: 04/20/2009 **Date Prepared:** 04/20/2009 **Analyst:** BEV

QC- Sample ID: 330525-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.86	2.88	1	20	

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

Xenco Laboratories

The 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: CAMILLE BRYANT
Company Name: BASIN ENVIRONMENTAL SERVICE TECH.
Company Address: 2800 PLAINS HWY - LOVINGTON, NM
City/State/Zip: LOVINGTON, NM
Telephone No: 575-605-7210
Fax No:
Sampler Signature: [signature] for CAMILLE BRYANT
e-mail:

Project Name: REDBYRD RANCH HIST.
Project #: TAM - REDBYRD RANCH HIST.
Project Loc: SE MONUMENT, NM
PO #: PAA - J. HENRY
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 330525

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled (2009)	Time Sampled	Field Filtered	Total #. of Containers (4/02)	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	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	BLENDED 12B			4/17	1400		1	X								SOIL	X												X
02	BLENDED 14B			↓	1420		↓	↓								↓	↓												↓
03	BLENDED 15B			↓	1440		↓	↓								↓	↓												↓
04	BLENDED 16B			↓	1510		↓	↓								↓	↓												↓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/20/09	0839			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			[signature]	04/20/09	8:39

Laboratory Comments: 4-4 [illegible]
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: 3.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin / Plains

Date/ Time: 04/20/09 8:39

Lab ID # : 330525

Initials: Amst

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.5 °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 336451

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

TNM-Red Byrd Ranch Historical

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: **336451**
Red Byrd Ranch Historical
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 336451. 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. 336451 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 336451

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended 11 C	S	Jun-24-09 13:30		336451-001
Blended 14 C	S	Jun-24-09 13:40		336451-002

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Red Byrd Ranch Historical

Project ID:	*TNM-Red Byrd Ranch His*	*Report Date:*	*07-JUL-09*
Work Order Number:	*336451*	*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-763629 Percent Moisture
None

Batch: LBA-763866 TPH by SW8015 Mod
None

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Red Byrd Ranch Historical

Project ID:	*TNM-Red Byrd Ranch His.*	*Report Date:*	*07-JUL-09*
Work Order Number:	*336451*	*Date Received:*	*06/25/2009*

Batch: LBA-764550 BTEX-MTBE EPA 8021B
SW8021BM

Batch 764550, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 336451-001, -002.
The Laboratory Control Sample for m,p-Xylenes , Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 764550, 4-Bromofluorobenzene recovered below QC limits; QC Data not confirmed by re-analysis. Samples affected are: 533130-1-BLK.

SW8021BM

Batch 764550, Benzene RPD was outside laboratory control limits In the LCS. The RPD was within limits for the Matrix Spike and Matrix Spike duplicate. Analyst spiking error suspected..
Samples affected are: 336451-001, -002

SW8021BM

Batch 764550, Benzene, Toluene recovered below QC limits in the laboratory control sample these compounds were within QC limits in the CCVs as well as the Laboratory Control Sample Duplicate, analyst spiking error is suspected, there should be no appreciable affect to the sample data..
Samples affected are: 336451-001, -002.

Certificate of Analysis Summary 336451

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: TNM-Red Byrd Ranch Historical
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:	336451-001				336451-002							
	Field Id:	Blended 11 C				Blended 14 C							
	Depth:												
	Matrix:	SOIL				SOIL							
	Sampled:	Jun-24-09 13:30				Jun-24-09 13:40							
BTEX by EPA 8021B	*Extracted:*	Jul-01-09 15:30				Jul-01-09 15:30							
	Analyzed:	Jul-03-09 02:15				Jul-03-09 02:37							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Benzene		0.0011	0.0010			ND	0.0010						
Toluene		0.0171	0.0021			0.0062	0.0020						
Ethylbenzene		0.0063	0.0010			0.0021	0.0010						
m,p-Xylenes		0.0152	0.0021			0.0039	0.0020						
o-Xylene		0.0091	0.0010			0.0020	0.0010						
Total Xylenes		0.0243	0.0010			0.0059	0.0010						
Total BTEX		0.0488	0.0010			0.0142	0.0010						
Percent Moisture	*Extracted:*												
	Analyzed:	Jun-25-09 16:00				Jun-25-09 16:00							
	Units/RL:	%	RL			%	RL						
Percent Moisture		2.43	1.00			1.75	1.00						
TPH By SW8015 Mod	*Extracted:*	Jun-27-09 11:17				Jun-27-09 11:17							
	Analyzed:	Jun-27-09 21:15				Jun-27-09 21:40							
	Units/RL:	mg/kg	RL			mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	15.3			18.4	15.3						
C12-C28 Diesel Range Hydrocarbons		554	15.3			828	15.3						
C28-C35 Oil Range Hydrocarbons		69.3	15.3			97.0	15.3						
Total TPH		623.3	15.3			943.4	15.3						

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 336451,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 764550 **Sample:** 533130-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/02/09 22:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 764550 **Sample:** 533130-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/02/09 23:02

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 764550 **Sample:** 533130-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 07/02/09 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	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0146	0.0300	49	80-120	*

Lab Batch #: 764550 **Sample:** 336451-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/03/09 02:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 764550 **Sample:** 336451-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/03/09 02:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	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 Ranch Historical

Work Orders : 336451, **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch #: 764550 **Sample:** 336622-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/03/09 07:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 764550 **Sample:** 336622-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 07/03/09 07:58

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 763866 **Sample:** 532726-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/27/09 12:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	47.4	50.0	95	70-135	

Lab Batch #: 763866 **Sample:** 532726-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/27/09 13:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 763866 **Sample:** 532726-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/27/09 13:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.3	100	93	70-135	
o-Terphenyl	49.8	50.0	100	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 Ranch Historical

Work Orders : 336451,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 763866 **Sample:** 336451-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/27/09 21:15

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	99.6	89	70-135	
o-Terphenyl	48.4	49.8	97	70-135	

Lab Batch #: 763866 **Sample:** 336451-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/27/09 21:40

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.7	99.9	91	70-135	
o-Terphenyl	49.0	50.0	98	70-135	

Lab Batch #: 763866 **Sample:** 336334-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/27/09 23:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	194	200	97	70-135	
o-Terphenyl	89.6	100	90	70-135	

Lab Batch #: 763866 **Sample:** 336334-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/28/09 00:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	197	200	99	70-135	
o-Terphenyl	91.5	99.9	92	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 Ranch Historical

Work Order #: 336451 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 07/01/2009 **Date Analyzed:** 07/02/2009

Lab Batch ID: 764550 **Sample:** 533130-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	0.0534	53	0.1	0.0802	80	40	70-130	35	LF
Toluene	ND	0.1000	0.0608	61	0.1	0.0841	84	32	70-130	35	L
Ethylbenzene	ND	0.1000	0.0722	72	0.1	0.0922	92	24	71-129	35	
m,p-Xylenes	ND	0.2000	0.1470	74	0.2	0.1844	92	23	70-135	35	
o-Xylene	ND	0.1000	0.0719	72	0.1	0.0880	88	20	71-133	35	

Analyst: BHW **Date Prepared:** 06/27/2009 **Date Analyzed:** 06/27/2009

Lab Batch ID: 763866 **Sample:** 532726-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

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	ND	1000	849	85	1000	843	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	912	91	1000	899	90	1	70-135	35	

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 Ranch Historical

Work Order # : 336451 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 764550 **QC- Sample ID:** 336622-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/03/2009 **Date Prepared:** 07/01/2009 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	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	0.1006	0.0873	87	0.1006	0.0879	87	1	70-130	35	
Toluene	ND	0.1006	0.0712	71	0.1006	0.0719	71	1	70-130	35	
Ethylbenzene	ND	0.1006	0.0399	40	0.1006	0.0394	39	1	71-129	35	X
m,p-Xylenes	ND	0.2013	0.0793	39	0.2013	0.0840	42	6	70-135	35	X
o-Xylene	ND	0.1006	0.0538	53	0.1006	0.0526	52	2	71-133	35	X

Lab Batch ID: 763866 **QC- Sample ID:** 336334-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/27/2009 **Date Prepared:** 06/27/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	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
C6-C12 Gasoline Range Hydrocarbons	ND	1010	869	86	1010	878	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	970	96	1010	989	98	2	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 336451

Lab Batch #: 763629 **Project ID:** TNM-Red Byrd Ranch Historical

Date Analyzed: 06/25/2009 **Date Prepared:** 06/25/2009 **Analyst:** WRU

QC- Sample ID: 336424-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	17.2	17.2	0	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting 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: Camille Bryant PAGE 01 OF 01 Project Name: Red Byrd Ranch Historical

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

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

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

Telephone No: (575) 605-7210 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: e-mail: cjbryant@basin-consulting.com

(lab use only) ORDER #: 336481

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 SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable 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/8260 or BTEX 8260	TCLP: / TOTAL: X	RCI	N.O.R.M.	PAH	EPA Point Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Blended 11C			6/24/2009	1330		1	X								Soil	X									X								X
02	Blended 14C			6/24/2009	1340		1	X								Soil	X									X								X

Special Instructions:

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time	Sample Containers Intact? Y N
	6/25/09	0945				VOCs Free of Headspace? Y N
Relinquished by:	Date	Time	Received by:	Date	Time	Labels on container(s) Y N
						Custody seals on container(s) Y N
Relinquished by:	Date	Time	Received by ELOT: Andrea Perez	Date	Time	Custody seals on cooler(s) Y N
				6-25-09	9:05	Sample Hand Delivered by Sampler/Client Rep.? Y N
						by Courier? UPS DHL FedEx Lone Star
						4078455
						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 # : 336451

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 340054

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

Red Byrd Ranch TNM Historical

10-AUG-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-Miramar (EPA Lab code: FL01246): Florida (E86349)

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)

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

10-AUG-09

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

Reference: XENCO Report No: **340054**
Red Byrd Ranch Historical
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 340054. 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. 340054 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 340054

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended 15C	S	Aug-05-09 13:05		340054-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Red Byrd Ranch Historical

Project ID: *Red Byrd Ranch TNM Hist* *Report Date:* *10-AUG-09*
Work Order Number: *340054* *Date Received:* *08/06/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-768017 Specific Conductance by EPA 120.1
None

Batch: LBA-768021 TX1005
None

Batch: LBA-768053 BTEX-MTBE EPA 8021B
SW8021BM

Batch 768053, 4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 535108-1-BLK.

Certificate of Analysis Summary 340054

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

Project Id: Red Byrd Ranch TNM Historical
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Aug-06-09 05:40 pm
Report Date: 10-AUG-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	340054-001					
	Field Id:	Blended 15C					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Aug-05-09 13:05					
BTEX by EPA 8021B	*Extracted:*	Aug-07-09 16:00					
	Analyzed:	Aug-07-09 22:40					
	Units/RL:	mg/kg RL					
Benzene		ND 0.0016					
Toluene		ND 0.0033					
Ethylbenzene		ND 0.0016					
m,p-Xylenes		ND 0.0033					
o-Xylene		ND 0.0016					
Total Xylenes		ND 0.0016					
Total BTEX		ND 0.0016					
Percent Moisture	*Extracted:*						
	Analyzed:	Aug-10-09 09:02					
	Units/RL:	% RL					
Percent Moisture		38.55 1.00					
TPH By SW8015 Mod	*Extracted:*	Aug-09-09 19:03					
	Analyzed:	Aug-09-09 21:15					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 24.3					
C12-C28 Diesel Range Hydrocarbons		178 24.3					
C28-C35 Oil Range Hydrocarbons		27.9 24.3					
Total TPH		206 24.3					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 340054,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 768053 **Sample:** 535108-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/07/09 19:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 768053 **Sample:** 535108-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/07/09 20:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 768053 **Sample:** 535108-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/07/09 20:49

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	0.0134	0.0300	45	80-120	*

Lab Batch #: 768053 **Sample:** 340054-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/07/09 22:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 768053 **Sample:** 339957-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/08/09 04:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	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 Ranch Historical

Work Orders : 340054,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 768053 **Sample:** 339957-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/08/09 04:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0352	0.0300	117	80-120	

Lab Batch #: 768021 **Sample:** 535079-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/09/09 19:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 768021 **Sample:** 535079-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/09/09 20:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	43.5	50.0	87	70-135	

Lab Batch #: 768021 **Sample:** 535079-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/09/09 20:50

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.1	100	87	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 768021 **Sample:** 340054-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/09/09 21:15

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.8	99.7	85	70-135	
o-Terphenyl	45.7	49.9	92	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 Ranch Historical

Work Orders : 340054,

Project ID: Red Byrd Ranch TNM Historical

Lab Batch #: 768021 **Sample:** 340239-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/09 06:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	44.4	49.9	89	70-135	

Lab Batch #: 768021 **Sample:** 340239-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/10/09 06:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	43.8	49.9	88	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 Ranch Historical

Work Order #: 340054 **Project ID:** Red Byrd Ranch TNM Historical

Analyst: ASA **Date Prepared:** 08/07/2009 **Date Analyzed:** 08/07/2009

Lab Batch ID: 768053 **Sample:** 535108-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.0935	94	0.1	0.0943	94	1	70-130	35	
Toluene	ND	0.1000	0.0907	91	0.1	0.0919	92	1	70-130	35	
Ethylbenzene	ND	0.1000	0.1038	104	0.1	0.1057	106	2	71-129	35	
m,p-Xylenes	ND	0.2000	0.2107	105	0.2	0.2140	107	2	70-135	35	
o-Xylene	ND	0.1000	0.1012	101	0.1	0.1032	103	2	71-133	35	

Analyst: BHW **Date Prepared:** 08/09/2009 **Date Analyzed:** 08/09/2009

Lab Batch ID: 768021 **Sample:** 535079-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	1000	866	87	1000	878	88	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	901	90	1000	921	92	2	70-135	35	

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 Ranch Historical

Work Order # : 340054 **Project ID:** Red Byrd Ranch TNM Historical

Lab Batch ID: 768053 **QC- Sample ID:** 339957-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/08/2009 **Date Prepared:** 08/07/2009 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**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	0.1092	0.0851	78	0.1092	0.0858	79	1	70-130	35	
Toluene	ND	0.1092	0.0825	76	0.1092	0.0829	76	0	70-130	35	
Ethylbenzene	ND	0.1092	0.0934	86	0.1092	0.0934	86	0	71-129	35	
m,p-Xylenes	ND	0.2185	0.1876	86	0.2185	0.1880	86	0	70-135	35	
o-Xylene	ND	0.1092	0.0906	83	0.1092	0.0909	83	0	71-133	35	

Lab Batch ID: 768021 **QC- Sample ID:** 340239-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/10/2009 **Date Prepared:** 08/09/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**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**
C6-C12 Gasoline Range Hydrocarbons	ND	1050	968	92	1050	959	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	40.3	1050	1070	98	1050	1050	96	2	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 340054

Lab Batch #: 768017 **Project ID:** Red Byrd Ranch TNM Historical

Date Analyzed: 08/10/2009 **Date Prepared:** 08/10/2009 **Analyst:** BEV

QC- Sample ID: 340058-001 D **Batch #:** 1 **Matrix:** Solid

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	ND	ND	NC	20	

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

Company Name: Basin Environmental Consulting, LLC

Company Address: P. O. Box 381

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 605-7210 -

Fax No: (505) 396-1429

Sampler Signature: Camille Bryant

e-mail: cjbryant@basin-consulting.com

Project Name: Red Byrd Ranch Historical

Project #: Red Byrd Ranch TNM Historical

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)
ORDER #: 340054

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	RCI	N.O.R.M.	Chloride E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	Blended 15C			8/5/2009	1305		1	X								Soil	X								X					X
	~~Blended 16C~~			~~8/5/2009~~	~~1320~~		~~1~~	~~X~~								~~Soil~~	~~X~~								~~X~~					~~X~~

(Analyze For: TCLP / TOTAL)

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	8/6/09	0713	[signature]	8/6/09	0713
[signature]	8/6/09	1740			
			Received by ELOT: [signature]	8/6/09	17:40

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) N/A (Y) N — label as seals
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 4.0 / 6.9 3.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Environmental / Plains

Date/ Time: 8/6/09 12:40

Lab ID # : 340054

Initials: 8 AA

8/6/09

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	36 °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? labels	(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 340488

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Red Byrd Ranch Historical

TNM-Red Byrd Ranch Historical

13-AUG-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-Miramar (EPA Lab code: FL01246): Florida (E86349)

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)

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

13-AUG-09

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

Reference: XENCO Report No: **340488**
Red Byrd Ranch Historical
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 340488. 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. 340488 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America

Sample Cross Reference 340488

PLAINS ALL AMERICAN EH&S, Midland, TX

Red Byrd Ranch Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Blended-16 C	S	Aug-07-09 12:30		340488-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Red Byrd Ranch Historical

Project ID:	*TNM-Red Byrd Ranch His.*	*Report Date:*	*13-AUG-09*
Work Order Number:	*340488*	*Date Received:*	*08/10/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-768265 TX1005
None

Batch: LBA-768270 Percent Moisture
None

Batch: LBA-768368 BTEX-MTBE EPA 8021B
SW8021BM

Batch 768368, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 340488-001.
The Laboratory Control Sample for Toluene, m,p-Xylenes , Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 768368, 4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 535290-1-BLK.
4-Bromofluorobenzene recovered above QC limits Data not confirmed by re-analysis. Samples affected are: 535290-1-BKS, 535290-1-BSD

Certificate of Analysis Summary 340488

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Red Byrd Ranch Historical

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

Date Received in Lab: Mon Aug-10-09 05:13 pm
Report Date: 13-AUG-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	340488-001					
	Field Id:	Blended-16 C					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Aug-07-09 12:30					
BTEX by EPA 8021B	***Extracted:***	Aug-12-09 17:00					
	Analyzed:	Aug-12-09 19:50					
	Units/RL:	mg/kg RL					
Benzene		ND 0.0011					
Toluene		ND 0.0021					
Ethylbenzene		ND 0.0011					
m,p-Xylenes		ND 0.0021					
o-Xylene		ND 0.0011					
Total Xylenes		ND 0.0011					
Total BTEX		ND 0.0011					
Percent Moisture	***Extracted:***						
	Analyzed:	Aug-12-09 10:03					
	Units/RL:	% RL					
Percent Moisture		5.23 1.00					
TPH By SW8015 Mod	***Extracted:***	Aug-11-09 13:33					
	Analyzed:	Aug-11-09 19:23					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		32.4 15.8					
C12-C28 Diesel Range Hydrocarbons		841 15.8					
C28-C35 Oil Range Hydrocarbons		79.1 15.8					
Total TPH		953 15.8					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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 Ranch Historical

Work Orders : 340488,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 768368 **Sample:** 535290-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/12/09 18:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0368	0.0300	123	80-120	*

Lab Batch #: 768368 **Sample:** 535290-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/12/09 18:35

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0364	0.0300	121	80-120	*

Lab Batch #: 768368 **Sample:** 535290-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/12/09 19:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0135	0.0300	45	80-120	*

Lab Batch #: 768368 **Sample:** 340488-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/12/09 19:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 768368 **Sample:** 340660-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/13/09 02:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	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 Ranch Historical

Work Orders : 340488,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 768368 **Sample:** 340660-001 SD / MSD **Batch:** 1 **Matrix:** Soil

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

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	0.0329	0.0300	110	80-120	

Lab Batch #: 768265 **Sample:** 535219-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/11/09 14:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.4	100	99	70-135	
o-Terphenyl	40.7	50.0	81	70-135	

Lab Batch #: 768265 **Sample:** 535219-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/11/09 15:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	41.1	50.0	82	70-135	

Lab Batch #: 768265 **Sample:** 535219-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 08/11/09 15:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.2	100	84	70-135	
o-Terphenyl	44.3	50.0	89	70-135	

Lab Batch #: 768265 **Sample:** 340488-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/11/09 19:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.6	99.8	73	70-135	
o-Terphenyl	37.6	49.9	75	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 Ranch Historical

Work Orders : 340488,

Project ID: TNM-Red Byrd Ranch Historical

Lab Batch #: 768265 **Sample:** 340373-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/11/09 22:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	99.9	99	70-135	
o-Terphenyl	39.6	50.0	79	70-135	

Lab Batch #: 768265 **Sample:** 340373-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 08/11/09 23:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	40.9	50.0	82	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 Ranch Historical

Work Order #: 340488 **Project ID:** TNM-Red Byrd Ranch Historical

Analyst: ASA **Date Prepared:** 08/12/2009 **Date Analyzed:** 08/12/2009

Lab Batch ID: 768368 **Sample:** 535290-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	0.1102	110	0.1	0.1092	109	1	70-130	35	
Toluene	ND	0.1000	0.1058	106	0.1	0.1046	105	1	70-130	35	
Ethylbenzene	ND	0.1000	0.1193	119	0.1	0.1179	118	1	71-129	35	
m,p-Xylenes	ND	0.2000	0.2451	123	0.2	0.2420	121	1	70-135	35	
o-Xylene	ND	0.1000	0.1151	115	0.1	0.1139	114	1	71-133	35	

Analyst: BHW **Date Prepared:** 08/11/2009 **Date Analyzed:** 08/11/2009

Lab Batch ID: 768265 **Sample:** 535219-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	1000	905	91	1000	923	92	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1120	112	1000	1130	113	1	70-135	35	

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 Ranch Historical

Work Order # : 340488 **Project ID:** TNM-Red Byrd Ranch Historical

Lab Batch ID: 768368 **QC- Sample ID:** 340660-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/13/2009 **Date Prepared:** 08/12/2009 **Analyst:** ASA

Reporting Units: mg/kg

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	0.1111	0.0806	73	0.1111	0.0821	74	2	70-130	35	
Toluene	ND	0.1111	0.0662	60	0.1111	0.0663	60	0	70-130	35	X
Ethylbenzene	ND	0.1111	0.0729	66	0.1111	0.0716	64	2	71-129	35	X
m,p-Xylenes	ND	0.2222	0.1467	66	0.2222	0.1433	64	2	70-135	35	X
o-Xylene	ND	0.1111	0.0696	63	0.1111	0.0685	62	2	71-133	35	X

Lab Batch ID: 768265 **QC- Sample ID:** 340373-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/11/2009 **Date Prepared:** 08/11/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1170	1090	93	1170	1100	94	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1170	1310	112	1170	1350	115	3	70-135	35	

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

Sample Duplicate Recovery

Project Name: Red Byrd Ranch Historical

Work Order #: 340488

Lab Batch #: 768270 **Project ID:** TNM-Red Byrd Ranch Historical

Date Analyzed: 08/12/2009 **Date Prepared:** 08/12/2009 **Analyst:** BEV

QC- Sample ID: 340491-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.49	6.71	20	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting 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: Camille Bryant PAGE 01 OF 01 Project Name: Red Byrd Ranch Historical

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

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

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

Telephone No: (575) 605-7210 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: for EB Taylor e-mail: clbryant@basin-consulting.com

(lab use only) ORDER #: 340488

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 = Groundwater, S = Soil/Sed, SW = Surface Water, SL = Sludge, NP = Non-Potable, Specify Other	Analyze For: TCLP: TPH: 418.1	TCLP: TPH: TX 1005	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 8021B/5030 or BTEX 8260	TOTAL: HCl	TOTAL: H2O RUN	TOTAL: PAH	TOTAL: EPA Paint Filter Test	TOTAL: Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
								Ice	HNO3	HCl (VOA x 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)		8015M	TX 1005							BTEX 8021B/5030 or BTEX 8260								
01	Blended-16C			8/7/2009	1230		1	X								Soil	X								X							X

Special Instructions:

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

Relinquished by:	Date	Time	Received by:	Date	Time
	8/10/09	1713			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				08/10/09	1713

Temperature Upon Receipt: 5.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin Env.

Date/ Time: 08/10/09 17:13

Lab ID #: 340488

Initials: QMA

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5-1 °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: _____

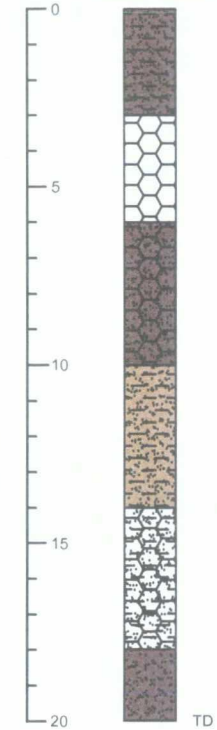
Corrective Action Taken: _____

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

Appendix C
Soil Boring Logs

Soil Boring SB-1-07



Depth (feet)	PID Reading	Petroleum Odor	Petroleum Stain
5	2	None	None
10	3	None	None
15	10	None	None
20 TD	308	Odor	None

Soil Description

0 - 3' - Sandy clay, brown

3 - 6' - Caliche-buff

6 - 10' - Sand, brown, loose and caliche lenses

10 - 14' - Sandy clay, light brown with sand lenses

14 - 18' - Sand, sandy clay with caliche nodules

18 - 20' - Sand and sandstone, brown with odor

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 20 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-1-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

Soil Boring SB-2-07

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0					0 - 5' - Sandy clay, brown
5		3	None	None	
					5 - 10' - Caliche with sand lenses
10		3	None	None	
					10 - 17' - Sand, fine gained, tan
15		120	None	None	
					17 - 20' - Sand - odor at 17' getting stronger with depth
20	TD	346	Odor	None	

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 20 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

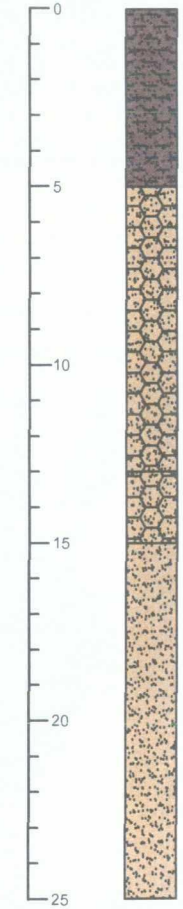
1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-2-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

Soil Boring SB-3-07



Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
0					0 - 5' - Sandy clay, brown
5		3	None	None	
10		5	None	None	5 - 13' - Sand, fine grained, tan- with caliche nodules- and buff caliche lenses
15		7	None	None	13 - 15' - Sand with caliche, tan
20		6	None	None	15 - 25' - Sand, tan, loose
25	TD	7	None	None	

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 20 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

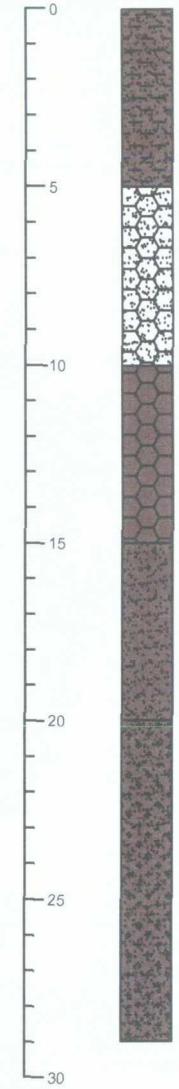
1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-3-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

Soil Boring SB-4-07



PID Reading	Petroleum Odor	Petroleum Stain
0	None	None
1	None	None
1	None	None
1	None	None
1	None	None
1	None	None

Soil Description

0 - 5' - Sandy clay, brown

5 - 10' - Caliche and sand layers

10 - 15' - Caliche - white buff - dusting brown sand at 15'

15 - 20' - Sand, brown

20 - 29' - Sand, brown with some rock fragments

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 29 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

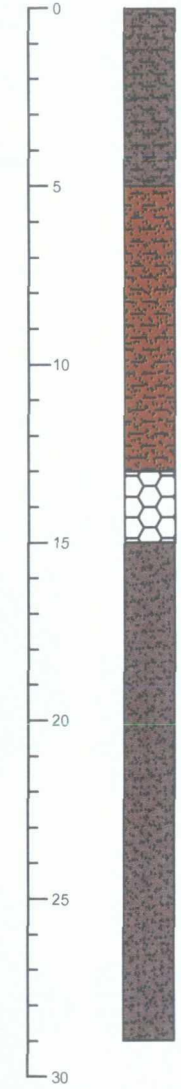
1. The soil boring was installed on date using air rotary drilling techniques.
2. *The lines between material* types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-4-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

Soil Boring SB-5-07



PID Reading	Petroleum Odor	Petroleum Stain
0	None	None
1	None	None
1	None	None
1	None	None
1	None	None
4	None	None

Soil Description

0 - 5' - Sandy clay, brown

5 - 13' - Sandy clay - reddish brown

13 - 15' - Caliche buff, dusting

15 - 29' - Sand, brown

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 29 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

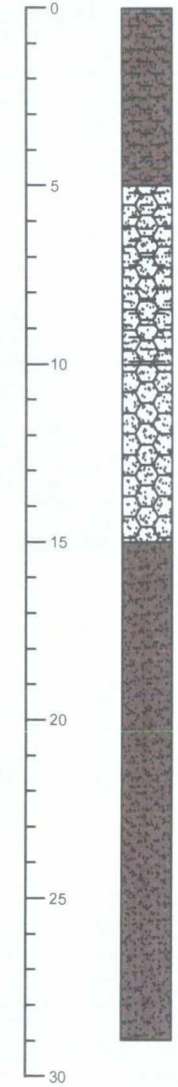
1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate *boundaries. Actual transitions may be gradual.*
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-5-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

Soil Boring SB-6-07



PID Reading	Petroleum Odor	Petroleum Stain
0	None	None
1	None	None
1	None	None
1	None	None
5	None	None
1	None	None

Soil Description

0 - 5' - Sandy clay, brown

5 - 10' - Sandy clay - caliche nodules

10 - 15' - Sand and streaks of caliche

15 - 29' - Sand, brown, fine grained, loose

Soil Boring Details

Date Drilled 11-28-07

Depth ofSoil Boring 29 ft

⬭ Indicates samples selected for Laboratory Analysis.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The soil boring was installed on date using air rotary drilling techniques.
2. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from below ground surface. (bgs)

Soil Boring Log and Details
Soil Boring SB-6-07
Red Bryd Ranch Historical Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

CAD By: DGC	Checked By: TKC
May 15, 2008	

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

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

☒ Initial Report ☐ Final Report

Name of Company Plains Pipeline, LP	Contact Camille Reynolds
Address 3112 W. US Hwy 82	Telephone No. (505) 441-0965
Facility Name Red Byrd Ranch Historical	Facility Type 6" Pipeline

Surface Owner R 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
	1	20S	36E					Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release Unknown Volume Recovered
Source of Release	Date and Hour of Occurrence UK Date and Hour of Discovery 4/24/07 10:3
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton
By Whom? Camille Reynolds	Date and Hour 4/24/07 @ 14:00
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.* During investigation of on-going site remediation discovered historical release along pipeline ROW.

Describe Area Affected and Cleanup Action Taken.* Delineation in progress -

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Camille Reynolds	OIL CONSERVATION DIVISION
Printed Name: Camille Reynolds	Approved by District Supervisor:
Title: Remediation Coor.	Approval Date: / Expiration Date:
E-mail Address: Creynolds@paalp.com	Conditions of Approval: / Attached ☐
Date: 4/25/07 Phone: (505) 441-0965	

Attach Additional Sheets If Necessary

RP# 1299