1R - 388

REPORTS

DATE:

Jan. 2009

1R388

Basin Environmental Service Technologies, LLC

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Effective Solutions

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Environmental Bureau
Oil Conservation Division

REMEDIATION SUMMARY

AND

SOIL CLOSURE REQUEST

PLAINS MARKETING, L.P. (231735)
Monument Barber 10-Inch Sour
Lea County, New Mexico
Plains SRS # 2000-10655
UNIT M (SW/SW), Section 32, Township 19 South, Range 37 East
NMOCD Reference # 1RP-0388

Prepared For:

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

Prepared By:
Basin Environmental Service Technologies, LLC

January 2009

Curt D. Stanley
Project Manager

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INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, 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 Monument Barber 10-Inch Sour (SRS # 2000-10655). The site is located in Unit Letter "M" (SW ¼ SW ¼), Section 32, Township 19 South, Range 37 East, approximately two (2) miles south of Monument in Lea County, New Mexico. The property is owned by Barbara Darnell. The site, formerly the responsibility of Enron Oil Trading and Transportation (EOTT) is now the responsibility of Plains. A Site Location and Site Map are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action is provided as Appendix C.

Documentation previously submitted to the New Mexico Oil Conservation Division (NMOCD) is summarized below. Please reference previously submitted documentation for soil boring and monitor well logs, tables and laboratory reports and other details prior to May 2006.

On August 7, 2000, a crude oil release from a ten (10) inch diameter pipeline was discovered on the subject property. The release occurred following the installation of a new section of pipeline and the release flowed north to south from the release point into a previously excavated area. A surface stain measuring approximately hundred (100) feet in length and eight (8) feet in width was observed. The volume of the release was approximately 1,600 barrels and 1,300 barrels was recovered during initial response activities, resulting in a net loss of approximately 300 barrels of crude oil. The area adjacent to the release is dominated by oil and gas production facilities and other historical non-EOTT related crude oil releases have been documented in the immediate vicinity of the Monument Barber 10-Inch release site.

Following the release, EOTT conducted initial response and site assessment activities as required by the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases*, (NMOCD, 1993).

Following the completion of initial response activities, including the repair of the pipeline and the removal of crude oil from the previously excavated area, a backhoe was utilized to excavate crude oil saturated soil and begin the horizontal delineation of impact of the site. A trench approximately 276 feet in length and twenty-one (21) feet in width was extended along and below the pipeline to the south of the release point. The main excavation, in the vicinity of the release point, measured approximately 72 feet in width and 35 feet in length and ten (10) feet in depth. A trench, measuring approximately twenty-seven (27) feet in length was extended to the west and perpendicular to the main excavation. Following the initial excavation activities, visual and olfactory evidence indicated impacted soil was present beyond the depth of the initial excavations and additional subsurface investigation would be required. The saturated soil excavated during the initial excavation activities was transported to an offsite NMOCD approved disposal facility. A limited quantity of impacted soil was stockpiled to the west of the initial excavation.

On August 8, 2000, a previous contactor began a subsurface soil investigation to delineate the vertical and horizontal extent of impact at the release site. A total of thirty-four (34) soil borings were advanced adjacent to the release point to a maximum depth of 35 feet bgs. Soil samples

were collected at five (5) foot drilling intervals and a portion of each soil sample was field screened using a Photo Ionization Detector (PID). Based on the results of the field screening, selected soil samples were submitted to the laboratory for analysis. Laboratory submitted soil samples were analyzed for total petroleum hydrocarbons (TPH) using EPA SW 846-8015 modified. Selected soil samples exhibiting PID readings in excess of 100 ppm were analyzed for benzene, toluene, ethyl-benzene and xylene (BTEX) constituents using EPA SW 826-8021b, as well as TPH. Based on the field screening and laboratory analytical results, hydrocarbon impacted soil in excess of the NMOCD regulatory standard was determined to exist to a depth of eight (8) to ten (10) feet bgs in an area immediately adjacent to the release point.

Of the thirty-four (34) soil borings advanced at the site, two (2) soil borings were completed as recovery wells (RW-1 and RW-2) and four (4) soil borings were completed as monitor wells (MW-1 through MW-4).

In May 2006, a previous contractor submitted a *Soil Remediation Work Plan* to the NMOCD Santa Fe Office; this Work Plan was designed to address the remaining soil issues at the site. On February 19, 2008, the NMOCD Santa Fe Office approved the Soil Remediation Work Plan.

NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database indicates the average depth to groundwater is approximately thirty (30) feet below ground surface (bgs) in the section. The depth to groundwater at the Monument Barber 10-Inch Sour release site 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 NMOCD guidelines indicate the idle Monument Barber 10-Inch Sour release site has a ranking score of greater than 19. Based on this score, the soil remediation levels for a site with a ranking score of greater than 19 points are as follows:

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

SUMMARY OF RECENT FIELD ACTIVITIES

On June 25, 2008, Basin commenced the excavation activities outlined in the *Soil Remediation Work Plan.* The release site was excavated to a depth of approximately sixteen (16) feet bgs, with the exception of the most southern area of the excavation which was excavated to a depth of

approximately twelve (12) feet bgs. Impacted soil was stockpiled adjacent to the excavation pending final disposition.

On July 7, 2008, four (4) delineation soil samples (East Wall-1, West Wall-1, East Wall-2 and West Wall-2) were collected and submitted to the laboratory to evaluate the status of the excavation. The analytical results indicated soil samples East Wall-1, West Wall-1 and East Wall-2 exhibited TPH concentrations below the laboratory method detection limit of 15 mg/Kg. Soil sample West Wall-2 exhibited a TPH concentration of 6,333 mg/Kg, this soil was excavated and added to the excavation stockpiles. Recent concentrations of benzene, BTEX and TPH are summarized in Table 1. Laboratory analytical reports are provided as Appendix A.

On July 31, 2008, a soil sample (Stockpile A) was collected from the onsite stockpile to evaluate the status of the stockpile and the potential use of the stockpile as backfill material. The analytical results indicated the TPH concentration of the composite stockpile soil sample was 4,558 mg/Kg. Based on the analytical results this soil stockpile was transported to an NMOCD approved land farm.

On August 8, 2008, two (2) soil samples (Stockpile 1-A and Stockpile 2-A) were collected from the onsite stockpiles to evaluate the status of the stockpile and the potential use of the stockpile as backfill material. The analytical results indicated the TPH concentration of the composite stockpile soil samples were 2,162 mg/Kg and 3,738 mg/Kg in soil samples Stockpile 1-A and Stockpile 2-A, respectively. Based on the analytical results this soil stockpile was transported to an NMOCD approved land farm.

On August 11, 2008, twelve (12) confirmation soil samples (NSW-1@14', NSW-2@14', ESW-1@14', ESW-2@14', ESW-3@14', ESW-4@14', WSW-4@14', WSW-3@14', WSW-2@14', WSW-1@14' SCSW-1@14' and SCSW-2@14') were collected from the excavation sidewalls. The laboratory analytical results indicated benzene, BTEX and TPH concentrations were below the appropriate MDL in all twelve (12) confirmation sidewall soil samples, with the exception of soil sample ESW-1@14' which exhibited a TPH concentration of 17.2 mg/Kg.

On August 14, 2008, three (3) confirmation sidewall soil samples (ESW-5@10', WSW-5@10', and SSW-1@10') and one (1) confirmation floor soil sample (Floor-1) were collected from the southern end of the excavation. The analytical results indicated benzene concentrations were below the appropriate MDL in each of the four (4) soil samples. BTEX concentrations were below the MDL in soil samples WSW-5@10', SSW-1@10' and Floor-1 and 0.0117 mg/Kg in soil sample ESW-5@10'. The TPH concentration ranged from below the MDL of 17.4 mg/Kg in soil sample SSW-1@10' to 98.7 mg/Kg in soil sample WSW-5@10'. Based on the analytical results of the four (4) soil samples, the southernmost extent of the excavation was delineated.

On August 25, 2008, five (5) confirmation floor soil samples (Floor-2@16', Floor-3@16', Floor-4@16', Floor-5@16' and Floor-6@16') were collected from the excavation floor. The laboratory analytical results indicated all five (5) confirmation soil samples exhibited benzene and BTEX constituent concentrations below the appropriate laboratory MDL. TPH concentrations ranged from below the laboratory MDL in soil sample Floor-2@16' to 35.5 mg/Kg in soil sample Floor-5@16'.

The laboratory analytical results indicated all sidewall and excavation floor confirmation soil samples were below the NMOCD regulatory standard for benzene (10 mg/Kg), BTEX (50 mg/Kg) and TPH (100 mg/Kg). Based on the analytical results of the confirmation soil samples, a risk-based closure utilizing a poly liner was not required at the release site. Approximately 10,526 cubic yards of excavated soil was transported to the C & C Land farm (NMOCD Permit NM-01-0012) located in Monument, New Mexico. Non-impacted native soil was purchased from a local landowner to backfill the excavation. Following the backfill activities, the site was contoured to fit the surrounding topography. On October 8, 2008, the remediation site was seeded with vegetation suitable to the landowner.

SOIL CLOSURE REQUEST

Based on the analytical results of confirmation soil samples collected from the floor and sidewalls of the excavation, 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 Monument Barber 10-Inch Sour release site.

LIMITATIONS

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

DISTRIBUTION:

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Figures

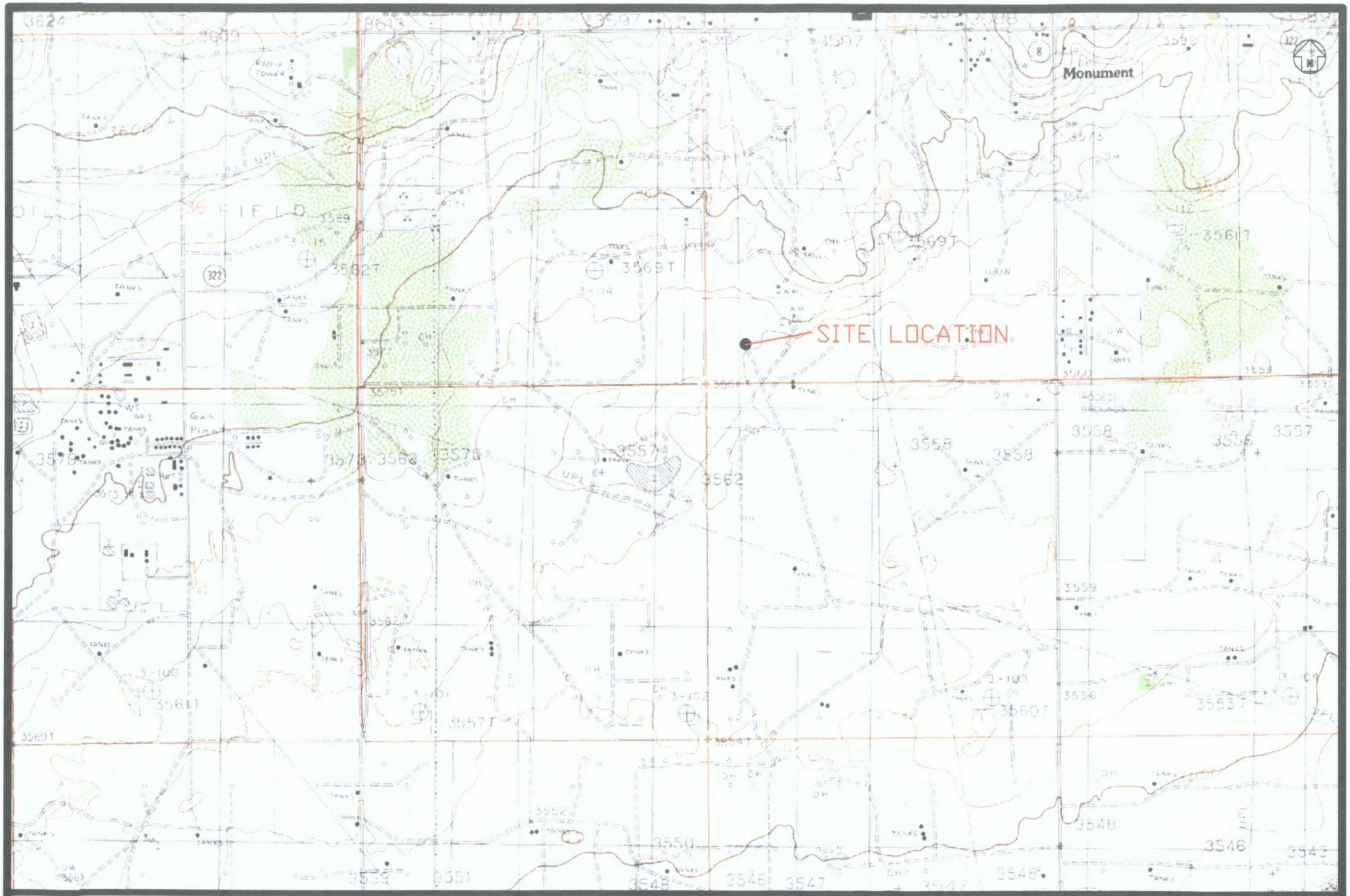
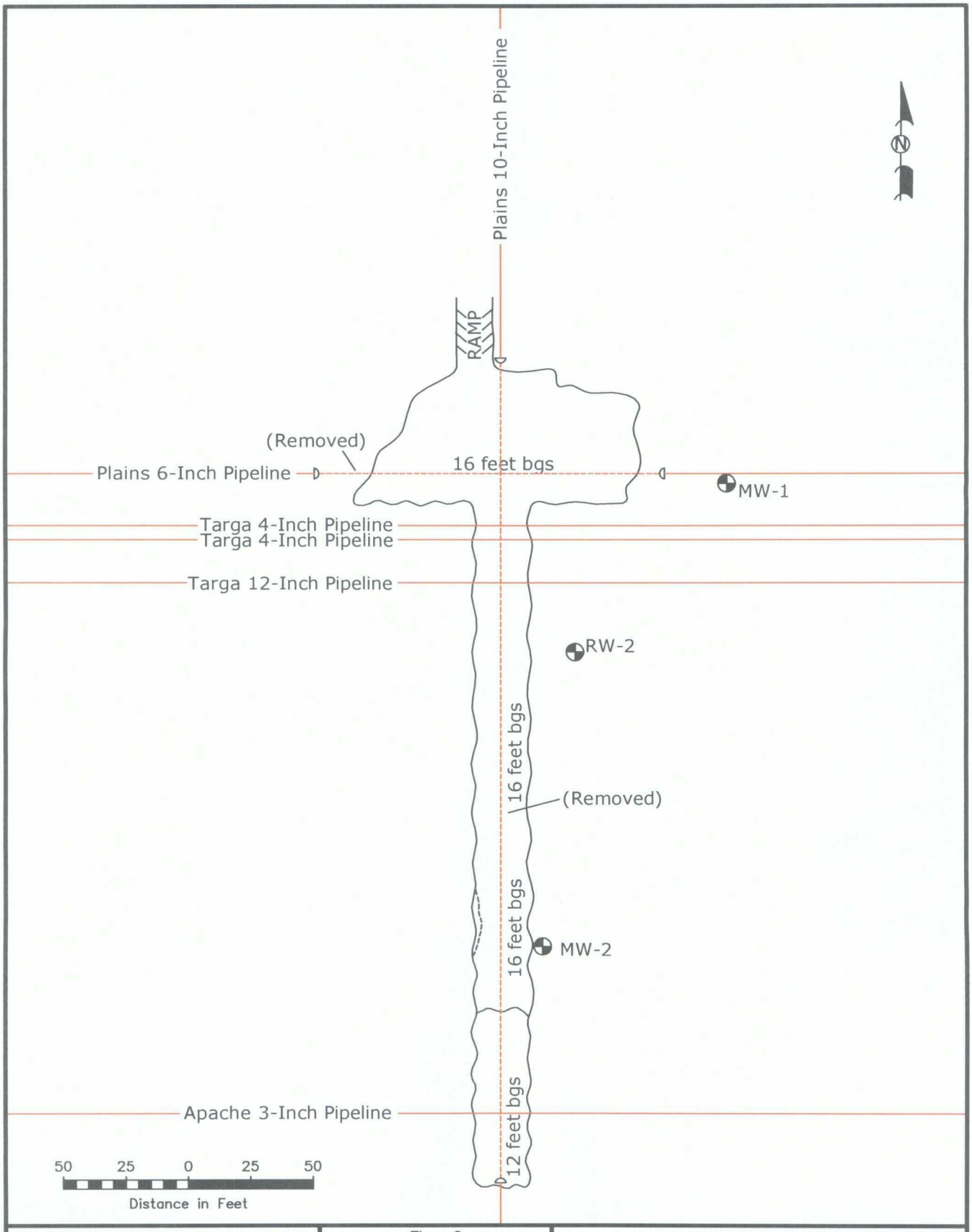


Figure 1
Site Location Map
Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Lea County, New Mexico
SRS 2000-10655
NMOCD Ref 1RP-0338

Basin Environmental Services

Prep By: CDS	Checked By: CDS
January 15, 2009	Scale 1"=2000'



LEGEND:

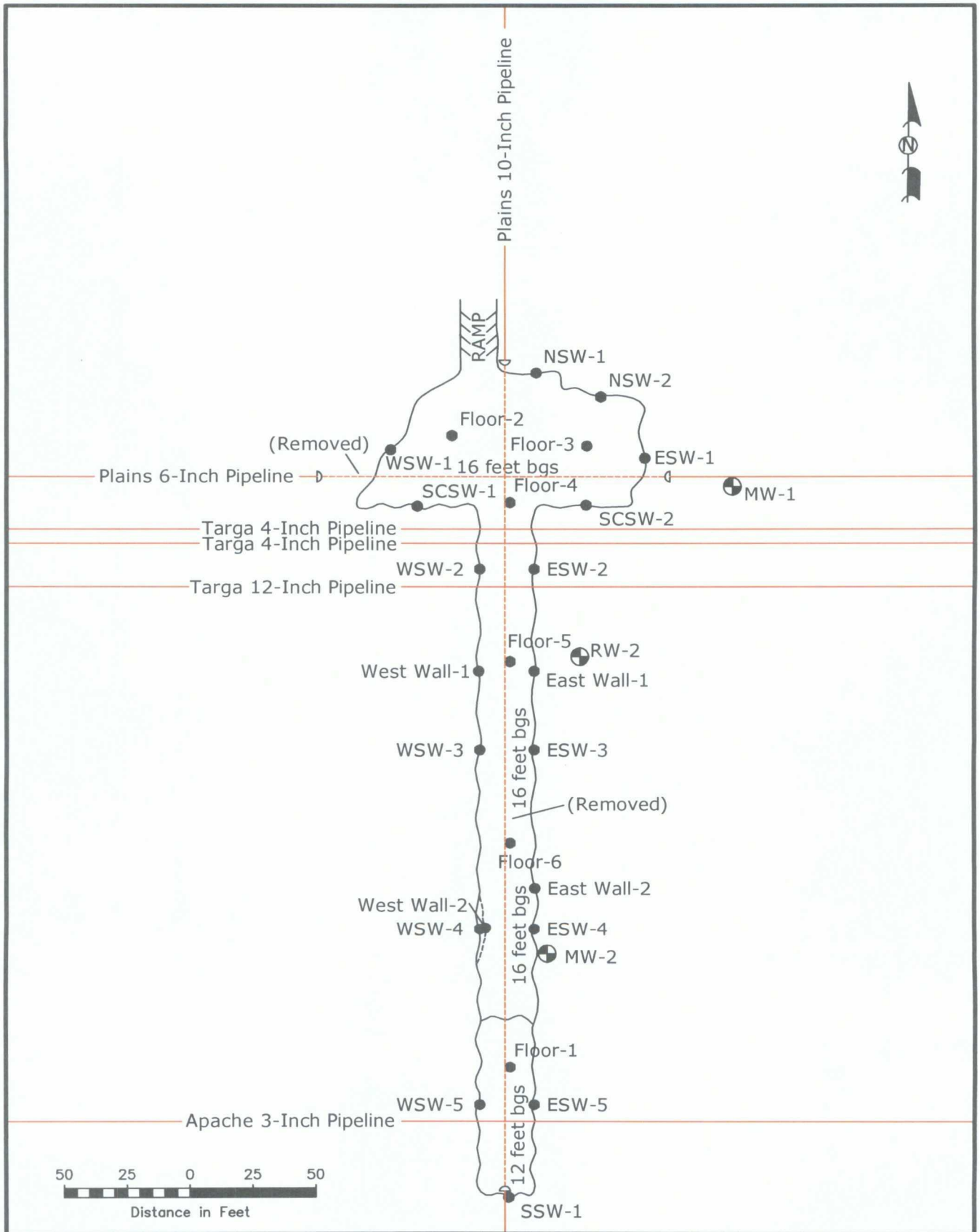
- Pipeline
- Pipeline (Removed)
- Groundwater Monitor or Recovery Well

Figure 2
Site Map

Plains Marketing, L.P.
***Monument* Barber 10-Inch Sour**
Lea County, NM
SRS-2000-10655
NMOCD #1R-0338

Basin Environmental Services

Scale: 1" = 50'	Drawn By: CDS	Prepared By: CDS
December 30, 2008		
SW 1/4 of SW 1/4 of Section 32, Township 19 South, Range 37 E		



LEGEND:

- Soil Sample Location
- Pipeline
- Pipeline (Removed)
- Groundwater Monitor or Recovery Well

Figure 3
Soil Sample Location Map

Plains Marketing, L.P.
Monument Barber 10-Inch Sour
Lea County, NM
SRS-2000-10655
NMOCD #1R-0338

Basin Environmental Services

Scale: 1" = 50'	Drawn By: CDS	Prepared By: CDS
December 30, 2008		
SW 1/4 of SW 1/4 of Section 32, Township 19 South, Range 37 E		

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX & TPH IN SOIL
MONUMENT BARBER 10" SOUR
MONUMENT, NEW MEXICO
NMOCD REFERENCE 1R-0338

All measurments recorded in mg/Kg

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH (bgs)	SOIL STATUS	Methods: EPA SW 846-8021B, 5030						EPA SW 846-8015M			
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	m,p-XYLENE (mg/Kg)	o-XYLENE (mg/Kg)	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)
07/07/08	East Wall-1	14'	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0
07/07/08	West Wall -1	14'	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0
07/07/08	East Wall-2	14'	In-Situ	-	-	-	-	-	-	<15.0	<15.0	<15.0	<15.0
07/07/08	West Wall -2	14'	Excavated	-	-	-	-	-	-	1410	4470	453	**6,333**
07/31/08	Stockpile A	-	Transported	-	-	-	-	-	-	633	3390	535	**4,558**
08/08/08	Stockpile 1-A	-	Transported	-	-	-	-	-	-	405	1500	257	**2,162**
08/08/08	Stockpile 2-A	-	Transported	-	-	-	-	-	-	768	2540	430	**3,738**
08/11/08	NSW-1 @ 14'	14'	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.2	<17.2	<17.2	<17.2
08/11/08	NSW-2 @ 14'	14'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.5	<16.5	<16.5	<16.5
08/11/08	ESW-1 @ 14'	14'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.3	17.2	<16.3	17.2
08/11/08	ESW-2 @ 14'	14'	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.7	<15.7	<15.7	<15.7
08/11/08	ESW-3 @ 14'	14'	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	<15.5	<15.5	<15.5
08/11/08	ESW-4 @ 14'	14'	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.6	<17.6	<17.6	<17.6
08/11/08	WSW-4 @ 14'	14'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2
08/11/08	WSW-3 @ 14'	14'	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.2	<18.2	<18.2	<18.2
08/11/08	WSW-2 @ 14'	14'	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.3	<17.3	<17.3	<17.3
08/11/08	WSW-1 @ 14'	14'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2
08/11/08	SCSW-1 @ 14'	14'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.4	<16.4	<16.4	<16.4
08/11/08	SCSW-2 @ 14'	14'	In-Situ	<0.0056	<0.0112	<0.0056	<0.0112	<0.0056	<0.0112	<16.8	<16.8	<16.8	<16.8
08/14/08	ESW-5 @ 10'	10'	In-Situ	<0.0011	<0.0022	0.0018	0.0076	0.0023	0.0117	<16.7	95.9	<16.7	95.9
08/14/08	WSW-5 @ 10'	10'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.6	98.7	<16.6	98.7
08/14/08	SSW-1 @ 10'	10'	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0011	<0.0023	<17.4	<17.4	<17.4	<17.4
08/14/08	Floor-1	12'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.5	30.1	<16.5	30.1
08/25/08	Floor-2@16'	16'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<15.0	<15.0	<15.0	<15.0
08/25/08	Floor-3@16'	16'	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<15.0	30.6	<15.0	30.6
08/25/08	Floor-4@16'	16'	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.0	17.2	<15.0	17.2
08/25/08	Floor-5@16'	16'	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<15.0	35.5	<15.0	35.5
08/25/08	Floor-6@16'	16'	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<15.0	22.7	<15.0	22.7
NMOCD REGULATORY STANDARD				**10**					**50**				**100**

BOLD indicates concentration exceeding NMOCD regulatory standards

Appendices

Appendix A
Laboratory Reports

Analytical Report 307395

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Monument Barber 10" Sour

2000-10655

10-JUL-08

ENVIRONMENTAL LAB OF

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

10-JUL-08

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

Reference: XENCO Report No: **307395**
Monument Barber 10" Sour
Project Address: Lea County, NM

Camille Reynolds:

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 307395. 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. 307395 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 307395

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
East Wall - 1	S	Jul-07-08 15:00		307395-001
West Wall - 1	S	Jul-07-08 15:05		307395-002
East Wall - 2	S	Jul-07-08 15:10		307395-003
West Wall - 2	S	Jul-07-08 15:15		307395-004

Certificate of Analysis Summary 307395

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Tue Jul-08-08 08:25 am
Report Date: 10-JUL-08
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	307395-001		307395-002		307395-003		307395-004					
	Field Id:	East Wall - 1		West Wall - 1		East Wall - 2		West Wall - 2					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jul-07-08 15:00		Jul-07-08 15:05		Jul-07-08 15:10		Jul-07-08 15:15					
Percent Moisture	***Extracted:***												
	Analyzed:	Jul-09-08 09:50		Jul-09-08 09:50		Jul-09-08 09:50		Jul-09-08 09:50					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		14.8	1.00	11.7	1.00	11.8	1.00	13.5	1.00				
TPH by SW8015 Mod	***Extracted:***	Jul-08-08 11:30		Jul-08-08 11:30		Jul-08-08 11:30		Jul-08-08 11:30					
	Analyzed:	Jul-08-08 23:46		Jul-09-08 00:14		Jul-09-08 00:44		Jul-09-08 01:14					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	1410	15.0				
C12-C28 Diesel Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	4470	15.0				
C28-C35 Oil Range Hydrocarbons		ND	15.0	ND	15.0	ND	15.0	453	15.0				
Total TPH		ND		ND		ND		6333					

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 307395 **Project ID:** 2000-10655

Lab Batch #: 727500 **Sample:** 307395-001 / 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	87.1	100	87	70-135	
o-Terphenyl	44.1	50.0	88	70-135	

Lab Batch #: 727500 **Sample:** 307395-001 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	91.9	100	92	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 727500 **Sample:** 307395-001 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	90.7	100	91	70-135	
o-Terphenyl	50.3	50.0	101	70-135	

Lab Batch #: 727500 **Sample:** 307395-002 / 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	85.8	100	86	70-135	
o-Terphenyl	44.0	50.0	88	70-135	

Lab Batch #: 727500 **Sample:** 307395-003 / 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	87.7	100	88	70-135	
o-Terphenyl	44.2	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.

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 307395 **Project ID:** 2000-10655

Lab Batch #: 727500 **Sample:** 307395-004 / 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	103	100	103	70-135	
o-Terphenyl	46.5	50.0	93	70-135	

Lab Batch #: 727500 **Sample:** 511782-1-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	95.1	100	95	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

Lab Batch #: 727500 **Sample:** 511782-1-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	89.4	100	89	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 727500 **Sample:** 511782-1-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	92.8	100	93	70-135	
o-Terphenyl	46.8	50.0	94	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: Monument Barber 10" Sour

Work Order #: 307395 **Project ID:** 2000-10655

Analyst: ASA **Date Prepared:** 07/08/2008 **Date Analyzed:** 07/08/2008

Lab Batch ID: 727500 **Sample:** 511782-1-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	882	88	1000	866	87	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	877	88	1000	856	86	2	70-135	35	

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

ENVIRONMENTAL LAB OF

Form 3 - MS / MSD Recoveries

Project Name: Monument Barber 10" Sour

Work Order # : 307395 **Project ID:** 2000-10655

Lab Batch ID: 727500 **QC- Sample ID:** 307395-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/09/2008 **Date Prepared:** 07/08/2008 **Analyst:** ASA

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	1000	830	83	1000	834	83	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	799	80	1000	812	81	1	70-135	35	

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

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: Monument Barber 10" Sour

Work Order #: 307395

Lab Batch #: 727517 **Project ID:** 2000-10655

Date Analyzed: 07/09/2008 **Date Prepared:** 07/09/2008 **Analyst:** MOV

QC- Sample ID: 307395-001 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	14.8	16.5	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: Curt Stanley
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: (505) 396-1429
Sampler Signature:

Project Name: Monument Barber 10" Sour
Project #: 2000-10655
Project Loc: Lea County, NM
PO #: PAA - C. J. Bryant
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 307395

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	8021B or BTEX 8260	RCI	M.O.R.M.	PAH	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	East Wall - 1			7/7/2008	1500		1	X								Soil	X																X
02	Wall Wall - 1			7/7/2008	1505		1	X								Soil	X																X
03	East Wall - 2			7/7/2008	1510		1	X								Soil	X																X
04	West Wall - 2			7/7/2008	1515		1	X								Soil	X																X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/8/08	8:25			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				7/8/08	8:25

Laboratory Comments:
Sample Containers Intact? Yes No
VOCs Free of Headspace? Yes No
Labels on container(s) Yes No
Custody seals on container(s) Yes No
Custody seals on cooler(s) Yes No
Sample Hand Delivered by Sampler/Client Rep. ? Yes No
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Phins

Date/ Time: 7.8.08 8:25

Lab ID #: 307395

Initials: AL

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 (NA)	
#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 309364

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Monument Barber 10" Sour

2000-10655

11-AUG-08

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

11-AUG-08

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

Reference: XENCO Report No: **309364**
Monument Barber 10" Sour
Project Address: Lea County, NW

Camille Reynolds:

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 309364. 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. 309364 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 309364

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile A	S	Jul-31-08 10:45		309364-001

Certificate of Analysis Summary 309364

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NW

Date Received in Lab: Tue Aug-05-08 11:32 am
Report Date: 11-AUG-08
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	309364-001					
	Field Id:	Stockpile A					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Jul-31-08 10:45					
Percent Moisture	*Extracted:*						
	Analyzed:	Aug-06-08 08:30					
	Units/RL:	%	RL				
Percent Moisture		10.1					
TPH by SW8015 Mod	*Extracted:*	Aug-07-08 10:30					
	Analyzed:	Aug-07-08 21:36					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		633	16.7				
C12-C28 Diesel Range Hydrocarbons		3390	16.7				
C28-C35 Oil Range Hydrocarbons		535	16.7				
Total TPH		4558					

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309364 **Project ID:** 2000-10655

Lab Batch #: 730465 **Sample:** 309358-001 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	70.9	100	71	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 730465 **Sample:** 309358-001 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	73.9	100	74	70-135	
o-Terphenyl	45.1	50.0	90	70-135	

Lab Batch #: 730465 **Sample:** 309364-001 / 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	85.1	100	85	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 730465 **Sample:** 513538-1-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	77.6	100	78	70-135	
o-Terphenyl	44.9	50.0	90	70-135	

Lab Batch #: 730465 **Sample:** 513538-1-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	76.3	100	76	70-135	
o-Terphenyl	44.5	50.0	89	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: Monument Barber 10" Sour

Work Order #: 309364 **Project ID:** 2000-10655

Lab Batch #: 730465 **Sample:** 513538-1-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	76.1	100	76	70-135	
o-Terphenyl	46.0	50.0	92	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: Monument Barber 10" Sour

Work Order #: 309364 **Project ID:** 2000-10655

Analyst: IRO **Date Prepared:** 08/07/2008 **Date Analyzed:** 08/07/2008

Lab Batch ID: 730465 **Sample:** 513538-1-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	838	84	1000	826	83	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	840	84	1000	822	82	2	70-135	35	

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

ENVIRONMENTAL LAB OF

Form 3 - MS / MSD Recoveries

Project Name: Monument Barber 10" Sour

Work Order # : 309364 **Project ID:** 2000-10655

Lab Batch ID: 730465 **QC- Sample ID:** 309358-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/08/2008 **Date Prepared:** 08/07/2008 **Analyst:** IRO

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	1110	838	75	1110	871	78	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	38.1	1110	838	72	1110	874	75	4	70-135	35	

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

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: Monument Barber 10" Sour

Work Order #: 309364

Lab Batch #: 730076 **Project ID:** 2000-10655

Date Analyzed: 08/06/2008 **Date Prepared:** 08/06/2008 **Analyst:** MOV

QC- Sample ID: 309344-003 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	15.3	18.3	18	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 79766
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Curt Stanley PAGE 01 OF 01 Project Name: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

Company Address: 2600 Plains Hwy Project Loc: Lea County, NM

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

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

Sampler Signature: Curt Stanley for Bobby Bradley N.D. e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 309364

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 (HCl x 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW=Drinking Water GW = Groundwater NP=Non-Potable	SL=Sludge SS=Soil/Solid Sperm=Other	Analyze For: TCLP: TOTAL: 8015M	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
1	Stockpile A			7/31/2008	1045		1	X								Soil		X																	X

Special Instructions:
BILL TO PLAINS

Relinquished by:	Date	Time	Received by:	Date	Time
	8/5/08	1132			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				8/5/08	11.32

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N JG
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: 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Environmental

Date/ Time: 8/5/08 11:32

Lab ID # : 309364

Initials: JG

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

Analytical Report 309767

for

PLAINS ALL AMERICAN EH&S

Project Manager: JIMMY BRYANT

Monument Barber 10" Sour

2000-10655

18-AUG-08

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

18-AUG-08

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

Reference: XENCO Report No: **309767**
Monument Barber 10" Sour
Project Address: Lea County, NM

JIMMY 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 309767. 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. 309767 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 309767

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile 1-A	S	Aug-08-08 15:00		309767-001
Stockpile 2-A	S	Aug-08-08 15:10		309767-002

Certificate of Analysis Summary 309767

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: JIMMY BRYANT
Project Location: Lea County, NM

Date Received in Lab: Mon Aug-11-08 08:20 am
Report Date: 18-AUG-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	309767-001		309767-002					
	Field Id:	Stockpile 1-A		Stockpile 2-A					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	Aug-08-08 15:00		Aug-08-08 15:10					
Percent Moisture	*Extracted:*								
	Analyzed:	Aug-11-08 17:00		Aug-11-08 17:00					
	Units/RL:	%	RL	%	RL				
Percent Moisture		7.54		7.34					
TPH by SW8015 Mod	*Extracted:*	Aug-13-08 16:20		Aug-13-08 16:20					
	Analyzed:	Aug-15-08 20:04		Aug-15-08 20:32					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		405	16.2	768	16.2				
C12-C28 Diesel Range Hydrocarbons		1500	16.2	2540	16.2				
C28-C35 Oil Range Hydrocarbons		257	16.2	430	16.2				
Total TPH		2162		3738					

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309767 **Project ID:** 2000-10655

Lab Batch #: 731327 **Sample:** 309767-001 / 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	90.8	100	91	70-135	
o-Terphenyl	46.9	50.0	94	70-135	

Lab Batch #: 731327 **Sample:** 309767-002 / 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	116	100	116	70-135	
o-Terphenyl	56.3	50.0	113	70-135	

Lab Batch #: 731327 **Sample:** 309801-003 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	110	100	110	70-135	
o-Terphenyl	4.48	50.0	9	70-135	**

Lab Batch #: 731327 **Sample:** 309801-003 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	113	100	113	70-135	
o-Terphenyl	54.0	50.0	108	70-135	

Lab Batch #: 731327 **Sample:** 514038-1-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	110	100	110	70-135	
o-Terphenyl	53.3	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: Monument Barber 10" Sour

Work Order #: 309767 **Project ID:** 2000-10655

Lab Batch #: 731327 **Sample:** 514038-1-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	102	100	102	70-135	
o-Terphenyl	61.8	50.0	124	70-135	

Lab Batch #: 731327 **Sample:** 514038-1-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	111	100	111	70-135	
o-Terphenyl	53.4	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.

BS / BSD Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309767
Analyst: IRO
Lab Batch ID: 731327
Sample: 514038-1-BKS
Units: mg/kg

Date Prepared: 08/13/2008
Batch #: 1

Project ID: 2000-10655
Date Analyzed: 08/15/2008
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	ND	1000	884	88	1000	881	88	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	869	87	1000	902	90	4	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: Monument Barber 10" Sour

Work Order # 309767 **Project ID:** 2000-10655

Lab Batch ID: 731327 **QC- Sample ID:** 309801-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/16/2008 **Date Prepared:** 08/13/2008 **Analyst:** IRO

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	1060	917	87	1060	948	89	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	22.3	1060	1040	96	1060	942	87	10	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: Monument Barber 10" Sour

Work Order # 309767

Lab Batch #: 730669 **Project ID:** 2000-10655

Date Analyzed: 08/11/2008 **Date Prepared:** 08/11/2008 **Analyst:** MOV

QC- Sample ID: 309743-001 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	48.5	49.2	1	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: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

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

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

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

Sampler Signature: Curt Stanley for Billy Blackwood e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 309767

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: Drinking Water DW / Groundwater GW / Non-Potable NP	Soil SL / Sludge SS / Other	Analyze For: TPH: 418.1 (8015M)	TPH: TX 1005	TPH: 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	NORM	PAH	EPA Point Filter Test	Chlorides E 300	RUSH TAT (pre-schedule) 24, 48, 72 hrs	Standard TAT
1	Stockpile 1-A			8/8/2008	1500		1	X									Soil	X																X
2	Stockpile 2-A			8/8/2008	1510		1	X									Soil	X																X

Analyze For: TCLP: / TOTAL: X

Special Instructions:

Relinquished by:	Date	Time	Received by	Date	Time
	8/11/08	820			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				8/11/08	8:20

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

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 8/11/08 8:20

Lab ID #: 309767

Initials: JA

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	
#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)? JA 8/11/08	(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 309862

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Monument Barber 10" Sour

2000-10655

18-AUG-08

ENVIRONMENTAL LAB OF

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

18-AUG-08

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

Reference: XENCO Report No: **309862**
Monument Barber 10" Sour
Project Address: Lea County, NM

Camille Reynolds:

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 309862. 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. 309862 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 309862

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NSW-1 @ 14'	S	Aug-11-08 10:05		309862-001
NSW-2 @ 14'	S	Aug-11-08 10:10		309862-002
ESW-1 @ 14'	S	Aug-11-08 10:15		309862-003
ESW-2 @ 14'	S	Aug-11-08 10:20		309862-004
ESW-3 @ 14'	S	Aug-11-08 10:25		309862-005
ESW-4 @ 14'	S	Aug-11-08 10:30		309862-006
WSW-4 @ 14'	S	Aug-11-08 10:35		309862-007
WSW-3 @ 14'	S	Aug-11-08 10:40		309862-008
WSW-2 @ 14'	S	Aug-11-08 10:45		309862-009
WSW-1 @ 14'	S	Aug-11-08 10:50		309862-010
SCSW-1 @ 14'	S	Aug-11-08 10:55		309862-011
SCSW-2 @ 14'	S	Aug-11-08 11:00		309862-012

Certificate of Analysis Summary 309862

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Mon Aug-11-08 05:05 pm
Report Date: 18-AUG-08
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	309862-001		309862-002		309862-003		309862-004		309862-005		309862-006	
	Field Id:	NSW-1 @ 14'		NSW-2 @ 14'		ESW-1 @ 14'		ESW-2 @ 14'		ESW-3 @ 14'		ESW-4 @ 14'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-11-08 10:05		Aug-11-08 10:10		Aug-11-08 10:15		Aug-11-08 10:20		Aug-11-08 10:25		Aug-11-08 10:30	
BTEX by EPA 8021B	*Extracted:*	Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35	
	Analyzed:	Aug-14-08 10:01		Aug-14-08 10:24		Aug-14-08 10:48		Aug-14-08 11:12		Aug-14-08 11:36		Aug-14-08 12:00	
	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	0.0011	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0012
Toluene		ND	0.0023	ND	0.0022	ND	0.0022	ND	0.0021	ND	0.0021	ND	0.0023
Ethylbenzene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0012
m,p-Xylenes		ND	0.0023	ND	0.0022	ND	0.0022	ND	0.0021	ND	0.0021	ND	0.0023
o-Xylene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0012
Total Xylenes		ND		ND		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND		ND		ND	
Percent Moisture	*Extracted:*												
	Analyzed:	Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		12.9		9.14		7.76		4.26		3.31		14.7	
TPH By SW8015 Mod	*Extracted:*	Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00	
	Analyzed:	Aug-14-08 16:42		Aug-14-08 14:58		Aug-14-08 15:24		Aug-14-08 16:16		Aug-14-08 17:08		Aug-14-08 17:33	
	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	17.2	ND	16.5	ND	16.3	ND	15.7	ND	15.5	ND	17.6
C12-C28 Diesel Range Hydrocarbons		ND	17.2	ND	16.5	17.2	16.3	ND	15.7	ND	15.5	ND	17.6
C28-C35 Oil Range Hydrocarbons		ND	17.2	ND	16.5	ND	16.3	ND	15.7	ND	15.5	ND	17.6
Total TPH		ND		ND		17.2		ND		ND		ND	

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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Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 309862

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Mon Aug-11-08 05:05 pm
Report Date: 18-AUG-08
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	309862-007		309862-008		309862-009		309862-010		309862-011		309862-012	
	Field Id:	WSW-4 @ 14'		WSW-3 @ 14'		WSW-2 @ 14'		WSW-1 @ 14'		SCSW-1 @ 14'		SCSW-2 @ 14'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-11-08 10:35		Aug-11-08 10:40		Aug-11-08 10:45		Aug-11-08 10:50		Aug-11-08 10:55		Aug-11-08 11:00	
BTEX by EPA 8021B	*Extracted:*	Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35		Aug-13-08 15:35	
	Analyzed:	Aug-14-08 12:24		Aug-14-08 12:48		Aug-14-08 13:12		Aug-14-08 13:36		Aug-14-08 14:48		Aug-14-08 15:12	
	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	0.0012	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0056
Toluene		ND	0.0022	ND	0.0024	ND	0.0023	ND	0.0022	ND	0.0022	ND	0.0112
Ethylbenzene		ND	0.0011	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0056
m,p-Xylenes		ND	0.0022	ND	0.0024	ND	0.0023	ND	0.0022	ND	0.0022	ND	0.0112
o-Xylene		ND	0.0011	ND	0.0012	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0056
Total Xylenes		ND		ND		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND		ND		ND	
Percent Moisture	*Extracted:*												
	Analyzed:	Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35		Aug-13-08 08:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.15		17.6		13.1		7.19		8.3		10.8	
TPH By SW8015 Mod	*Extracted:*	Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00		Aug-13-08 10:00	
	Analyzed:	Aug-14-08 17:58		Aug-14-08 18:23		Aug-14-08 18:48		Aug-14-08 19:13		Aug-16-08 05:19		Aug-14-08 20:03	
	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	16.2	ND	18.2	ND	17.3	ND	16.2	ND	16.4	ND	16.8
C12-C28 Diesel Range Hydrocarbons		ND	16.2	ND	18.2	ND	17.3	ND	16.2	ND	16.4	ND	16.8
C28-C35 Oil Range Hydrocarbons		ND	16.2	ND	18.2	ND	17.3	ND	16.2	ND	16.4	ND	16.8
Total TPH		ND		ND		ND		ND		ND		ND	

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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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731042 **Sample:** 309862-001 / 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	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 731042 **Sample:** 309862-002 / 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	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 731042 **Sample:** 309862-003 / 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	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 731042 **Sample:** 309862-004 / 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	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 731042 **Sample:** 309862-005 / 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	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0283	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: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731042 **Sample:** 309862-006 / 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	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 731042 **Sample:** 309862-007 / 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	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 731042 **Sample:** 309862-008 / 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	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 731042 **Sample:** 309862-009 / 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	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 731042 **Sample:** 309862-010 / 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	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	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: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731042 **Sample:** 309862-011 / 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	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 731042 **Sample:** 309862-012 / 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	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 731042 **Sample:** 309887-001 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	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 731042 **Sample:** 309887-001 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	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 731042 **Sample:** 513876-1-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	0.0269	0.0300	90	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: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731042 **Sample:** 513876-1-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	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 731042 **Sample:** 513876-1-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	0.0272	0.0300	91	80-120	

Lab Batch #: 731050 **Sample:** 309862-001 / 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	79.4	100	79	70-135	
o-Terphenyl	45.4	50.0	91	70-135	

Lab Batch #: 731050 **Sample:** 309862-002 / 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	75.0	100	75	70-135	
o-Terphenyl	42.4	50.0	85	70-135	

Lab Batch #: 731050 **Sample:** 309862-003 / 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	75.0	100	75	70-135	
o-Terphenyl	43.3	50.0	87	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: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731050 **Sample:** 309862-004 / 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	79.1	100	79	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

Lab Batch #: 731050 **Sample:** 309862-005 / 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	75.6	100	76	70-135	
o-Terphenyl	42.4	50.0	85	70-135	

Lab Batch #: 731050 **Sample:** 309862-006 / 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	78.0	100	78	70-135	
o-Terphenyl	43.9	50.0	88	70-135	

Lab Batch #: 731050 **Sample:** 309862-007 / 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	79.6	100	80	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

Lab Batch #: 731050 **Sample:** 309862-008 / 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	75.5	100	76	70-135	
o-Terphenyl	43.0	50.0	86	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: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731050 **Sample:** 309862-009 / 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	78.3	100	78	70-135	
o-Terphenyl	44.1	50.0	88	70-135	

Lab Batch #: 731050 **Sample:** 309862-010 / 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	81.3	100	81	70-135	
o-Terphenyl	45.4	50.0	91	70-135	

Lab Batch #: 731050 **Sample:** 309862-011 / 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	79.9	100	80	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

Lab Batch #: 731050 **Sample:** 309862-012 / 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	76.8	100	77	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 731050 **Sample:** 513879-1-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	85.1	100	85	70-135	
o-Terphenyl	51.3	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.

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Lab Batch #: 731050 **Sample:** 513879-1-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	85.1	100	85	70-135	
o-Terphenyl	49.5	50.0	99	70-135	

Lab Batch #: 731050 **Sample:** 513879-1-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	85.6	100	86	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.

BS / BSD Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 309862 **Project ID:** 2000-10655

Analyst: ASA **Date Prepared:** 08/13/2008 **Date Analyzed:** 08/14/2008

Lab Batch ID: 731042 **Sample:** 513876-1-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	0.1123	112	0.1	0.0986	99	13	70-130	35	
Toluene	ND	0.1000	0.1093	109	0.1	0.0963	96	13	70-130	35	
Ethylbenzene	ND	0.1000	0.1174	117	0.1	0.1028	103	13	71-129	35	
m,p-Xylenes	ND	0.2000	0.2404	120	0.2	0.2107	105	13	70-135	35	
o-Xylene	0.0011	0.1000	0.1107	111	0.1	0.0976	98	13	71-133	35	

Analyst: IRO **Date Prepared:** 08/13/2008 **Date Analyzed:** 08/14/2008

Lab Batch ID: 731050 **Sample:** 513879-1-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	801	80	1000	809	81	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	812	81	1000	819	82	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: Monument Barber 10" Sour

Work Order # 309862 **Project ID:** 2000-10655

Lab Batch ID: 731042 **QC- Sample ID:** 309887-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/14/2008 **Date Prepared:** 08/13/2008 **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	0.1130	0.0719	64	0.1130	0.0673	60	6	70-130	35	X
Toluene	ND	0.1130	0.0713	63	0.1130	0.0671	59	7	70-130	35	X
Ethylbenzene	ND	0.1130	0.0749	66	0.1130	0.0711	63	5	71-129	35	X
m,p-Xylenes	ND	0.2260	0.1555	69	0.2260	0.1481	66	4	70-135	35	X
o-Xylene	ND	0.1130	0.0679	60	0.1130	0.0656	58	3	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

Sample Duplicate Recovery

Project Name: Monument Barber 10" Sour

Work Order # 309862

Lab Batch #: 730815 **Project ID:** 2000-10655

Date Analyzed: 08/13/2008 **Date Prepared:** 08/13/2008 **Analyst:** MOV

QC- Sample ID: 309862-001 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	12.9	12.7	2	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 02 Project Name: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

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

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

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

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

(lab use only)
ORDER #: 309862

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (VOA x 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix: DW = Drinking Water SL = Sludge; GW = Groundwater S = Soil/Sol; NP = Non-Potable Specify Other	Analyze For: TCLP: TOTAL: 8015B (8015M) TPH 418.1 TPH TX 1005 TPH 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	NSW-1 @ 14'			8/11/2008	1005		1	X								Soil	X							X						X
02	NSW-2 @ 14'			8/11/2008	1010		1	X								Soil	X							X						X
03	ESW-1 @ 14'			8/11/2008	1015		1	X								Soil	X							X						X
04	ESW-2 @ 14'			8/11/2008	1020		1	X								Soil	X							X						X
05	ESW-3 @ 14'			8/11/2008	1025		1	X								Soil	X							X						X
06	ESW-4 @ 14'			8/11/2008	1030		1	X								Soil	X							X						X
07	WSW-4 @ 14'			8/11/2008	1035		1	X								Soil	X							X						X
08	WSW-3 @ 14'			8/11/2008	1040		1	X								Soil	X							X						X
09	WSW-2 @ 14'			8/11/2008	1045		1	X								Soil	X							X						X
10	WSW-1 @ 14'			8/11/2008	1050		1	X								Soil	X							X						X

Special Instructions:

	Date	Time		Date	Time
Relinquished by:	8/11/08	1705	Received by:		
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	8.11.08	17:05

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: 6.0 °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 Project Name: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

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

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

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

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

(lab use only)
ORDER #: 309862

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/Solid DW - Drinking Water SL - Sludge NP - Non-Potable Specify Other	Analyze For: TPH 418.1 / 8015M / 8015B	TPH TX 1005	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 Plant Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
																	TCLP:																	
																	TOTAL:									X							
11	SCSW-1 @ 14'			8/11/2008	1055		1	X								Soil	X									X							X
12	SCSW-2 @ 14'			8/11/2008	1100		1	X								Soil	X									X							X

Special Instructions:

Relinquished by:	Date: 8/11/08	Time: 1705	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by ELOT: Andrea Lam	Date: 8-11-08	Time: 17:05

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
Log 1695
Temperature Upon Receipt: 4.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Plains

Date/ Time: 8.11.08 17:05

Lab ID #: 309862

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	6.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

Analytical Report 310167

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Monument Barber 10" Sour

2000-10655

18-AUG-08

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

18-AUG-08

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

Reference: XENCO Report No: **310167**
Monument Barber 10" Sour
Project Address: Lea County, NM

Camille Reynolds:

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 310167. 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. 310167 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 310167

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
ESW-5 @ 10'	S	Aug-14-08 13:00		310167-001
WSW-5 @ 10'	S	Aug-14-08 13:10		310167-002
SSW-1 @ 10'	S	Aug-14-08 13:05		310167-003

Certificate of Analysis Summary 310167

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Thu Aug-14-08 04:45 pm
Report Date: 18-AUG-08
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	310167-001		310167-002		310167-003				
	Field Id:	ESW-5 @ 10'		WSW-5 @ 10'		SSW-1 @ 10'				
	Depth:									
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Aug-14-08 13:00		Aug-14-08 13:10		Aug-14-08 13:05				
BTEX by EPA 8021B	*Extracted:*	Aug-15-08 15:30		Aug-15-08 15:30		Aug-15-08 15:30				
	Analyzed:	Aug-16-08 00:28		Aug-16-08 00:53		Aug-16-08 01:16				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Benzene		ND	0.0011	ND	0.0011	ND	0.0012			
Toluene		ND	0.0022	ND	0.0022	ND	0.0023			
Ethylbenzene		0.0018	0.0011	ND	0.0011	ND	0.0012			
m,p-Xylenes		0.0076	0.0022	ND	0.0022	ND	0.0023			
o-Xylene		0.0023	0.0011	ND	0.0011	ND	0.0012			
Total Xylenes		0.0099		ND		ND				
Total BTEX		0.0117		ND		ND				
Percent Moisture	*Extracted:*									
	Analyzed:	Aug-15-08 17:00		Aug-15-08 17:00		Aug-15-08 17:00				
	Units/RL:	%	RL	%	RL	%	RL			
Percent Moisture		10.1		9.61		14				
TPH By SW8015 Mod	*Extracted:*	Aug-15-08 16:45		Aug-15-08 16:45		Aug-15-08 16:45				
	Analyzed:	Aug-16-08 21:27		Aug-16-08 21:53		Aug-16-08 22:45				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
C6-C12 Gasoline Range Hydrocarbons		ND	16.7	ND	16.6	ND	17.4			
C12-C28 Diesel Range Hydrocarbons		95.9	16.7	98.7	16.6	ND	17.4			
C28-C35 Oil Range Hydrocarbons		ND	16.7	ND	16.6	ND	17.4			
Total TPH		95.9		98.7		ND				

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 310167 **Project ID:** 2000-10655

Lab Batch #: 731303 **Sample:** 310166-001 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	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 731303 **Sample:** 310166-001 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	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 731303 **Sample:** 310167-001 / 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	0.0348	0.0300	116	80-120	
4-Bromofluorobenzene	0.0381	0.0300	127	80-120	**

Lab Batch #: 731303 **Sample:** 310167-002 / 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	0.0355	0.0300	118	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 731303 **Sample:** 310167-003 / 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	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	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: Monument Barber 10" Sour

Work Order #: 310167 **Project ID:** 2000-10655

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 731290 **Sample:** 310167-001 / 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	48.2	50.0	96	70-135	

Lab Batch #: 731290 **Sample:** 310167-002 / 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	81.2	100	81	70-135	
o-Terphenyl	46.1	50.0	92	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: Monument Barber 10" Sour

Work Order #: 310167 **Project ID:** 2000-10655

Lab Batch #: 731290 **Sample:** 310167-003 / 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	79.0	100	79	70-135	
o-Terphenyl	44.2	50.0	88	70-135	

Lab Batch #: 731290 **Sample:** 310167-003 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	78.4	100	78	70-135	
o-Terphenyl	47.6	50.0	95	70-135	

Lab Batch #: 731290 **Sample:** 310167-003 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	81.0	100	81	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 731290 **Sample:** 514017-1-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	80.4	100	80	70-135	
o-Terphenyl	46.7	50.0	93	70-135	

Lab Batch #: 731290 **Sample:** 514017-1-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	82.7	100	83	70-135	
o-Terphenyl	46.4	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.

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 310167 **Project ID:** 2000-10655

Lab Batch #: 731290 **Sample:** 514017-1-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	79.5	100	80	70-135	
o-Terphenyl	46.2	50.0	92	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: Monument Barber 10" Sour

Work Order #: 310167 **Project ID:** 2000-10655

Analyst: ASA **Date Prepared:** 08/15/2008 **Date Analyzed:** 08/15/2008

Lab Batch ID: 731303 **Sample:** 514022-1-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	0.1124	112	0.1	0.0997	100	12	70-130	35	
Toluene	ND	0.1000	0.1126	113	0.1	0.0991	99	13	70-130	35	
Ethylbenzene	ND	0.1000	0.1200	120	0.1	0.1084	108	10	71-129	35	
m,p-Xylenes	ND	0.2000	0.2508	125	0.2	0.2234	112	12	70-135	35	
o-Xylene	ND	0.1000	0.1153	115	0.1	0.1020	102	12	71-133	35	

Analyst: IRO **Date Prepared:** 08/15/2008 **Date Analyzed:** 08/16/2008

Lab Batch ID: 731290 **Sample:** 514017-1-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	844	84	1000	835	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	851	85	1000	839	84	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: Monument Barber 10" Sour

Work Order # 310167 **Project ID:** 2000-10655

Lab Batch ID: 731303 **QC- Sample ID:** 310166-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/16/2008 **Date Prepared:** 08/15/2008 **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	0.1062	0.0828	78	0.1062	0.0873	82	5	70-130	35	
Toluene	ND	0.1062	0.0810	76	0.1062	0.0844	79	4	70-130	35	
Ethylbenzene	ND	0.1062	0.0855	81	0.1062	0.0905	85	5	71-129	35	
m,p-Xylenes	ND	0.2124	0.1768	83	0.2124	0.1863	88	6	70-135	35	
o-Xylene	ND	0.1062	0.0781	74	0.1062	0.0832	78	5	71-133	35	

Lab Batch ID: 731290 **QC- Sample ID:** 310167-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/17/2008 **Date Prepared:** 08/15/2008 **Analyst:** IRO

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	915	79	1160	960	83	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1160	906	78	1160	954	82	5	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: Monument Barber 10" Sour

Work Order # 310167

Lab Batch #: 731187 **Project ID:** 2000-10655

Date Analyzed: 08/15/2008 **Date Prepared:** 08/15/2008 **Analyst:** JLG

QC- Sample ID: 310167-001 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	10.1	9.53	6	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: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

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

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

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

Sampler Signature: C t D Stanley e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 3101167

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (VOA X 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix: DW - Drinking Water SL - Sludge; GW - Groundwater S - Soil/Solid; WP - Non-Potable Specify Other	Analyze For: TCLP: TPH 418.1 (8015M) 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: 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	ESW-5 @ 10'			8/14/2008	1300		1	X								Soil	X								X							X
02	WSW-5 @ 10'			8/14/2008	1310		1	X								Soil	X								X							X
03	SSW-1 @ 10'			8/14/2008	1305		1	X								Soil	X								X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
C t D Stanley	8/14/08	16:45			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	Date 8.14.08	Time 16:45

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: 5.5 °C	

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Plains

Date/ Time: 8.14.08 16:45

Lab ID # : 310167

Initials: CHL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.5 °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 310163

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Monument Barber 10" Sour

2000-10655

18-AUG-08

XENCO Laboratories

ACCREDITED IN ACCORDANCE WITH nelac

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

18-AUG-08

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

Reference: XENCO Report No: **310163**
Monument Barber 10" Sour
Project Address: Lea County, NM

Camille Reynolds:

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 310163. 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. 310163 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 310163

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-1	S	Aug-14-08 13:15		310163-001

Certificate of Analysis Summary 310163

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Thu Aug-14-08 04:45 pm
Report Date: 18-AUG-08
Project Manager: *Brent Barron, II*

Analysis Requested							
	Lab Id:	310163-001					
	Field Id:	Floor-1					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Aug-14-08 13:15					
BTEX by EPA 8021B	*Extracted:*	Aug-15-08 15:30					
	Analyzed:	Aug-15-08 23:40					
	Units/RL:	mg/kg RL					
Benzene		ND 0.0011					
Toluene		ND 0.0022					
Ethylbenzene		ND 0.0011					
m,p-Xylenes		ND 0.0022					
o-Xylene		ND 0.0011					
Total Xylenes		ND					
Total BTEX		ND					
Percent Moisture	*Extracted:*						
	Analyzed:	Aug-15-08 17:00					
	Units/RL:	% RL					
Percent Moisture		8.82					
TPH By SW8015 Mod	*Extracted:*	Aug-15-08 16:45					
	Analyzed:	Aug-16-08 19:43					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 16.5					
C12-C28 Diesel Range Hydrocarbons		30.1 16.5					
C28-C35 Oil Range Hydrocarbons		ND 16.5					
Total TPH		30.1					

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 310163 **Project ID:** 2000-10655

Lab Batch #: 731303 **Sample:** 310163-001 / 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	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 731303 **Sample:** 310166-001 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	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 731303 **Sample:** 310166-001 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	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	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: Monument Barber 10" Sour

Work Order #: 310163 **Project ID:** 2000-10655

Lab Batch #: 731303 **Sample:** 514022-1-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	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 731290 **Sample:** 310163-001 / 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	81.4	100	81	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 731290 **Sample:** 310167-003 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	78.4	100	78	70-135	
o-Terphenyl	47.6	50.0	95	70-135	

Lab Batch #: 731290 **Sample:** 310167-003 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	81.0	100	81	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 731290 **Sample:** 514017-1-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	80.4	100	80	70-135	
o-Terphenyl	46.7	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.

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Order #: 310163 **Project ID:** 2000-10655

Lab Batch #: 731290 **Sample:** 514017-1-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	82.7	100	83	70-135	
o-Terphenyl	46.4	50.0	93	70-135	

Lab Batch #: 731290 **Sample:** 514017-1-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	79.5	100	80	70-135	
o-Terphenyl	46.2	50.0	92	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: Monument Barber 10" Sour

Work Order #: 310163 **Project ID:** 2000-10655

Analyst: ASA **Date Prepared:** 08/15/2008 **Date Analyzed:** 08/15/2008

Lab Batch ID: 731303 **Sample:** 514022-1-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	0.1124	112	0.1	0.0997	100	12	70-130	35	
Toluene	ND	0.1000	0.1126	113	0.1	0.0991	99	13	70-130	35	
Ethylbenzene	ND	0.1000	0.1200	120	0.1	0.1084	108	10	71-129	35	
m,p-Xylenes	ND	0.2000	0.2508	125	0.2	0.2234	112	12	70-135	35	
o-Xylene	ND	0.1000	0.1153	115	0.1	0.1020	102	12	71-133	35	

Analyst: IRO **Date Prepared:** 08/15/2008 **Date Analyzed:** 08/16/2008

Lab Batch ID: 731290 **Sample:** 514017-1-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	844	84	1000	835	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	851	85	1000	839	84	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: Monument Barber 10" Sour

Work Order # 310163 **Project ID:** 2000-10655

Lab Batch ID: 731303 **QC- Sample ID:** 310166-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/16/2008 **Date Prepared:** 08/15/2008 **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	0.1062	0.0828	78	0.1062	0.0873	82	5	70-130	35	
Toluene	ND	0.1062	0.0810	76	0.1062	0.0844	79	4	70-130	35	
Ethylbenzene	ND	0.1062	0.0855	81	0.1062	0.0905	85	5	71-129	35	
m,p-Xylenes	ND	0.2124	0.1768	83	0.2124	0.1863	88	6	70-135	35	
o-Xylene	ND	0.1062	0.0781	74	0.1062	0.0832	78	5	71-133	35	

Lab Batch ID: 731290 **QC- Sample ID:** 310167-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/17/2008 **Date Prepared:** 08/15/2008 **Analyst:** IRO

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	915	79	1160	960	83	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1160	906	78	1160	954	82	5	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: Monument Barber 10" Sour

Work Order # 310163

Lab Batch #: 731187 **Project ID:** 2000-10655

Date Analyzed: 08/15/2008 **Date Prepared:** 08/15/2008 **Analyst:** JLG

QC- Sample ID: 310167-001 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	10.1	9.53	6	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: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10655

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

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

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

Sampler Signature: C. D. Stanley e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 310163

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 7)	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: TCLP: TOTAL: 8015M (GRO/DRO)	TPH: 418.1 TPH: TX 1005	TPH: 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	NORM	PAH	EPA Paint Filter Test	Chlorides E 300	TRUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Floor -1			8/14/2008	1315		1	X								Soil	X									X							X

Special Instructions:

	Relinquished by:	Date	Time	Received by:	Date	Time
	C. D. Stanley	8/14/08	1645			
	Relinquished by:	Date	Time	Received by:	Date	Time
	Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	Date 8.14.08	Time 16:45

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 glass 5.5 °C	

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 8.14.08 16:45

Lab ID # : 310163

Initials: CL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.5 °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 311100

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Bryant

Monument Barber 10" Sour

2000-10655

29-AUG-08

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-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 - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

29-AUG-08

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

Reference: XENCO Report No: **311100**
Monument Barber 10" Sour
Project Address: Lea County, NM

Camille 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 311100. 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. 311100 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 311100

PLAINS ALL AMERICAN EH&S, Midland, TX

Monument Barber 10" Sour

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor-2 @ 16'	S	Aug-25-08 14:00		311100-001
Floor-3 @ 16'	S	Aug-25-08 14:05		311100-002
Floor-4 @ 16'	S	Aug-25-08 14:10		311100-003
Floor-5 @ 16'	S	Aug-25-08 14:15		311100-004
Floor-6 @ 16'	S	Aug-25-08 14:20		311100-005

Certificate of Analysis Summary 311100

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Monument Barber 10" Sour

Project Id: 2000-10655
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Tue Aug-26-08 06:00 pm
Report Date: 29-AUG-08
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	311100-001		311100-002		311100-003		311100-004		311100-005	
	Field Id:	Floor-2 @ 16'		Floor-3 @ 16'		Floor-4 @ 16'		Floor-5 @ 16'		Floor-6 @ 16'	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-25-08 14:00		Aug-25-08 14:05		Aug-25-08 14:10		Aug-25-08 14:15		Aug-25-08 14:20	
BTEX by EPA 8021B	*Extracted:*	Aug-28-08 15:00		Aug-28-08 15:00		Aug-28-08 15:00		Aug-28-08 15:00		Aug-28-08 15:00	
	Analyzed:	Aug-28-08 22:36		Aug-28-08 22:59		Aug-28-08 23:22		Aug-28-08 23:45		Aug-29-08 00:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0011	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0011
Toluene		ND	0.0022	ND	0.0023	ND	0.0021	ND	0.0022	ND	0.0023
Ethylbenzene		ND	0.0011	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0011
m,p-Xylenes		ND	0.0022	ND	0.0023	ND	0.0021	ND	0.0022	ND	0.0023
o-Xylene		ND	0.0011	ND	0.0012	ND	0.0011	ND	0.0011	ND	0.0011
Total Xylenes		ND		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND		ND	
Percent Moisture	*Extracted:*										
	Analyzed:	Aug-27-08 17:00		Aug-27-08 17:00		Aug-27-08 17:00		Aug-27-08 17:00		Aug-27-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.30	1.00	14.11	1.00	4.79	1.00	7.98	1.00	12.96	1.00
TPH By SW8015 Mod	*Extracted:*	Aug-27-08 12:00		Aug-27-08 12:00		Aug-27-08 12:00		Aug-27-08 12:00		Aug-27-08 12:00	
	Analyzed:	Aug-28-08 08:02		Aug-28-08 08:27		Aug-28-08 08:53		Aug-28-08 09:19		Aug-28-08 09:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.7	ND	17.5	ND	15.8	ND	16.3	ND	17.2
C12-C28 Diesel Range Hydrocarbons		ND	16.7	35.6	17.5	18.0	15.8	38.6	16.3	26.1	17.2
C28-C35 Oil Range Hydrocarbons		ND	16.7	ND	17.5	ND	15.8	ND	16.3	ND	17.2
Total TPH		ND		35.6		18		38.6		26.1	

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(PQL) and above the SQL(MDL).

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.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Orders : 311100,

Project ID: 2000-10655

Lab Batch #: 732589 **Sample:** 311100-001 / 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	0.0378	0.0300	126	80-120	**
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 732589 **Sample:** 311100-002 / 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	0.0362	0.0300	121	80-120	**
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 732589 **Sample:** 311100-003 / 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	0.0362	0.0300	121	80-120	**
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 732589 **Sample:** 311100-004 / 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	0.0365	0.0300	122	80-120	**
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 732589 **Sample:** 311100-005 / 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	0.0357	0.0300	119	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	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: Monument Barber 10" Sour

Work Orders : 311100,

Project ID: 2000-10655

Lab Batch #: 732589 **Sample:** 311229-001 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	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 732589 **Sample:** 311229-001 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	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 732589 **Sample:** 514764-1-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	0.0259	0.0300	86	80-120	

Lab Batch #: 732589 **Sample:** 514764-1-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	0.0374	0.0300	125	80-120	**
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 732589 **Sample:** 514764-1-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	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Monument Barber 10" Sour

Work Orders : 311100,

Project ID: 2000-10655

Lab Batch #: 732491 **Sample:** 311100-001 / 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	84.7	100	85	70-135	
o-Terphenyl	47.1	50.0	94	70-135	

Lab Batch #: 732491 **Sample:** 311100-001 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	86.1	100	86	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 732491 **Sample:** 311100-001 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	87.1	100	87	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 732491 **Sample:** 311100-002 / 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	90.4	100	90	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

Lab Batch #: 732491 **Sample:** 311100-003 / 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	90.2	100	90	70-135	
o-Terphenyl	48.7	50.0	97	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: Monument Barber 10" Sour

Work Orders : 311100,

Project ID: 2000-10655

Lab Batch #: 732491 **Sample:** 311100-004 / 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	79.4	100	79	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 732491 **Sample:** 311100-005 / 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	105	100	105	70-135	
o-Terphenyl	55.9	50.0	112	70-135	

Lab Batch #: 732491 **Sample:** 514699-1-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	84.1	100	84	70-135	
o-Terphenyl	47.5	50.0	95	70-135	

Lab Batch #: 732491 **Sample:** 514699-1-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	84.6	100	85	70-135	
o-Terphenyl	46.7	50.0	93	70-135	

Lab Batch #: 732491 **Sample:** 514699-1-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	87.6	100	88	70-135	
o-Terphenyl	49.7	50.0	99	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: Monument Barber 10" Sour

Work Order #: 311100 **Project ID:** 2000-10655

Analyst: ASA **Date Prepared:** 08/28/2008 **Date Analyzed:** 08/28/2008

Lab Batch ID: 732589 **Sample:** 514764-1-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	0.0952	95	0.1	0.1038	104	9	70-130	35	
Toluene	ND	0.1000	0.0916	92	0.1	0.0995	100	8	70-130	35	
Ethylbenzene	ND	0.1000	0.0932	93	0.1	0.1015	102	9	71-129	35	
m,p-Xylenes	ND	0.2000	0.1932	97	0.2	0.2107	105	9	70-135	35	
o-Xylene	ND	0.1000	0.0895	90	0.1	0.0977	98	9	71-133	35	

Analyst: IRO **Date Prepared:** 08/27/2008 **Date Analyzed:** 08/28/2008

Lab Batch ID: 732491 **Sample:** 514699-1-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	853	85	1000	870	87	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	890	89	1000	908	91	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: Monument Barber 10" Sour

Work Order # : 311100 **Project ID:** 2000-10655

Lab Batch ID: 732589 **QC- Sample ID:** 311229-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/29/2008 **Date Prepared:** 08/28/2008 **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	0.1062	0.0900	85	0.1062	0.0908	85	0	70-130	35	
Toluene	ND	0.1062	0.0870	82	0.1062	0.0862	81	1	70-130	35	
Ethylbenzene	ND	0.1062	0.0884	83	0.1062	0.0883	83	0	71-129	35	
m,p-Xylenes	ND	0.2125	0.1832	86	0.2125	0.1832	86	0	70-135	35	
o-Xylene	ND	0.1062	0.0846	80	0.1062	0.0843	79	1	71-133	35	

Lab Batch ID: 732491 **QC- Sample ID:** 311100-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/28/2008 **Date Prepared:** 08/27/2008 **Analyst:** IRO

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	1110	959	86	1110	969	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1110	947	85	1110	992	89	5	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: Monument Barber 10" Sour

Work Order #: 311100

Lab Batch #: 732492 **Project ID:** 2000-10655

Date Analyzed: 08/27/2008 **Date Prepared:** 08/27/2008 **Analyst:** IRO

QC- Sample ID: 311127-001 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	ND	ND	NC	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: Monument Barber 10" Sour

Company Name: Basin Environmental Service Technologies, LLC Project #: 2000-10855

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

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

Telephone No: (575) 441-3244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

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

(lab use only)

ORDER #: 311100

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: TCLP: TPH: 418.1 (8015M)	TOTAL: TPH: 418.1 (8015M)	TPH: TX 1005	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	TURN TAT (Pre-scheduled) 24, 48, 72 hrs	Standard TAT
01	Floor-2 @ 16'			8/25/2008	1400		1	X								Soil	X																X
02	Floor-3 @ 16'			8/25/2008	1405		1	X								Soil	X																X
03	Floor-4 @ 16'			8/25/2008	1410		1	X								Soil	X																X
04	Floor-5 @ 16'			8/25/2008	1415		1	X								Soil	X																X
05	Floor-6 @ 16'			8/25/2008	1420		1	X								Soil	X																X

Special Instructions:
BILL TO PLAINS

Relinquished by:	Date	Time	Received by:	Date	Time
	8/26/08	600			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				8/26/08	1650

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 02 9 1655 Temperature Upon Receipt:	3 °C	

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 8.26.08 18:00

Lab ID # : 31100

Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	3 °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 B
Photographs

Looking North along North-South Excavation Toward Release Point

Looking North, Remediation Completed, Excavation Backfilled, Contoured and Seeded

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

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 **EOTT Energy Pipeline Limited Partnership**	Contact **Glenn Waldrop**
Address **P.O. Box 1660, Midland, TX 79702**	Telephone No. **915/684-3453**
Facility Name **Monument 10" Sour (6")**	Facility Type **Pipeline**

Surface Owner **Barber Estate**	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
	32	19S	37E					Lea

NATURE OF RELEASE

Type of Release **Sour Crude Oil**	Volume of Release **1,600 bbls**	Volume Recovered **1,350 bbls**
Source of Release **Pipeline valve flange.**	Date and Hour of Occurrence **August 8, 2000**	Date and Hour of Discovery **August 8, 2000 at 10 AM**
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? **Donna Williams – NMOCD, Hobbs District Office**	
By Whom? **Wayne Brunetta**	Date and Hour **August 8, 2000**	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Poly weld broke on the west end of valve flange. Released oil was contained in a bell hole and ditch. Bellhole (35'x45'x10'deep) filled to top and oil flowed into a ditch 100 yards long. Oil was recovered with a vacuum truck.

Describe Area Affected and Cleanup Action Taken.*
Heavily impacted soil, from the ditch only, was excavated and hauled to a landfarm for treatment. Soils in the bellhole could not be excavated due to the presence of pipelines. ETGI has begun delineating the site and will prepare a remediation workplan

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: Glenn Waldrop	**OIL CONSERVATION DIVISION**
Printed Name: **Glenn Waldrop**	Approved by District Supervisor:
Title: **District Manager**	Approval Date: / Expiration Date:
Date: **8/7/00** Phone: **915/684-3453**	Conditions of Approval: / Attached ☐

* Attach Additional Sheets If Necessary

MONUMENT BARBER
MONUMENT 10" SOUR