Basin Environmental Service Technologies, LLC

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Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE REQUEST

PLAINS MARKETING, LP
BOPCO STATION
Plains SRS #2014-087
Eddy County, New Mexico
Unit Letter "P" (SE/SE), Section 21, Township 24 South, Range 31 East
Latitude 32.197262° North, Longitude 103.777821° West

Prepared For:

Plains All American Pipeline, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260

September 2014

Ben J. Arguijo
Project Manager

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1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of Plains Marketing, LP (Plains), has prepared this *Remediation Summary & Site Closure Request* for the release site known as BOPCO Station. The legal description of the release site is Unit Letter "P" (SE/SE), Section 21, Township 24 South, Range 31 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.197262° North latitude and 103.777821° West longitude. The property affected by the release is owned by the United States Department of the Interior – Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On April 2, 2014, Plains discovered a release had occurred at its BOPCO Station facility. A gasket on a pump liner cover failed, resulting in a release of crude oil. During initial response activities, the gasket on the pump was replaced, and a vacuum truck was utilized to recover free-standing liquid.

The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately fourteen barrels (14 bbls) of crude oil were released and approximately ten barrels (10 bbls) were recovered, for a net loss of approximately four barrels (4 bbls). The release affected an area inside the facility measuring approximately one hundred and forty-eight feet (148') in length by sixty feet (60') in width. The Form C-141 is provided as Appendix C. General photographs of the release site are provided as Appendix A.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated depth-to-groundwater information was unavailable for Section 21, Township 24 South, Range 31 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately three hundred and fifty feet (350') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

There are no surface water bodies within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

NMOCD guidelines indicate the BOPCO Station release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, ethylbenzene, toluene, and xylenes (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (TPH) – 5,000 mg/Kg (ppm)

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On April 15, 2014, following initial response activities, excavation of impacted soil commenced at the site. A photo-ionization detector (PID) and visual and olfactory senses were used to investigate the horizontal and vertical extent of contamination and to guide the excavation. Excavated soil was stockpiled on-site, pending final disposition.

On April 17, 2014, a total of fourteen (14) confirmation soil samples (Floor #1, Floor #2, Floor #3, Floor #4, Floor #5, Floor #6, Floor #7, Floor #8, Wall #1, Wall #2, Wall #3, Wall #4, Wall #5, and Wall #6) were collected from the floor and sidewalls of the excavation and submitted to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of BTEX, TPH, and chloride concentrations using Environmental Protection Agency (EPA) Methods SW 846-8021b, SW 846-8015M, and 300.1, respectively. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical reports are provided as Appendix B.

Laboratory analytical results indicated benzene concentrations were less than the laboratory method detection limit (MDL) in all submitted soil samples. BTEX concentrations were less than the appropriate laboratory MDL in all submitted soil samples, with the exceptions of soil samples Floor #3 and Floor #8, which exhibited concentrations of 0.081 mg/kg and 0.0055 mg/kg, respectively. TPH concentrations ranged from less than the laboratory MDL in soil samples Floor #1, Floor #2, Floor #5, Floor #6, Floor #8, Wall #3, Wall #4, Wall #5, and Wall #6 to 654 mg/kg in soil sample Floor #3. Chloride concentrations ranged from 3.84 mg/kg in soil sample Wall #5 to 27.6 mg/kg in soil sample Floor #6.

A composite soil sample (Stockpile) was also collected from the stockpiled material and submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicate the benzene concentration in soil sample Stockpile was 0.0089 mg/kg, and the BTEX concentration was 1.27 mg/kg. The TPH concentration was 5,610 mg/kg, and the chloride concentration was 31.1 mg/kg. Following sample collection, soil represented by soil sample Stockpile was aerated, then left undisturbed for several days to facilitate bioremediation.

On April 21, 2014, representatives of Plains and Basin Environmental contacted representatives of the BLM and the NMOCD Artesia District Office via telephone to request permission to backfill the excavation. The back request was approved by both the BLM and the NMOCD representative.

On April 30, 2014, a composite soil sample [Stockpile (Composite)] was collected from the stockpiled material and submitted to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated the TPH concentration was 5,100 mg/kg.

From May 12 through May 13, 2014, the stockpiled material (approximately 216 cubic yards) was transported to Lea Land, Inc. (NMOCD Permit # WM-01-035), for disposal.

Based on laboratory analytical results, and with NMOCD and BLM approval, from May 12 through May 13, 2014, the excavation was backfilled with locally obtained, non-impacted material, compacted, and contoured to fit the surrounding topography. Prior to backfilling, the final dimensions of the excavation were approximately one hundred and fifty-two feet (152') in length, ranging in width from approximately six feet (6') to approximately sixty-three feet (63'), and ranging in depth from approximately six inches (6") to four feet (4') bgs.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of BTEX, TPH, and/or chloride concentrations using the methods described below. Soil samples were analyzed for BTEX, TPH, and/or chloride concentrations within fourteen (14) days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method SW 846-8021b
- TPH concentrations in accordance with modified EPA Method SW 846-8015M
- Chloride concentrations in accordance with EPA Method 300.1

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory analytical reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Soil samples collected from floor and sidewalls of the BOPCO Station excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH and chloride were below the recommended remediation action levels established for the site by the NMOCD. Basin Environmental recommends Plains provide the NMOCD Artesia District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the BOPCO Station release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental 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, LP. 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, LP.

7.0 DISTRIBUTION:

Copy 1: Mike Bratcher
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88210

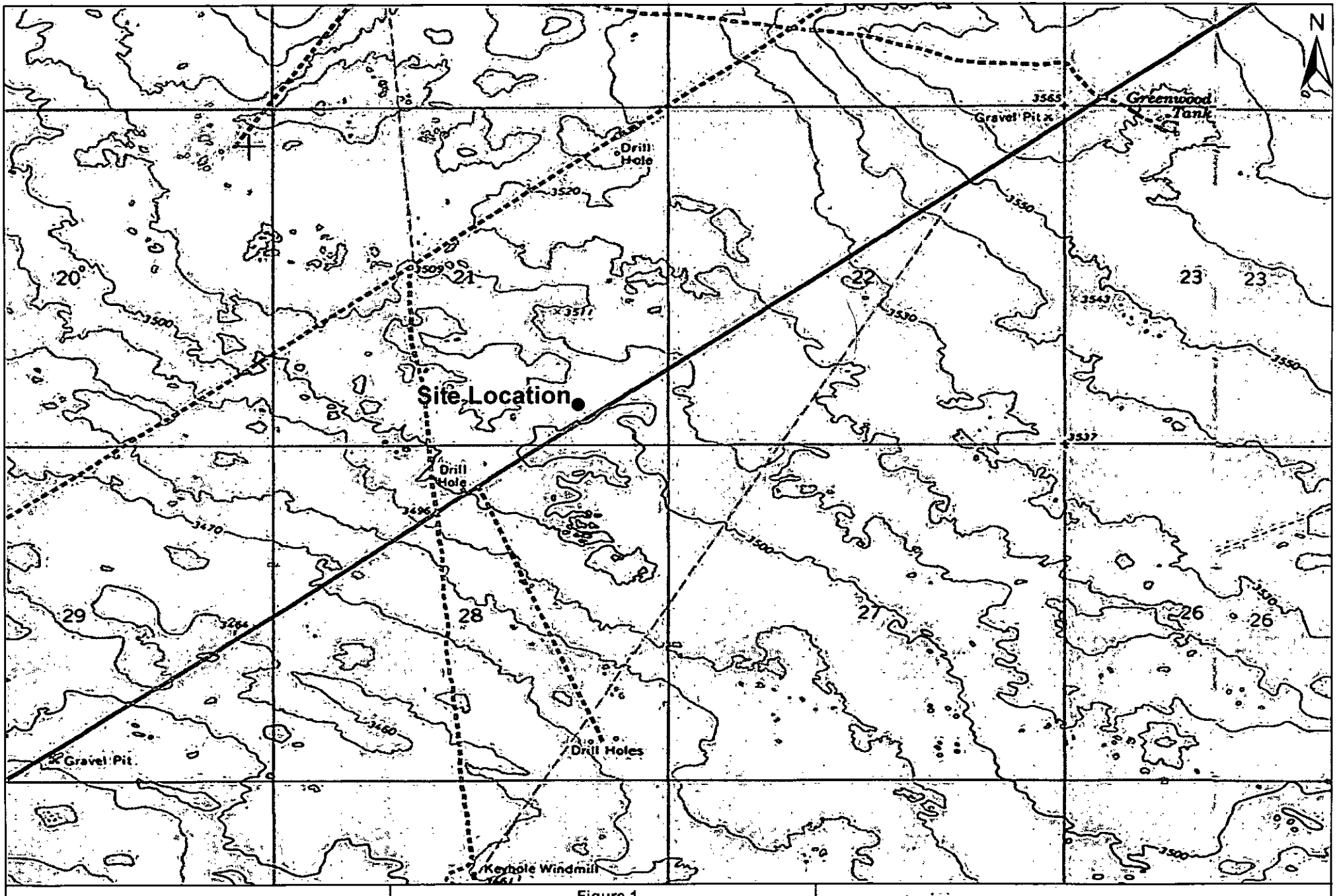
Copy 2: Randy Pair
Bureau of Land Management
602 E. Greene Street
Carlsbad, NM 88220

Copy 3: Jeff Dann
Plains All American Pipeline, LP
333 Clay Street, Suite 1600
Houston, Texas 77002
jpdann@paalp.com

Copy 4: Camille Bryant
Plains All American Pipeline, LP
2530 State Highway 214
Denver City, Texas 79323
cjbryant@paalp.com

Copy 5: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260

Figures



1,000500 0 1,000 2,000

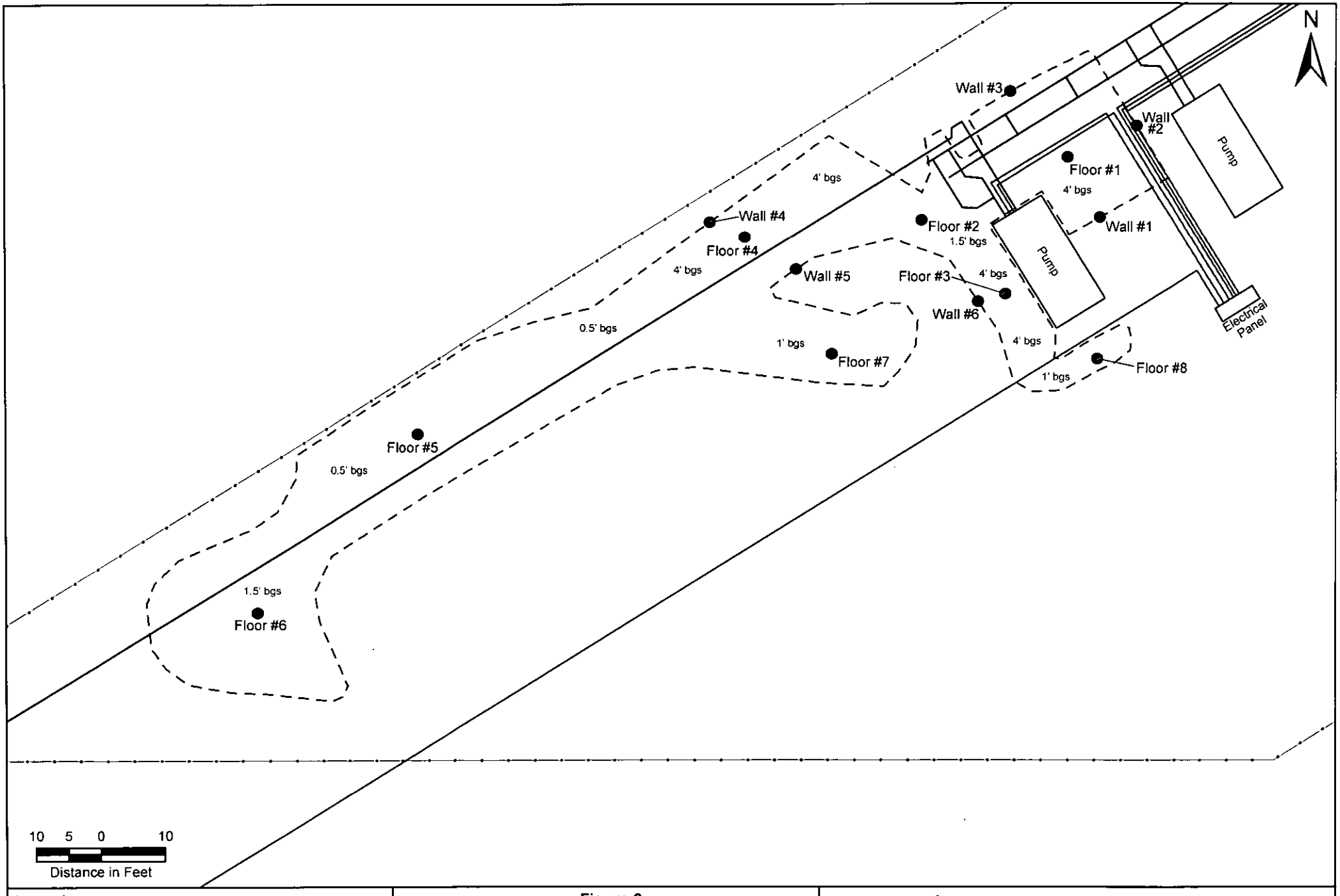
Distance in Feet

Figure 1
Site Location Map
Plains Marketing, LP
BOPCO Station
Eddy County, New Mexico
Plains SRS #: 2014-087

Basin Environmental Service Technologies
Effective Solutions

Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
April 14, 2014	Scale: 1" = 2,000'



Legend

- Excavation Extent
- Pipeline
- Electrical Line
- Fence
- Sample Location

Figure 2
Site & Sample Location Map
Plains Marketing, LP
BOPCO Station
Eddy County, New Mexico
Plains SRS #: 2014-087

Basin Environmental Service Technologies
Effective Solutions

Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
September 8, 2014	Scale: 1" = 20'

Tables

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

PLAINS MARKETING, LP
BOPCO STATION
EDDY COUNTY, NEW MEXICO
PLAINS SRS #: 2014-087

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M			TPH C_6-C_{35} (mg/Kg)	300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P. - XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
Floor #1	4'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.5	<15.5	<15.5	<15.5	8.02
Floor #2	1.5'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.4	<15.4	<15.4	<15.4	12.1
Floor #3	4'	4/17/2014	In-Situ	<0.0010	<0.0021	0.0076	0.0389	0.0345	0.0734	0.0810	117	537	<15.7	654	16.8
Floor #4	4'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.4	81.8	<15.4	81.8	4.36
Floor #5	0.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	<15.3	<15.3	<15.3	8.04
Floor #6	1.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	<15.3	<15.3	<15.3	27.6
Floor #7	1'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.5	36.3	<15.5	36.3	13.3
Floor #8	1'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	0.0040	0.0015	0.0055	0.0055	<15.2	<15.2	<15.2	<15.2	4.29
Wall #1	3.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	56.5	<15.3	56.5	7.58
Wall #2	3.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	89.2	<15.3	89.2	17.6
Wall #3	3.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	<15.3	<15.3	<15.3	8.24
Wall #4	3.5'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.4	<15.4	<15.4	<15.4	5.30
Wall #5	3.5'	4/17/2014	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<15.3	<15.3	<15.3	<15.3	3.84
Wall #6	3.5'	4/17/2014	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<0.0021	<15.5	<15.5	<15.5	<15.5	5.64
Stockpile	N/A	4/17/2014	Stockpiled	0.0089	0.260	0.162	0.578	0.260	0.838	1.27	1,190	4,420	<15.2	**5,610**	31.1
Stockpile (Composite)	N/A	4/30/2014	Stockpiled	-	-	-	-	-	-	-	407	4,610	78.8	**5,100**	-
NMOCD Recommended Remediation Action Level				**10**						**50**				**5,000**	**1,000**

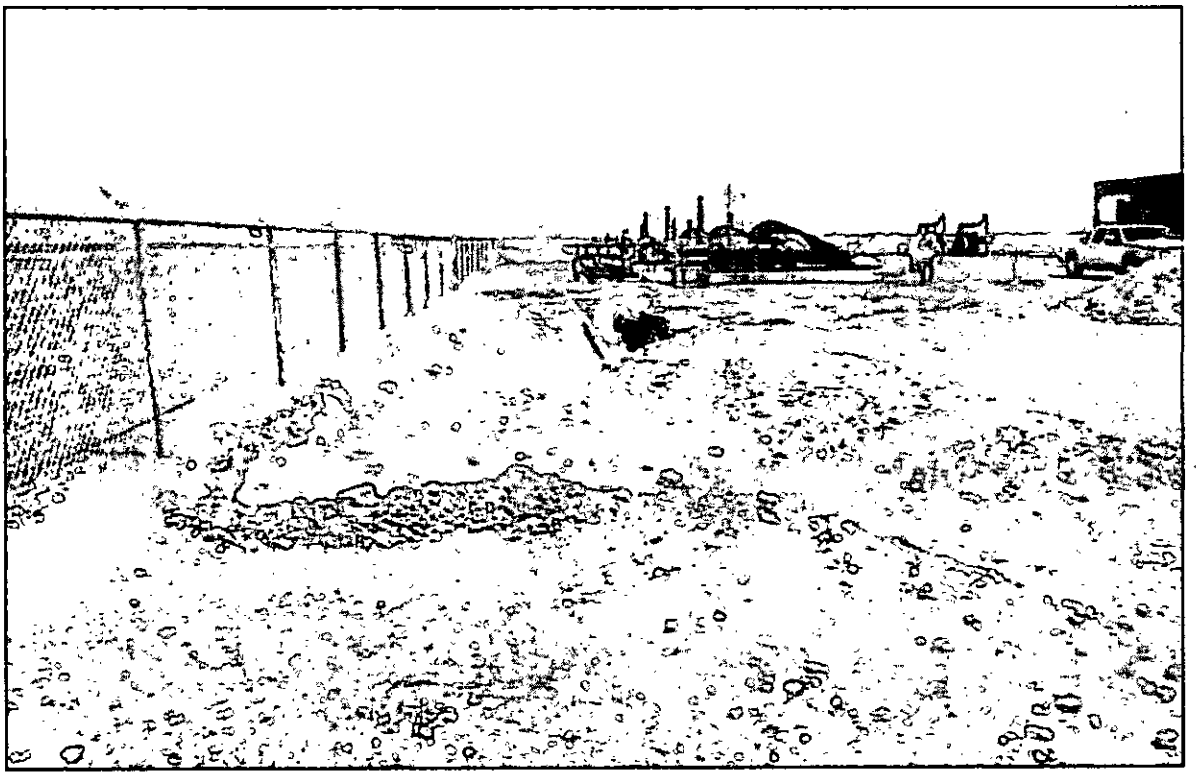
- = Not analyzed.

Appendices

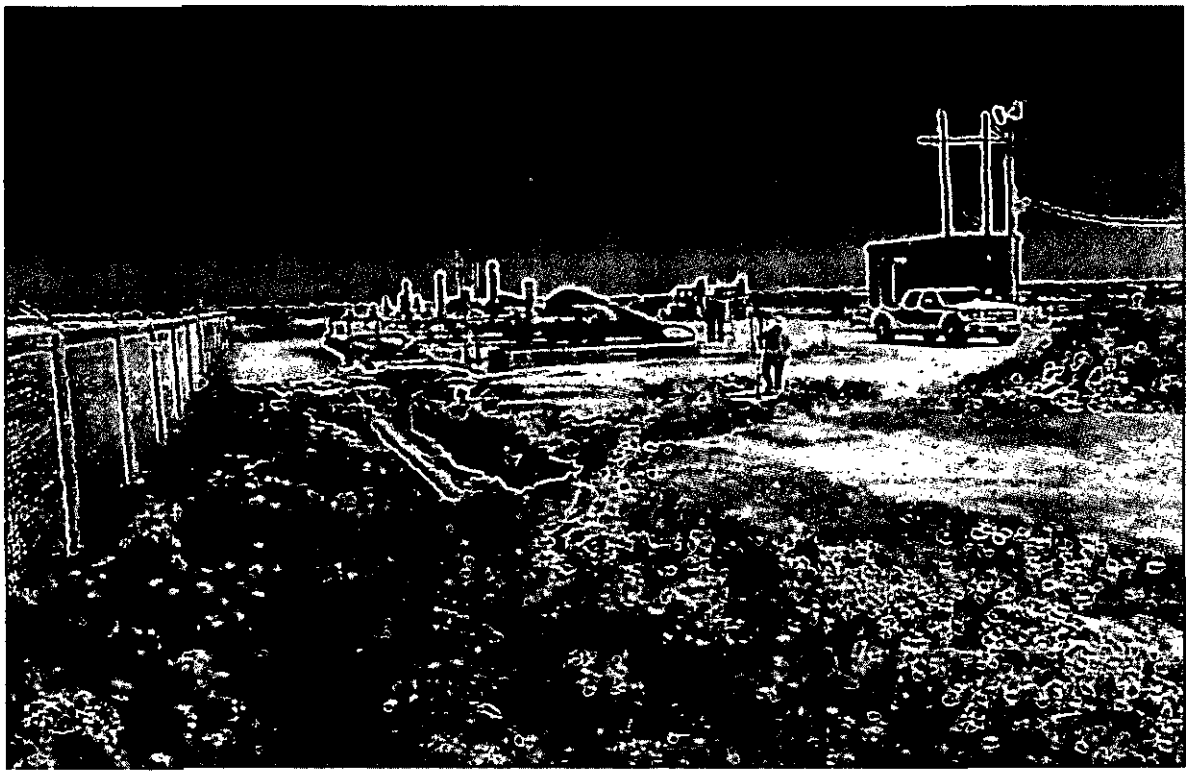
Appendix A

Photographs

BOPCO Station - Excavation (Looking Northeast)

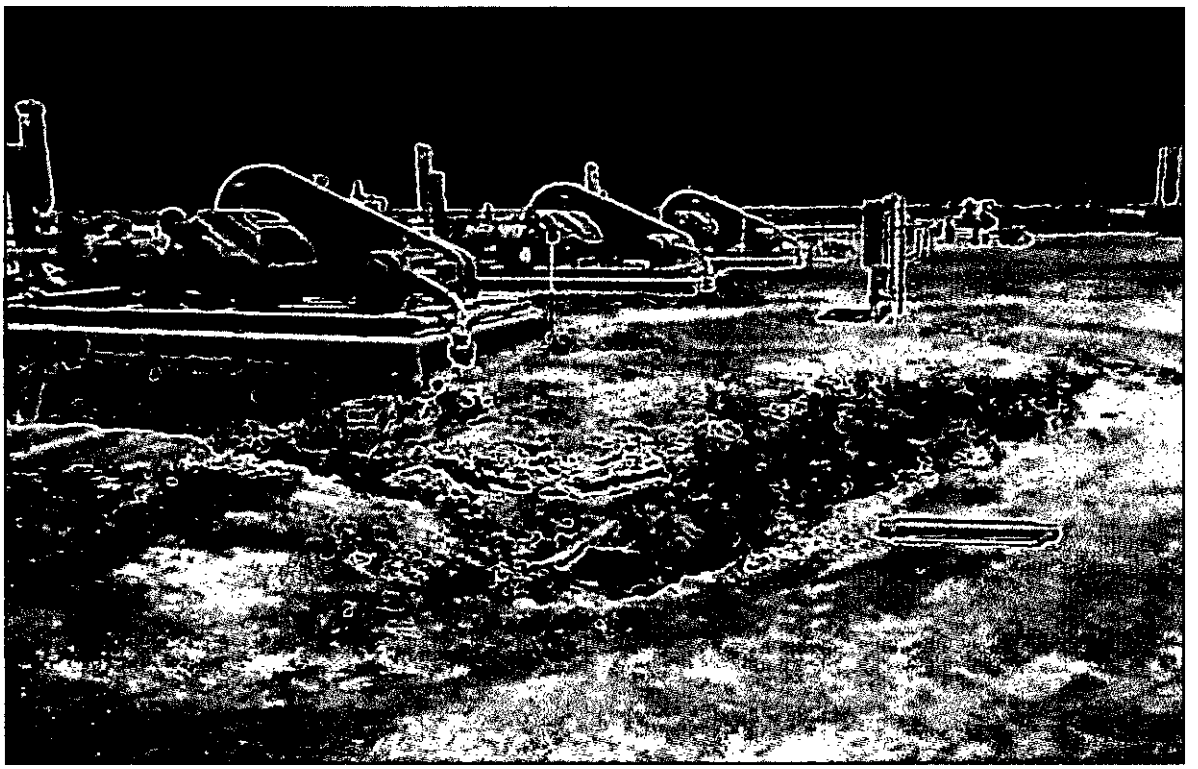


BOPCO Station – Excavation (Looking Northeast)

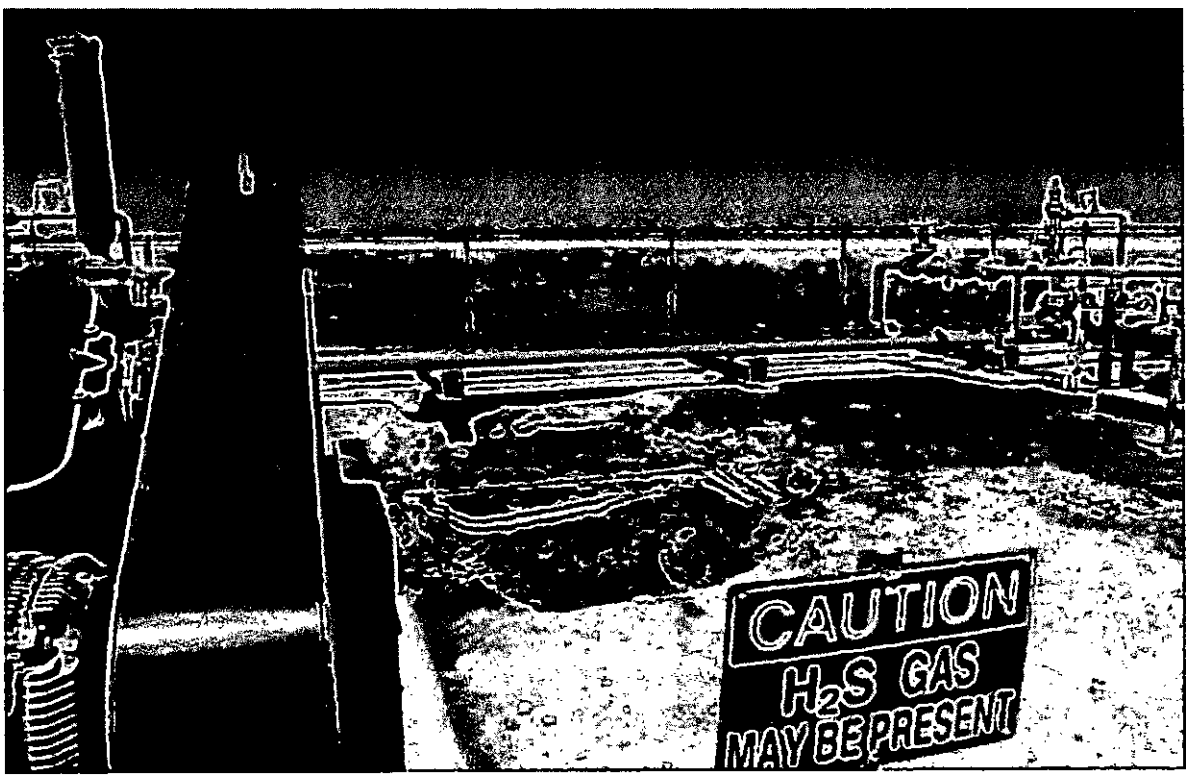


BOPCO Station – Excavation (Looking East-Northeast)

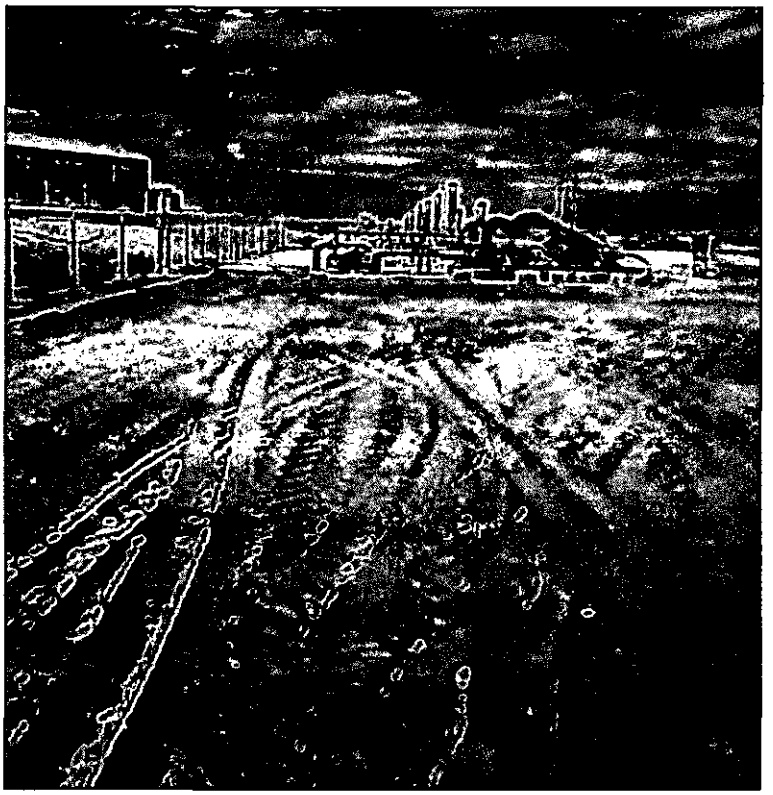
BOPCO Station – Excavation (Looking North-Northwest)



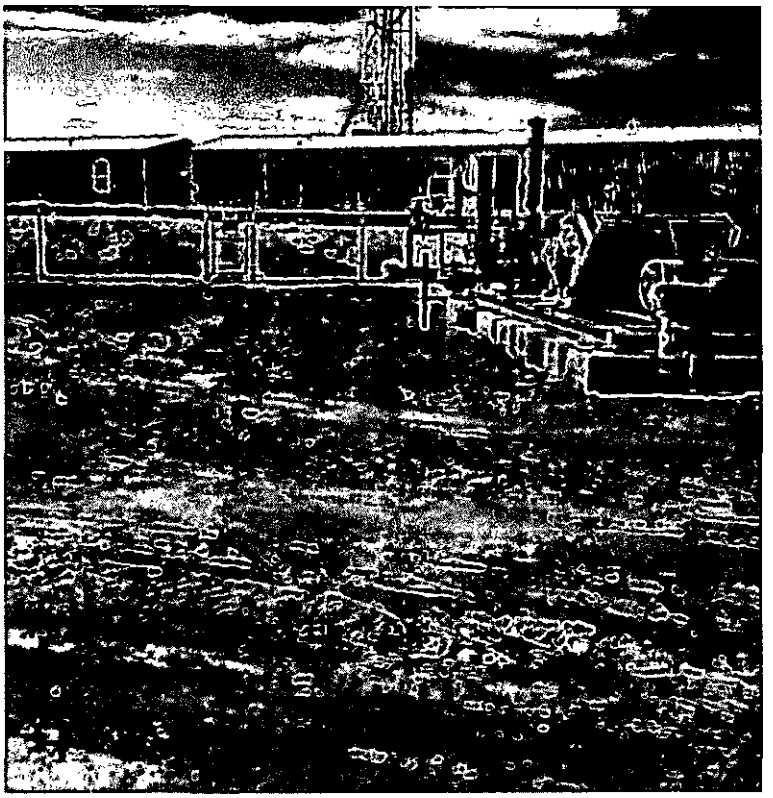
BOPCO Station – Excavation (Looking North-Northeast)



BOPCO Station – Excavation (Looking North)

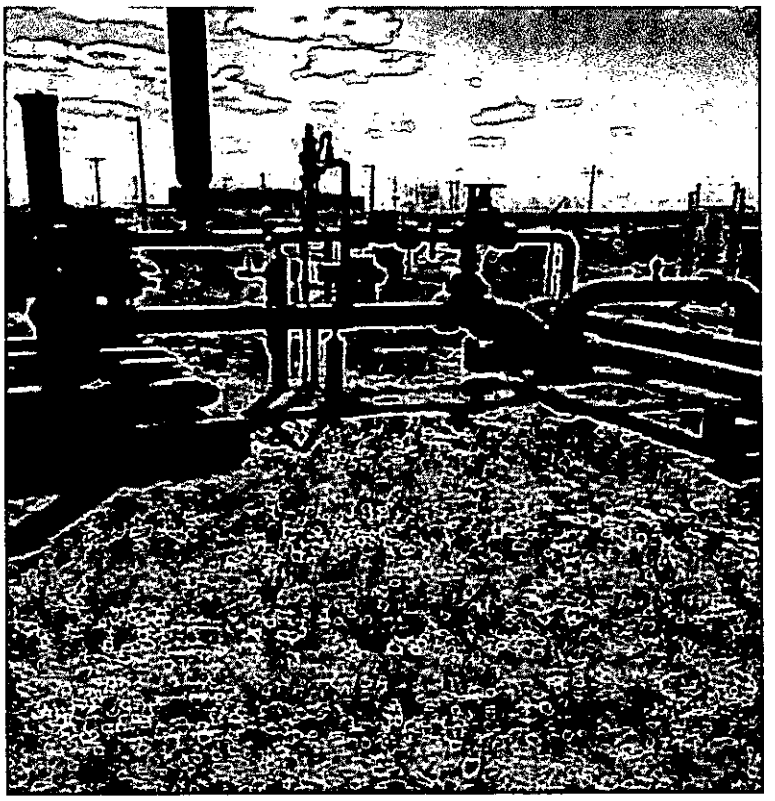


BOPCO Station – Backfilled Excavation (Looking Northeast)



BOPCO Station – Backfilled Excavation (Looking North)

BOPCO Station – Backfilled Excavation (Looking Northwest)



BOPCO Station – Backfilled Excavation (Looking West)

Appendix B

Laboratory Analytical Reports

Analytical Report 483644

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

BOPCO Station

2014-087

28-APR-14

Collected By: Client

XENCO Laboratories

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-16-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

28-APR-14

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

Reference: XENCO Report No(s): **483644**
BOPCO Station
Project Address: Lovington, NM

Ben Arguijo:

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(s) 483644. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 483644 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 483644

PLAINS ALL AMERICAN EH&S, Midland, TX

BOPCO Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FLOOR #1	S	04-17-14 11:25		483644-001
FLOOR #2	S	04-17-14 11:30		483644-002
FLOOR #3	S	04-17-14 11:35		483644-003
FLOOR #4	S	04-17-14 11:40		483644-004
FLOOR #5	S	04-17-14 11:45		483644-005
FLOOR #6	S	04-17-14 11:50		483644-006
FLOOR #7	S	04-17-14 11:55		483644-007
FLOOR #8	S	04-17-14 12:00		483644-008
WALL #1	S	04-17-14 12:05		483644-009
WALL #2	S	04-17-14 12:10		483644-010
WALL #3	S	04-17-14 12:15		483644-011
WALL #4	S	04-17-14 12:20		483644-012
WALL #5	S	04-17-14 12:25		483644-013
WALL #6	S	04-17-14 12:30		483644-014
Stockpile	S	04-17-14 12:45		483644-015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 483644

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: BOPCO Station

Project Id: 2014-087
Contact: Ben Arguijo
Project Location: Lovington, NM

Date Received in Lab: Thu Apr-17-14 04:30 pm
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	483644-001		483644-002		483644-003		483644-004		483644-005		483644-006	
	Field Id:	FLOOR #1		FLOOR #2		FLOOR #3		FLOOR #4		FLOOR #5		FLOOR #6	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-17-14 11:25		Apr-17-14 11:30		Apr-17-14 11:35		Apr-17-14 11:40		Apr-17-14 11:45		Apr-17-14 11:50	
BTEX by EPA 8021B	*Extracted:*	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00	
	Analyzed:	Apr-23-14 10:21		Apr-23-14 10:38		Apr-23-14 10:54		Apr-23-14 11:11		Apr-23-14 11:26		Apr-23-14 11:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00104	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Toluene		ND	0.00207	ND	0.00205	ND	0.00208	ND	0.00206	ND	0.00203	ND	0.00204
Ethylbenzene		ND	0.00104	ND	0.00103	0.00755	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
m_p-Xylenes		ND	0.00207	ND	0.00205	0.0389	0.00208	ND	0.00206	ND	0.00203	ND	0.00204
o-Xylene		ND	0.00104	ND	0.00103	0.0345	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Total Xylenes		ND	0.00104	ND	0.00103	0.0734	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Total BTEX		ND	0.00104	ND	0.00103	0.0810	0.00104	ND	0.00103	ND	0.00102	ND	0.00102
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00	
	Analyzed:	Apr-25-14 03:28		Apr-25-14 03:51		Apr-25-14 04:14		Apr-25-14 04:36		Apr-25-14 05:22		Apr-25-14 05:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8.02	2.08	12.1	2.06	16.8	2.09	4.36	2.06	8.04	2.03	27.6	2.05
Percent Moisture	*Extracted:*												
	Analyzed:	Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.65	1.00	2.68	1.00	4.25	1.00	2.88	1.00	1.69	1.00	2.38	1.00
TPH By SW8015 Mod	*Extracted:*	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00	
	Analyzed:	Apr-22-14 18:53		Apr-22-14 20:02		Apr-22-14 20:25		Apr-22-14 20:48		Apr-22-14 21:10		Apr-22-14 21:33	
	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	15.5	ND	15.4	117	15.7	ND	15.4	ND	15.3	ND	15.3
C12-C28 Diesel Range Hydrocarbons		ND	15.5	ND	15.4	537	15.7	81.8	15.4	ND	15.3	ND	15.3
C28-C35 Oil Range Hydrocarbons		ND	15.5	ND	15.4	ND	15.7	ND	15.4	ND	15.3	ND	15.3
Total TPH		ND	15.5	ND	15.4	654	15.7	81.8	15.4	ND	15.3	ND	15.3

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483644

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: BOPCO Station

Project Id: 2014-087
Contact: Ben Arguijo
Project Location: Lovington, NM

Date Received in Lab: Thu Apr-17-14 04:30 pm
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	483644-007		483644-008		483644-009		483644-010		483644-011		483644-012	
	Field Id:	FLOOR #7		FLOOR #8		WALL #1		WALL #2		WALL #3		WALL #4	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-17-14 11:55		Apr-17-14 12:00		Apr-17-14 12:05		Apr-17-14 12:10		Apr-17-14 12:15		Apr-17-14 12:20	
BTEX by EPA 8021B	*Extracted:*	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00	
	Analyzed:	Apr-23-14 13:39		Apr-23-14 12:16		Apr-23-14 12:33		Apr-23-14 12:49		Apr-23-14 13:56		Apr-23-14 14:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00104	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00103
Toluene		ND	0.00207	ND	0.00204	ND	0.00203	ND	0.00204	ND	0.00204	ND	0.00206
Ethylbenzene		ND	0.00104	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00103
m_p-Xylenes		ND	0.00207	0.00397	0.00204	ND	0.00203	ND	0.00204	ND	0.00204	ND	0.00206
o-Xylene		ND	0.00104	0.00151	0.00102	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00103
Total Xylenes		ND	0.00104	0.00548	0.00102	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00103
Total BTEX		ND	0.00104	0.00548	0.00102	ND	0.00102	ND	0.00102	ND	0.00102	ND	0.00103
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00		Apr-22-14 11:00	
	Analyzed:	Apr-25-14 06:07		Apr-25-14 06:30		Apr-25-14 07:38		Apr-25-14 08:00		Apr-25-14 08:23		Apr-25-14 08:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13.3	2.08	4.29	2.04	7.58	2.04	17.6	2.04	8.24	2.05	5.30	2.06
Percent Moisture	*Extracted:*												
	Analyzed:	Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.73	1.00	1.99	1.00	2.04	1.00	2.20	1.00	2.32	1.00	2.99	1.00
TPH By SW8015 Mod	*Extracted:*	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00	
	Analyzed:	Apr-22-14 21:56		Apr-22-14 22:19		Apr-22-14 22:42		Apr-22-14 23:05		Apr-23-14 00:18		Apr-23-14 00:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.5	ND	15.2	ND	15.3	ND	15.3	ND	15.3	ND	15.4
C12-C28 Diesel Range Hydrocarbons		36.3	15.5	ND	15.2	56.5	15.3	89.2	15.3	ND	15.3	ND	15.4
C28-C35 Oil Range Hydrocarbons		ND	15.5	ND	15.2	ND	15.3	ND	15.3	ND	15.3	ND	15.4
Total TPH		36.3	15.5	ND	15.2	56.5	15.3	89.2	15.3	ND	15.3	ND	15.4

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483644

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: BOPCO Station

Project Id: 2014-087
Contact: Ben Arguijo
Project Location: Lovington, NM

Date Received in Lab: Thu Apr-17-14 04:30 pm
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	483644-013		483644-014		483644-015					
	Field Id:	WALL #5		WALL #6		Stockpile					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Apr-17-14 12:25		Apr-17-14 12:30		Apr-17-14 12:45					
BTEX by EPA 8021B	*Extracted:*	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00					
	Analyzed:	Apr-23-14 14:29		Apr-23-14 14:45		Apr-23-14 15:02					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00102	ND	0.00103	0.00894	0.00101				
Toluene		ND	0.00203	ND	0.00206	0.260	0.00202				
Ethylbenzene		ND	0.00102	ND	0.00103	0.162	0.00101				
m_p-Xylenes		ND	0.00203	ND	0.00206	0.578	0.00202				
o-Xylene		ND	0.00102	ND	0.00103	0.260	0.00101				
Total Xylenes		ND	0.00102	ND	0.00103	0.838	0.00101				
Total BTEX		ND	0.00102	ND	0.00103	1.27	0.00101				
Inorganic Anions by EPA 300/300.1	*Extracted:*	Apr-22-14 11:00		Apr-24-14 10:30		Apr-21-14 10:30					
	Analyzed:	Apr-25-14 09:09		Apr-25-14 09:31		Apr-23-14 17:52					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		3.84	2.04	5.64	2.06	31.1	4.06				
Paint Filter Liquids Test by SW-9095	*Extracted:*										
	Analyzed:					Apr-21-14 11:15					
	Units/RL:										
Paint Filter						Pass	1.0				
Percent Moisture	*Extracted:*										
	Analyzed:	Apr-21-14 17:25		Apr-21-14 17:25		Apr-21-14 17:25					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		2.00	1.00	3.10	1.00	1.55	1.00				

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 483644

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: BOPCO Station

Project Id: 2014-087
Contact: Ben Arguijo
Project Location: Lovington, NM

Date Received in Lab: Thu Apr-17-14 04:30 pm
Report Date: 28-APR-14
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	483644-013		483644-014		483644-015			
	Field Id:	WALL #5		WALL #6		Stockpile			
	Depth:								
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Apr-17-14 12:25		Apr-17-14 12:30		Apr-17-14 12:45			
TPH By SW8015 Mod	***Extracted:***	Apr-22-14 16:00		Apr-22-14 16:00		Apr-22-14 16:00			
	Analyzed:	Apr-23-14 01:04		Apr-23-14 01:27		Apr-23-14 01:51			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	15.3	ND	15.5	1190	15.2		
C12-C28 Diesel Range Hydrocarbons		ND	15.3	ND	15.5	4420	15.2		
C28-C35 Oil Range Hydrocarbons		ND	15.3	ND	15.5	ND	15.2		
Total TPH		ND	15.3	ND	15.5	5610	15.2		

Kelsey Brooks
Project Manager

Flagging Criteria

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644,

Project ID: 2014-087

Lab Batch #: 939265 **Sample:** 483644-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 18:53

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.8	108	70-135	
o-Terphenyl	52.6	49.9	105	70-135	

Lab Batch #: 939265 **Sample:** 483644-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 20:02

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	99.7	91	70-135	
o-Terphenyl	40.7	49.9	82	70-135	

Lab Batch #: 939265 **Sample:** 483644-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 20:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 939265 **Sample:** 483644-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 20:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.9	99.9	91	70-135	
o-Terphenyl	40.9	50.0	82	70-135	

Lab Batch #: 939265 **Sample:** 483644-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 21:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	100	92	70-135	
o-Terphenyl	41.6	50.0	83	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644, **Project ID:** 2014-087

Lab Batch #: 939265 **Sample:** 483644-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 21:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.8	99.6	95	70-135	
o-Terphenyl	42.7	49.8	86	70-135	

Lab Batch #: 939265 **Sample:** 483644-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 21:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.7	104	70-135	
o-Terphenyl	49.4	49.9	99	70-135	

Lab Batch #: 939265 **Sample:** 483644-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 22:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.6	101	70-135	
o-Terphenyl	46.9	49.8	94	70-135	

Lab Batch #: 939265 **Sample:** 483644-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 22:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.9	104	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 939265 **Sample:** 483644-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 23:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	49.5	49.9	99	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644, **Project ID:** 2014-087

Lab Batch #: 939265 **Sample:** 483644-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 00:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.8	101	70-135	
o-Terphenyl	42.8	49.9	86	70-135	

Lab Batch #: 939265 **Sample:** 483644-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 00:41

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	46.3	49.9	93	70-135	

Lab Batch #: 939265 **Sample:** 483644-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 01:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 939265 **Sample:** 483644-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 01:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	46.7	50.0	93	70-135	

Lab Batch #: 939265 **Sample:** 483644-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 01:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.8	121	70-135	
o-Terphenyl	52.2	49.9	105	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644, **Project ID:** 2014-087

Lab Batch #: 939340 **Sample:** 483644-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 10:21

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 939340 **Sample:** 483644-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 10:38

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 939340 **Sample:** 483644-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 10:54

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 939340 **Sample:** 483644-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 11:11

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 939340 **Sample:** 483644-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 11:26

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644,

Project ID: 2014-087

Lab Batch #: 939340 **Sample:** 483644-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 11:43

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 939340 **Sample:** 483644-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 12:16

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 939340 **Sample:** 483644-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 12:33

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 939340 **Sample:** 483644-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 12:49

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 939340 **Sample:** 483644-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 13:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644, **Project ID:** 2014-087

Lab Batch #: 939340 **Sample:** 483644-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 13:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 939340 **Sample:** 483644-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 14:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 939340 **Sample:** 483644-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 14:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 939340 **Sample:** 483644-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 14:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 939340 **Sample:** 483644-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 15:02

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY *Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644, **Project ID:** 2014-087

Lab Batch #: 939265 **Sample:** 654408-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/22/14 17:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	100	82	70-135	
o-Terphenyl	36.8	50.0	74	70-135	

Lab Batch #: 939340 **Sample:** 654389-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/14 08:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 939265 **Sample:** 654408-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/22/14 18:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	60.8	50.0	122	70-135	

Lab Batch #: 939340 **Sample:** 654389-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/14 08:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 939265 **Sample:** 654408-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/22/14 18:30

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	61.8	50.0	124	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 483644,

Project ID: 2014-087

Lab Batch #: 939340 **Sample:** 654389-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/23/14 09:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 939265 **Sample:** 483644-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 19:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.9	120	70-135	
o-Terphenyl	64.7	50.0	129	70-135	

Lab Batch #: 939340 **Sample:** 483644-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 09:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 939265 **Sample:** 483644-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/22/14 19:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.9	111	70-135	
o-Terphenyl	59.0	50.0	118	70-135	

Lab Batch #: 939340 **Sample:** 483644-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/23/14 09:49

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: BOPCO Station

Work Order #: 483644 **Project ID:** 2014-087

Analyst: ARM **Date Prepared:** 04/22/2014 **Date Analyzed:** 04/23/2014

Lab Batch ID: 939340 **Sample:** 654389-1-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	<0.00100	0.100	0.0876	88	0.100	0.0902	90	3	70-130	35	
Toluene	<0.00200	0.100	0.0863	86	0.100	0.0896	90	4	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0900	90	0.100	0.0947	95	5	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.196	98	5	70-135	35	
o-Xylene	<0.00100	0.100	0.0957	96	0.100	0.0997	100	4	71-133	35	

Analyst: AMB **Date Prepared:** 04/21/2014 **Date Analyzed:** 04/23/2014

Lab Batch ID: 939306 **Sample:** 654350-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	<2.00	50.0	48.5	97	50.0	48.3	97	0	80-120	20	

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

BS / BSD Recoveries

Project Name: BOPCO Station

Work Order #: 483644 **Project ID:** 2014-087

Analyst: AMB **Date Prepared:** 04/22/2014 **Date Analyzed:** 04/24/2014

Lab Batch ID: 939472 **Sample:** 654353-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	<2.00	50.0	50.6	101	50.0	48.2	96	5	80-120	20	

Analyst: AMB **Date Prepared:** 04/24/2014 **Date Analyzed:** 04/25/2014

Lab Batch ID: 939494 **Sample:** 654464-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	<2.00	50.0	52.0	104	50.0	51.8	104	0	80-120	20	

Analyst: ARM **Date Prepared:** 04/22/2014 **Date Analyzed:** 04/22/2014

Lab Batch ID: 939265 **Sample:** 654408-1-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	<15.0	1000	955	96	1000	987	99	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	955	96	1000	911	91	5	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 Recoveries

Project Name: BOPCO Station

Work Order #: 483644

Lab Batch #: 939306 **Project ID:** 2014-087

Date Analyzed: 04/23/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-029 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	269	275	753	176	80-120	X

Lab Batch #: 939306

Date Analyzed: 04/23/2014 **Date Prepared:** 04/21/2014 **Analyst:** AMB

QC- Sample ID: 483548-039 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	17.4	52.0	62.3	86	80-120	

Lab Batch #: 939472

Date Analyzed: 04/25/2014 **Date Prepared:** 04/22/2014 **Analyst:** AMB

QC- Sample ID: 483562-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	5.68	54.6	56.9	94	80-120	

Lab Batch #: 939472

Date Analyzed: 04/25/2014 **Date Prepared:** 04/22/2014 **Analyst:** AMB

QC- Sample ID: 483644-004 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	4.36	51.5	51.7	92	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: BOPCO Station

Work Order #: 483644

Lab Batch #: 939494 **Project ID:** 2014-087

Date Analyzed: 04/25/2014 **Date Prepared:** 04/24/2014 **Analyst:** AMB

QC- Sample ID: 483806-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	228	583	814	101	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: BOPCO Station

Work Order # : 483644 **Project ID:** 2014-087

Lab Batch ID: 939340 **QC- Sample ID:** 483644-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/23/2014 **Date Prepared:** 04/22/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B 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	<0.00103	0.103	0.0898	87	0.104	0.0884	85	2	70-130	35	
Toluene	<0.00207	0.103	0.0892	87	0.104	0.0878	84	2	70-130	35	
Ethylbenzene	<0.00103	0.103	0.0945	92	0.104	0.0929	89	2	71-129	35	
m_p-Xylenes	<0.00207	0.207	0.194	94	0.207	0.191	92	2	70-135	35	
o-Xylene	<0.00103	0.103	0.0977	95	0.104	0.0958	92	2	71-133	35	

Lab Batch ID: 939265 **QC- Sample ID:** 483644-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/22/2014 **Date Prepared:** 04/22/2014 **Analyst:** ARM

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	<15.6	1040	1070	103	1040	1010	97	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.6	1040	1130	109	1040	1080	104	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: BOPCO Station

Work Order #: 483644

Lab Batch #: 939127 **Project ID:** 2014-087

Date Analyzed: 04/21/2014 17:25 **Date Prepared:** 04/21/2014 **Analyst:** WRU

QC- Sample ID: 483567-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	31.8	30.9	3	20	

Lab Batch #: 939127

Date Analyzed: 04/21/2014 17:25 **Date Prepared:** 04/21/2014 **Analyst:** WRU

QC- Sample ID: 483644-007 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.73	3.50	6	20	

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

CHAIN OF CUSTODY RECORD

Page 1 of 2

XENCO Laboratories — Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800

LAB W.O #: 483644

Field billable Hrs :

Company:	Basin Environmental Service Technologies, LLC	Phone:	(575)396-2378
Address:	3100 Plains Hwy.	Fax:	(575)396-1429
City:	Lovington	State: NM	Zip: 88260
PM/Attn:	Ben Arguijo	Email:	bjarguijo@basinenv.com
Project ID:	BOPCO Station #2014-087 SRS	PO#:	PAA-C. Bryant
Invoice To:	Camille Bryant Plains All American	Quote #:	
Sampler Signature:	Bobby L Blakewood Jr.		

TAT Work Days = D Need results by:_____ Time: _____

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type VC	GC TPH	GC BTEX	GC Chloride	Hold Sample (CALL) Run PAH on Highest TPH Only If
	Example Volatiles by 8260							# Cont	Lab Only	Lab Only:		
1	Floor #1	4/17/14	1125	S			1		X	X	X	
2	Floor #2	4/17/14	1130	S			1		X	X	X	
3	Floor #3	4/17/14	1135	S			1		X	X	X	
4	Floor #4	4/17/14	1140	S			1		X	X	X	
5	Floor #5	4/17/14	1145	S			1		X	X	X	
6	Floor #6	4/17/14	1150	S			1		X	X	X	
7	Floor #7	4/17/14	1155	S			1		X	X	X	
8	Floor #8	4/17/14	1200	S			1		X	X	X	
9	Wall #1	4/17/14	1205	S			1		X	X	X	
10	Wall #2	4/17/14	1210	S			1		X	X	X	

Pres Type**: I I I

* Container Type Codes

VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear, Other _____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None, B. HNO_3, C. H_2SO_4, D. NaOH, E. HCL, F. MeOH, G. $Na_2S_2O_3$, H. $NaHSO_4$, I. Ice, J. MCAA, K. ZnAc&NaOH, L Asbc Acid&NaOH, O. _____

^ Matrix Type Codes

GW Ground Water, WW Waste Water, DW Drinking Water, SW Surface Water, OW Ocean/Sea Water, PL Product-Liquid, PS Product-Solid, SL Sludge, S Soil/Sediment/Solid, W Wipe, A Air, O Oil, T Tissue, U Urine, B Blood, Other _____

REMARKS

Reg. Program / Clean-up Std: TRRP DW NPDES LPST DryCln

STATE for Certs & Regs: FL TX GA NC SC NJ PA OK LA AL NM Other:

QA/QC Level & Certification: 1 **2** 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:

EDDs: ADaPT SEDD ERPIMS XLS Other:

COC & Labels: Match Incomplete Absent Unclear

Coolers Temp °C: 3.5.0

Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
Bobby L Blakewood	Basin Env.	4/17/14	1545	Terry Cockett	Basin Env.	4/17/14	1545
Terry Cockett	Basin Env.	4-17-14	4:28		MS	4/17/14	4:30
						4/18/14	10:00

Lab Use Only

	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

CHAIN OF CUSTODY RECORD

XENCO Laboratories Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800

Page 2 of 2

LAB W.O # :

Field billable Hrs :

Company:	Basin Environmental Service Technologies, LLC	Phone:	(575)396-2378
Address:	3100 Plains Hwy.	Fax:	(575)396-1429
City:	Lovington	State: NM	Zip: 88260
PM/Attn:	Ben Arguijo	Email:	bjarguijo@basinenv.com
Project ID:	BOPCO Station #2014-087 SRS	PO#:	PAA-C. Bryant
Invoice To:	Camille Bryant Plains All American	Quote #:	

TAT Work Days = D Need results by:_____ Time: _____

Std (5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other_____

Sampler Signature: Bobby L Blakewood Jr.

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code A	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type VC	Pres Type I	Example Volatiles by 8260	GC TPH	GC BTEX	GC Chloride	GC Paint Filter						Hold Sample (CALL)	Run PAH on Highest TPH Only If
								# Cont	Lab Only	Lab Only:											
1	Wall #3	4/17/14	1215	S			1				X	X	X								
2	Wall #4	4/17/14	1220	S			1				X	X	X								
3	Wall #5	4/17/14	1225	S			1				X	X	X								
4	Wall #6	4/17/14	1230	S			1				X	X	X								
5	Stockpile	4/17/14	1245	S			1				X	X	X	X							
6																					
7																					
8																					
9																					
0																					

REMARKS

5 **RUSH**

Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Tedlar Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		

Other _____

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

Preservative Type Codes

A. None E. HCL I. Ice
B. HNO_3 F. MeOH J. MCAA C.
H_2SO_4 G. $Na_2S_2O_3$ K. ZnAc&NaOH
D. NaOH H. $NaHSO_4$ L Asbc Acid&NaOH
O. _____

Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		

Other _____

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C	Lab Use Only	YES	NO	N/A
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 3	Non-Conformances found?			
						Samples intact upon arrival?			
						Received on Wet Ice?			
						Labeled with proper preservatives?			
						Received within holding time?			
						Custody seals intact?			
						VOCs rec'd w/o headspace?			
						Proper containers used?			
						pH verified-acceptable, excl VOCs?			
						Received on time to meet HTs?			

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bobby L Blakewood	Basin Env.	4/17/14	1545	Terry Corbett	Basin Env.	4/17/14	1545
2	Terry Corbett	Basin Env.	4-17-14	4:28		MS	4/17/14	430
3								
4								

C.O.C. Serial #

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 04/17/2014 04:30:00 PM

Work Order #: 483644

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	N/A
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Ruriko Konuma Date: 04/18/2014

Checklist reviewed by: Kelsey Brooks Date: 04/18/2014

Analytical Report 484446

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

BOPCO Station

2014-087

02-MAY-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-16-TX), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

02-MAY-14

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

Reference: XENCO Report No(s): **484446**
BOPCO Station
Project Address: Lovington, NM

Ben Arguijo:

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(s) 484446. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 484446 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 484446

PLAINS ALL AMERICAN EH&S, Midland, TX

BOPCO Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile	S	04-30-14 11:15		484446-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 484446

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: BOPCO Station

Project Id: 2014-087
Contact: Ben Arguijo
Project Location: Lovington, NM

Date Received in Lab: Thu May-01-14 11:00 am
Report Date: 02-MAY-14
Project Manager: Kelsey Brooks

Analysis Requested								
	Lab Id:	484446-001						
	Field Id:	Stockpile						
	Depth:							
	Matrix:	SOIL						
	Sampled:	Apr-30-14 11:15						
Percent Moisture	*Extracted:*							
	Analyzed:	May-01-14 15:00						
	Units/RL:	%	RL					
Percent Moisture		ND	1.00					
TPH By SW8015 Mod	*Extracted:*	May-01-14 16:00						
	Analyzed:	May-02-14 00:16						
	Units/RL:	mg/kg	RL					
C6-C12 Gasoline Range Hydrocarbons		407	15.1					
C12-C28 Diesel Range Hydrocarbons		4610	15.1					
C28-C35 Oil Range Hydrocarbons		78.8	15.1					
Total TPH		5100	15.1					

Kelsey Brooks
Project Manager

Flagging Criteria

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 484446, **Project ID:** 2014-087

Lab Batch #: 939996 **Sample:** 484446-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/02/14 00:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.8	112	70-135	
o-Terphenyl	47.5	49.9	95	70-135	

Lab Batch #: 939996 **Sample:** 654882-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/01/14 17:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 939996 **Sample:** 654882-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/01/14 18:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 939996 **Sample:** 654882-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/01/14 18:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 939996 **Sample:** 484442-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/01/14 21:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	59.4	50.0	119	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BOPCO Station

Work Orders : 484446, **Project ID:** 2014-087

Lab Batch #: 939996 **Sample:** 484442-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/01/14 21:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: BOPCO Station

Work Order #: 484446 **Project ID:** 2014-087

Analyst: ARM **Date Prepared:** 05/01/2014 **Date Analyzed:** 05/01/2014

Lab Batch ID: 939996 **Sample:** 654882-1-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	<15.0	1000	934	93	1000	896	90	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	993	99	1000	937	94	6	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: BOPCO Station

Work Order # : 484446 **Project ID:** 2014-087

Lab Batch ID: 939996 **QC- Sample ID:** 484442-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/01/2014 **Date Prepared:** 05/01/2014 **Analyst:** ARM

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	15.6	1030	1170	112	1030	1090	104	7	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.5	1030	1160	113	1030	1040	101	11	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 Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Project Name: BOPCO Station

Work Order #: 484446

Lab Batch #: 940004 **Project ID:** 2014-087

Date Analyzed: 05/01/2014 15:00 **Date Prepared:** 05/01/2014 **Analyst:** WRU

QC- Sample ID: 484446-001 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	<1.00	<1.00	0	20	U

Lab Batch #: 940004

Date Analyzed: 05/01/2014 15:00 **Date Prepared:** 05/01/2014 **Analyst:** WRU

QC- Sample ID: 484449-003 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	23.9	23.1	3	20	

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

CHAIN OF CUSTODY RECORD

XENCO Laboratories — Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800

Page 1 of 1

LAB W.O#: H04446

Field billable Hrs :

Company:	Basin Environmental Service Technologies, LLC	Phone:	(575)396-2378
Address:	3100 Plains Hwy.	Fax:	(575)396-1429
City:	Lovington	State: NM	Zip: 88260
PM/Attn:	Ben Arguijo	Email:	bjarguijo@basinenv.com
Project ID:	BOPCO Station #2014-087 SRS	PO#:	PAA-C. Bryant
Invoice To:	Camille Bryant Plains All American	Quote #:	

TAT Work Days = D Need results by: 5/2/14 Time: PM

Std (5-7D) 5Hr 1D 2D 3D 4D 5D 7D 10D 14D Other

Sampler Signature:

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type VC	Pres Type	Example Volatiles by 8260	TPH	Hold Sample (Call Lab to Run PAH Only If Highest TPH is)
								# Cont	Lab Only	Lab Only:		
1	Stockpile (Composite)	4/30/14	1115	S			1				X	
2												
3												
4												
5												
6												
7												
8												
9												
0												

Container Type Codes

VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear, Other

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal 40ml, 125 ml, 250 ml, 500 ml, 1L, Other

Preservative Type Codes

A. None, E. HCL, I. Ice, B. HNO_3, F. MeOH, J. MCAA, C. H_2SO_4, G. $Na_2S_2O_3$, K. ZnAc&NaOH, D. NaOH, H. $NaHSO_4$, L Asbc Acid&NaOH, O.

Matrix Type Codes

GW Ground Water, S Soil/Sediment/Solid, WW Waste Water, W Wipe, DW Drinking Water, A Air, SW Surface Water, O Oil, OW Ocean/Sea Water, T Tissue, PL Product-Liquid, U Urine, PS Product-Solid, B Blood, SL Sludge, Other

REMARKS

☆RUSH☆

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	18.4 2.5 C3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1		Basin Env.	4/30/14	1330		Basin Env.	4/30/14	1330
2		Basin Env.	4/30/14	1500		Basin Env.	4/30/14	1500
3		Basin Env.	4/30/14	4:30pm		MS	4/30/14	4:30
4					Julian M	Xenco	5/1/14	11:00

Lab Use Only

	YES	NO	N/A
Non-Conformances found?		✓	
Samples intact upon arrival?	✓		
Received on Wet Ice?	✓		
Labeled with proper preservatives?	✓		✓
Received within holding time?	✓		
Custody seals intact?			✓
VOCs rec'd w/o headspace?			✓
Proper containers used?	✓		
pH verified-acceptable, excl VOCs?			✓
Received on time to meet HTs?	✓		

C.O.C. Serial #

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 05/01/2014 11:00:00 AM

Work Order #: 484446

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	N/A
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: 05/01/2014
Julian Martinez

Checklist reviewed by: _____ Date: 05/01/2014
Kelsey Brooks

Appendix C

Release Notification & Corrective Action (Form C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Plains Marketing, LP	Contact Camille Bryant
Address 2530 State Hwy. 214, Denver City, TX 79323	Telephone No. (575) 441-1099
Facility Name BOPCO Station	Facility Type Pump

Surface Owner BLM	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
P	21	24S	31E					Eddy

Latitude N 32.197262° Longitude W 103.777821°

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 14 bbls	Volume Recovered 10 bbls
Source of Release Pump	Date and Hour of Occurrence 04/02/2014 @ 08:00	Date and Hour of Discovery 04/02/2014 @ 08:40
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Verbal notification to Mike Bratcher (voicemail)	
By Whom? Camille Bryant	Date and Hour 04/02/2014 @ 14:30	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Gasket failure on a pump liner cover resulted in a release of crude oil. The gasket on the pump was replaced.

Describe Area Affected and Cleanup Action Taken. The released crude oil impacted an area measuring approximately 148' x 60' inside the facility. The impacted area will be remediated as per applicable NMOCD guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Camille Bryant	OIL CONSERVATION DIVISION	
Printed Name: Camille Bryant	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjbryant@paalp.com	Conditions of Approval:	Attached ☐
Date: 4/10/2014 Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary