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

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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

N

OPERATOR

☒ Initial Report Final Repor

Name of Company Legacy Reserves, LP	Contact Kevin Bracey
Address P. O. Box 10848, Midland, Texas 79702	Telephone No. 432-238-2856
Facility Name WA Simpson	Facility Type Tank Battery

Surface Owner Arzell Sellers	Mineral Owner	Lease No.

LOCATION OF RELEASE

API #30-025-05261-00-00
NEARBY WELL WA SIMPSON WELL # 2

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	3	15S	37E					Lea

Latitude 33° 02.632" North Longitude 103° 10.987" West

NATURE OF RELEASE

Type of Release Produced Water and crude oil	Volume of Release 225 bbls	Volume Recovered 160 bbls
Source of Release Tank	Date and Hour of Occurrence 9/3/2010 @ 3:00 pm	Date and Hour of Discovery 9/3/2010 @ 3:30 pm
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? EL Gonzales	
By Whom? Camille Bryant	Date and Hour 9/3/2010 @ 5:30 pm	
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: The Davis Gas Plant went off line causing the lines to pressure up and the tank at the WA Simpson Tank Battery to overflow.

Describe Area Affected and Cleanup Action Taken. The release impacted approximately 8,200 square feet inside the tank battery and approximately 3,000 square feet outside the tank battery. A fine to heavy overspray affected the area to the northwest of the tank battery. The overspray area was treated with a Micro Blaze solution. The site will be remediated to 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: Kevin Bracey	OIL CONSERVATION DIVISION
Printed Name: Kevin Bracey	ENV. ENGINEER: Approved by ~~District Supervisor~~: Geoffrey Leking
Title: Production Foreman	Approval Date: 09/08/10 Expiration Date: 11/08/10
E-mail Address: kbracey@legacylp.com	Conditions of Approval: SUBMIT FINAL C-141 BY 11/08/10 IRP-10-9-2609
Date: 9-8-2010 Phone: 432-238-2856	

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE PROPOSAL

LEGACY RESERVES, LP
WA SIMPSON
Lea County, New Mexico
Unit Letter "I" (NE/SE), Section 3, Township 15 South, Range 37 East
Latitude 33° 02.632' North, Longitude 103° 10.987' West
NMOCD Reference #1RP-10-9-2609

Prepared For:

Legacy Reserves, LP
P. O. Box 10848
Midland, TX 79702

Prepared By:

Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, NM 88260

May 2011

approved by:
Geoffrey Leking, OCD Hobbs
NMOCD-HOBBS
05/18/11

Ben J. Arguijo
Project Manager

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE PROPOSAL

LEGACY RESERVES, LP
WA SIMPSON
Lea County, New Mexico
Unit Letter "I" (NE/SE), Section 3, Township 15 South, Range 37 East
Latitude 33° 02.632' North, Longitude 103° 10.987' West
NMOCD Reference #1RP-10-9-2609

Prepared For:

Legacy Reserves, LP
P. O. Box 10848
Midland, TX 79702

Prepared By:

Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, NM 88260

May 2011

Ben J. Arguijo
Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Legacy Reserves, LP (Legacy), has prepared this *Remediation Summary & Site Closure Proposal* for the release site known as WA Simpson. The legal description of the release site is Unit Letter "I" (NE/SE), Section 3, Township 15 South, Range 37 East in Lea County, New Mexico. The geographic coordinates of the release site are 33° 02.632' North latitude and 103° 10.987' West longitude. The property affected by the release is owned by Mr. Arzell Sellers.

On September 3, 2010, Legacy discovered a release had occurred at the WA Simpson tank battery. The Davis Gas Plant had gone offline, causing transmission lines to pressure up and a storage tank to overflow, resulting in a release of crude oil and produced water. The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately two hundred and twenty-five (225) barrels were released, with approximately one hundred and sixty (160) barrels recovered. The release impacted an area measuring approximately eight thousand two hundred (8,200) square feet inside the tank battery and approximately three thousand (3,000) square feet outside the tank battery. A fine overspray impacted the area to the northwest of the tank battery and was treated with a Micro-Blaze® solution.

Please reference Figure 1 for a "Site Location Map". The Form C-141 is provided as Appendix A. General photographs of the release site are provided as Appendix B.

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) indicates groundwater should be encountered at approximately fifty-five (55) below ground surface (bgs). Based on the NMOCD ranking system, ten (10) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are water wells within 1,000 feet of the release. Based on the NMOCD ranking system, twenty (20) points will be assigned to the site as a result of this criterion.

There are no surface water bodies within 1,000 feet 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 WA Simpson release site has an initial ranking score of thirty (30) points. The soil remediation levels for a site with a ranking score of thirty (30) points are as follows:

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

SUMMARY OF SOIL REMEDIATION ACTIVITIES

From September 10 to September 20, 2010, remediation activities proceeded at the site. Heavily impacted and visually stained soil was excavated from within the tank battery's containment berm and adjacent to an on-site water tank (Southwest Pooling Area). The excavated soil was stockpiled on-site, pending final disposition, and the containment berm was reconstructed.

On September 15, 2010, a delineation trench (Trench 1) was excavated in the Southwest Pooling Area to investigate the horizontal and vertical extent of contamination at the site.

One (1) soil sample (Background) was collected to establish a baseline for the site. The soil sample was submitted to Xenco Laboratories in Odessa, Texas, for analysis of total petroleum hydrocarbons (TPH) and chlorides using EPA methods SW-846 8015M and 300.1, respectively. Background concentrations were 59.4 mg/Kg for TPH and 14.5 mg/Kg for chlorides.

Trench 1 was advanced to a depth of approximately five (5) feet bgs. Two (2) soil samples (Trench 1 @ 3' and Trench 1 @ 5') were submitted to the laboratory for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA method SW-846 8021b, TPH, and chlorides. BTEX concentrations ranged from less than the laboratory Method Detection Limit (MDL) for soil sample Trench 1 @ 5' to 1.3623 mg/Kg for soil sample Trench 1 @ 3'. TPH concentrations ranged from 85.3 mg/Kg for soil sample Trench 1 @ 5' to 6,043 mg/Kg for soil sample Trench 1 @ 3'. Chloride concentrations ranged from 195 mg/Kg for soil sample Trench 1 @ 5' to 705 mg/Kg for soil sample Trench 1 @ 3'.

Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chlorides in Soil". A "Site & Sample Location Map" is provided as Figure 2. Laboratory analytical reports are provided as Appendix C.

On September 20, 2010, Trench 1 was advanced to six (6) feet bgs, and four (4) delineation trenches (Trench 2, S. Trench, E. Trench, and W. Trench) were excavated in the Southwest Pooling Area.

One (1) soil sample from Trench 1 (Trench 1 @ 6') was submitted to Xenco Laboratories for analysis of BTEX, TPH, and chloride concentrations. BTEX and TPH concentrations were less than the appropriate laboratory MDL, and the chloride concentration was 61.0 mg/Kg.

Trench 2 was advanced to a total depth of approximately twelve (12) feet bgs. Five (5) soil samples (Trench 2 @ 4', Trench 2 @ 6', Trench 2 @ 8', Trench 2 @ 10', and Trench 2 @12') were submitted to the laboratory for analysis. BTEX concentrations were less than the laboratory MDL for all soil samples submitted. TPH concentrations ranged less than the laboratory MDL for soil samples Trench 2 @ 4', Trench 2 @ 6', Trench 2 @ 10', Trench 2 @12' to 50.8 mg/Kg for soil sample Trench 2 @ 8'. Chloride concentrations ranged from 157 mg/Kg for soil sample Trench 2 @12' to 1,070 mg/Kg for soil sample Trench 2 @ 4'.

S. Trench was advanced to a depth of approximately two (2) feet bgs. One (1) soil sample (S. Trench Sample 5) was submitted to the laboratory for analysis. BTEX and TPH concentrations were less than the appropriate laboratory MDL, and the chloride concentration was 7.67 mg/Kg.

E. Trench was advanced to a depth of approximately two (2) feet bgs. One (1) soil sample (E. Trench Sample 1) was submitted to the laboratory for analysis. BTEX and TPH concentrations were less than the appropriate laboratory MDL, and the chloride concentration was 191 mg/Kg.

W. Trench was advanced to a depth of approximately two (2) feet bgs. One (1) soil sample (W. Trench Sample 1) was submitted to the laboratory for analysis. BTEX and TPH concentrations were less than the appropriate laboratory MDL, and the chloride concentration was 23.5 mg/Kg.

On September 28 through 29, 2010, three (3) delineation trenches (Trench 3, Trench 4, and Trench 5) were excavated to investigate the horizontal and vertical extent of impacted soil in a secondary pooling area (Southeast Pooling Area) located approximately two hundred (200) feet to the southeast of the WA Simpson tank battery. Trench 3 was advanced at the southern edge of the Southeast Pooling Area to a depth of approximately four (4) feet bgs. Trench 4 was advanced at the eastern edge of the Southeast Pooling Area to a depth of approximately four (4) feet bgs. Trench 5 was advanced at the northern edge of the Southeast Pooling Area to a depth of approximately two (2) feet bgs. Soil samples were collected at selected intervals and field-screened with a Photo-ionization Detector (PID) and a chloride test kit. A summary of the field test results is provided in Table 2, "Field Test Results".

On April 14, 2011, a delineation trench (Trench 6) was excavated in the approximate center of the Southeast Pooling Area to a total depth of approximately ten (10) feet bgs. Soil samples were collected at selected intervals and field-screened with a chloride test kit.

Based on field tests and a visual inspection of the site, further investigation of the extent of hydrocarbon impact in the Southeast Pooling Area is warranted. Vertical delineation beyond ten (10) feet bgs is precluded by an impenetrable rock layer running underneath the Southeast Pooling Area. Horizontal delineation is precluded by an area of historical impact adjacent to the Southeast Pooling Area (Southeast Historical Area).

PROPOSED ACTIVITIES

Legacy proposes the following strategy to progress the WA Simpson release site toward an NMOCD-approved closure:

- Soil borings will be drilled to delineate the vertical extent of impact in the Southeast Historical Area. Soil samples will be collected at five (5) foot drilling intervals and field screened using a PID and a chloride field test kit. Selected soil samples will be submitted to the laboratory for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH), and/or chlorides using EPA methods SW-846 8021b, SW-846 8015M, and 300.1, respectively.

REPORTING

On review and approval of this proposal by the NMOCD, Legacy is prepared to begin field activities and perform the corrective actions summarized in this *Remediation Summary & Site Closure Proposal.* Upon completion of the corrective actions, Legacy will submit a *Remediation Summary & Site Closure Request* to the NMOCD, documenting remediation activities and results of confirmation soil samples.

LIMITATIONS

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

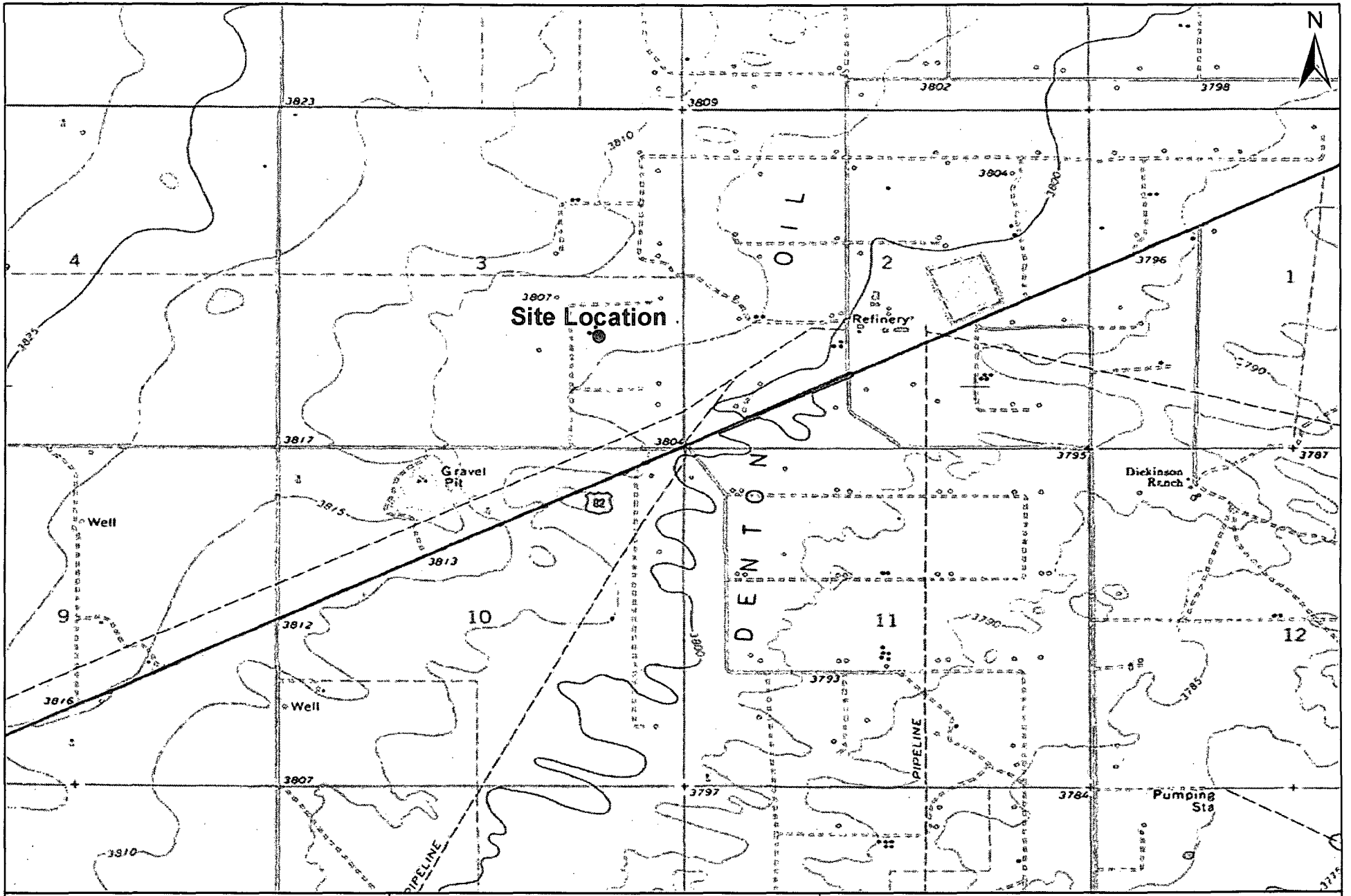
DISTRIBUTION:

Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 N. French Dr.
Hobbs, NM 88240

Copy 2: Kevin Bracey
Legacy Reserves, LP
P. O. Box 10848
Midland, TX 79702

Copy 3: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, NM 88260

Figures



1,000500 0 1,000 2,000

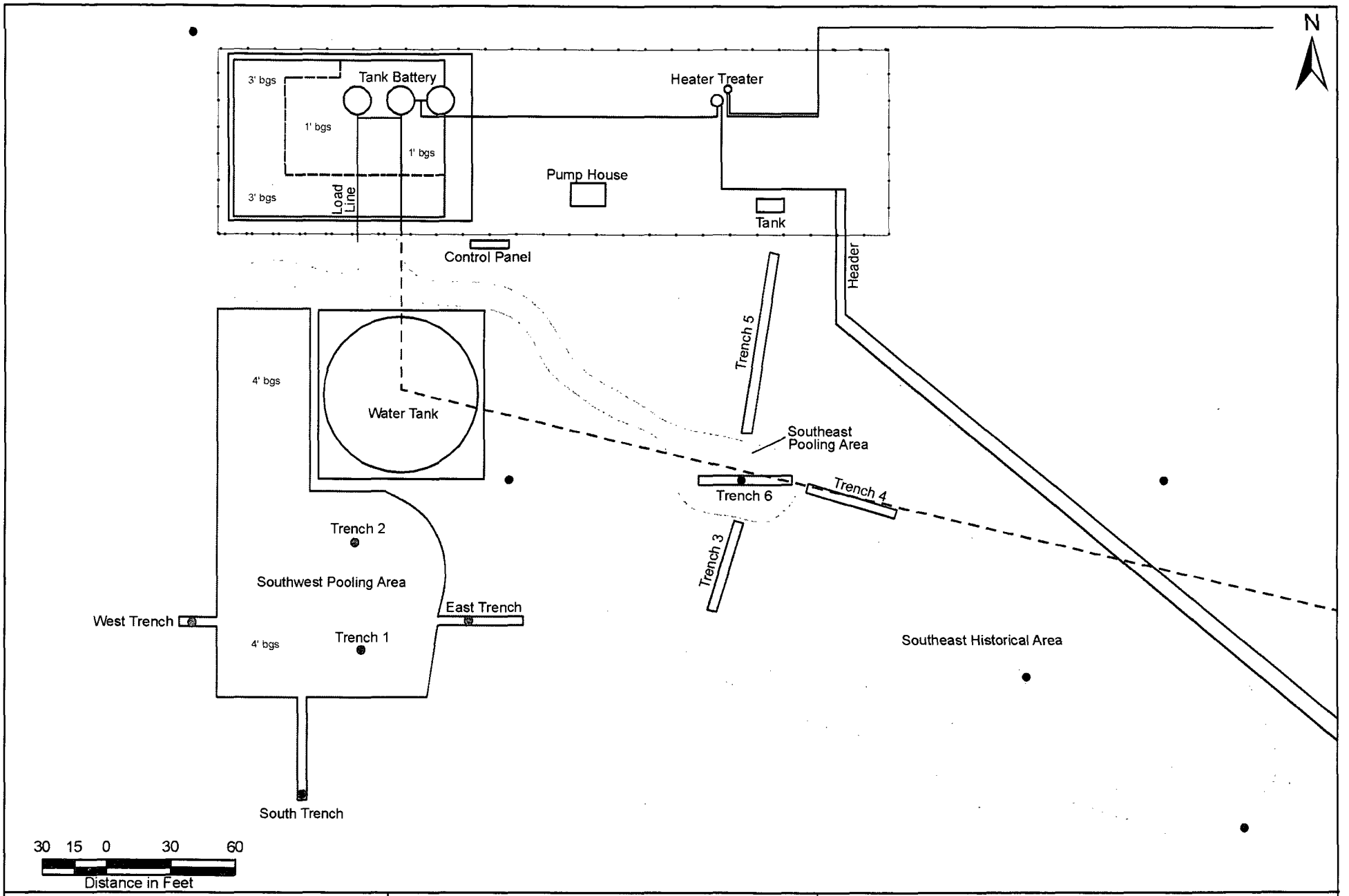
Distance in Feet

Figure 1
Site Location Map
Legacy Reserves, LP
WA Simpson
Lea County, New Mexico
NMOCD Ref. #: 1RP-10-9-2609

Basin Environmental Service Technologies
Effective Solutions

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

Drawn By: BJA	Checked By: BRB
May 13, 2011	Scale: 1" = 2000'



Legend:

- Excavation Extent
- Pipeline
- Fence
- Firewall
- Sample Location
- Proposed Soil Bore
- Spill Margins
- Historic Release

Figure 2
Site & Sample Location Map
Legacy Reserves, LP
WA Simpson
Lea County, New Mexico
NMOCD Ref. #: 1RP-10-9-2609

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

Drawn By: BJA	Checked By: BRB
May 13, 2011	Scale: 1" = 60'

Tables

Table 1

CONCENTRATIONS OF BTEX, TPH & CHLORIDES IN SOIL

LEGACY RESERVES, LP
WA SIMPSON
LEA COUNTY, NEW MEXICO
NMOCD # 1RP-10-9-2609

SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 846-8015M				300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)	TOTAL TPH C_6-C_{35} (mg/Kg)	CHLORIDE (mg/Kg)
Background	Surface	09/15/10	In-Situ	-	-	-	-	-	-	15.6	25.9	17.9	59.4	14.5
Trench 1 @ 3'	3 Feet	09/15/10	In-Situ	<0.0053	0.0395	0.1098	0.8848	0.3282	1.3623	907	4,960	176.0	6,043	705
Trench 1 @ 5'	5 Feet	09/15/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	18	67.3	<15.7	85.3	195
Trench 1 @ 6'	6 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2	61.0
Trench 2 @ 4'	4 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.7	<16.7	<16.7	<16.7	1,070
Trench 2 @ 6'	6 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.5	<16.5	<16.5	<16.5	369
Trench 2 @ 8'	8 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	31.8	19.0	<16.6	50.8	275
Trench 2 @ 10'	10 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.9	<16.9	<16.9	<16.9	284
Trench 2 @12'	12 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2	157
S. Trench Sample 5	2 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.1	<16.1	<16.1	<16.1	7.67
W. Trench Sample 1	2 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.2	<16.2	<16.2	<16.2	23.5
E. Trench Sample 1	2 Feet	09/20/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.1	<16.1	<16.1	<16.1	191

Table 2

FIELD TEST RESULTS

LEGACY RESERVES, LP
WA SIMPSON
LEA COUNTY, NEW MEXICO
NMOCD # 1RP-10-9-2609

SAMPLE LOCATION	SAMPLE DEPTH (Below Ground Surface)	SAMPLE DATE	Field Test	
			CHLORIDE (mg/Kg)	PID READING (mg/Kg)
Trench 3 Sample 1 @ 2'	2'	9/28/2010	1,836	41.0
Trench 3 Sample 1 @ 4'	4'	9/28/2010	-	38.7
Trench 3 Sample 2 @ 2'	2'	9/28/2010	1,476	37.5
Trench 3 Sample 2 @ 4'	4'	9/28/2010	>2464	37.8
Trench 3 Sample 3 @ 2'	2'	9/28/2010	1,972	35.4
Trench 3 Sample 3 @ 4'	4'	9/28/2010	2,124	41.5
Trench 3 Sample 4 @ 2'	2'	9/28/2010	1,972	37.8
Trench 3 Sample 4 @ 4'	4'	9/28/2010	>2464	30.7
Trench 3 Sample 5 @ 2'	2'	9/28/2010	944	37.9
Trench 3 Sample 5 @ 4'	4'	9/28/2010	>2464	37.8
Trench 3 Sample 6 @ 2'	2'	9/28/2010	>2464	37.4
Trench 4 Sample 1 @ 2'	2'	9/28/2010	-	40.1
Trench 4 Sample 1 @ 4'	4'	9/28/2010	-	40.2
Trench 4 Sample 2 @ 2'	2'	9/28/2010	1,836	36.4
Trench 4 Sample 2 @ 4'	4'	9/28/2010	1,704	41.4
Trench 4 Sample 3 @ 2'	2'	9/28/2010	-	37.2
Trench 4 Sample 3 @ 4'	4'	9/28/2010	1,972	36.5
Trench 4 Sample 4 @ 2'	2'	9/28/2010	1,020	36.7
Trench 4 Sample 4 @ 4'	4'	9/29/2010	1,704	29.1
Trench 4 Sample 5 @ 2'	2'	9/29/2010	-	37.1
Trench 4 Sample 5 @ 4'	4'	9/29/2010	1,272	29.3
Trench 5 Sample 1 @ 2'	2'	9/29/2010	1,476	920.0
Trench 5 Sample 2 @ 2'	2'	9/29/2010	1,398	35.2
Trench 5 Sample 3 @ 2'	2'	9/29/2010	1,398	36.9
Trench 5 Sample 4 @ 2'	2'	9/29/2010	1,184	42.9
Trench 5 Sample 5 @ 2'	2'	9/29/2010	1,096	39.7
Trench 5 Sample 6 @ 2'	2'	9/29/2010	532	63.5
Trench 5 Sample 7 @ 2'	2'	9/29/2010	944	31.7
Trench 5 Sample 8 @ 2'	2'	9/29/2010	632	36.9
Trench 6 Sample 1 @ 6'	6'	4/15/2011	640	-
Trench 6 Sample 1 @ 8'	8'	4/15/2011	672	-
Trench 6 Sample 1 @ 10'	2'	4/15/2011	672	-

Appendices

Appendix A

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

RECEIVED
SEP 08 2010
HOBBSOCD

Form C-14
Revised October 10, 20

Submit 2 Copies to appropria
District Office in accordan
with Rule 116 on ba
side of for

Release Notification and Corrective Action

OPERATOR

☒ Initial Report Final Rep

Name of Company Legacy Reserves, LP	Contact Kevin Bracey
Address P. O. Box 10848, Midland, Texas 79702	Telephone No. 432-238-2856
Facility Name **WA Simpson**	Facility Type Tank Battery

Surface Owner Arzell Sellers	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
I	3	15S	37E					Lea

Latitude 33° 02.632" North **Longitude** 103° 10.987" West

NATURE OF RELEASE

Type of Release Produced Water and crude oil	Volume of Release 225 bbls	Volume Recovered 160 bbls
Source of Release Tank	Date and Hour of Occurrence 9/3/2010 @ 3:00 pm	Date and Hour of Discovery 9/3/2010 @ 3:30 pm
Was Immediate Notice Given? X Yes No Not Required	If YES, To Whom? EL Gonzales	
By Whom? Camille Bryant	Date and Hour 9/3/2010 @ 5:30 pm	
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: The Davis Gas Plant went off line causing the lines to pressure up and the tank at the W. Simpson Tank Battery to overflow.

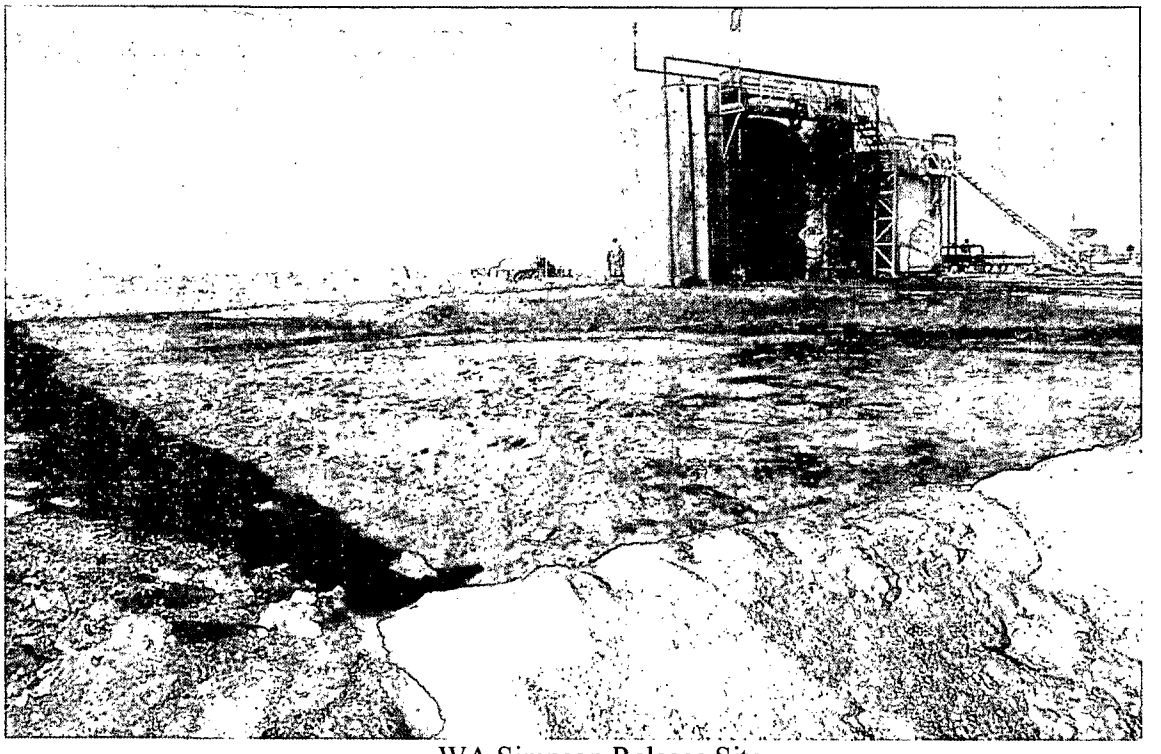
Describe Area Affected and Cleanup Action Taken. The release impacted approximately 8,200 square feet inside the tank battery and approximately 3,00 square feet outside the tank battery. A fine to heavy overspray affected the area to the northwest of the tank battery. The overspray area was treated with Micro Blaze solution. The site will be remediated to 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 an regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endange 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 liabilit should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human healt or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any othe federal, state, or local laws and/or regulations.

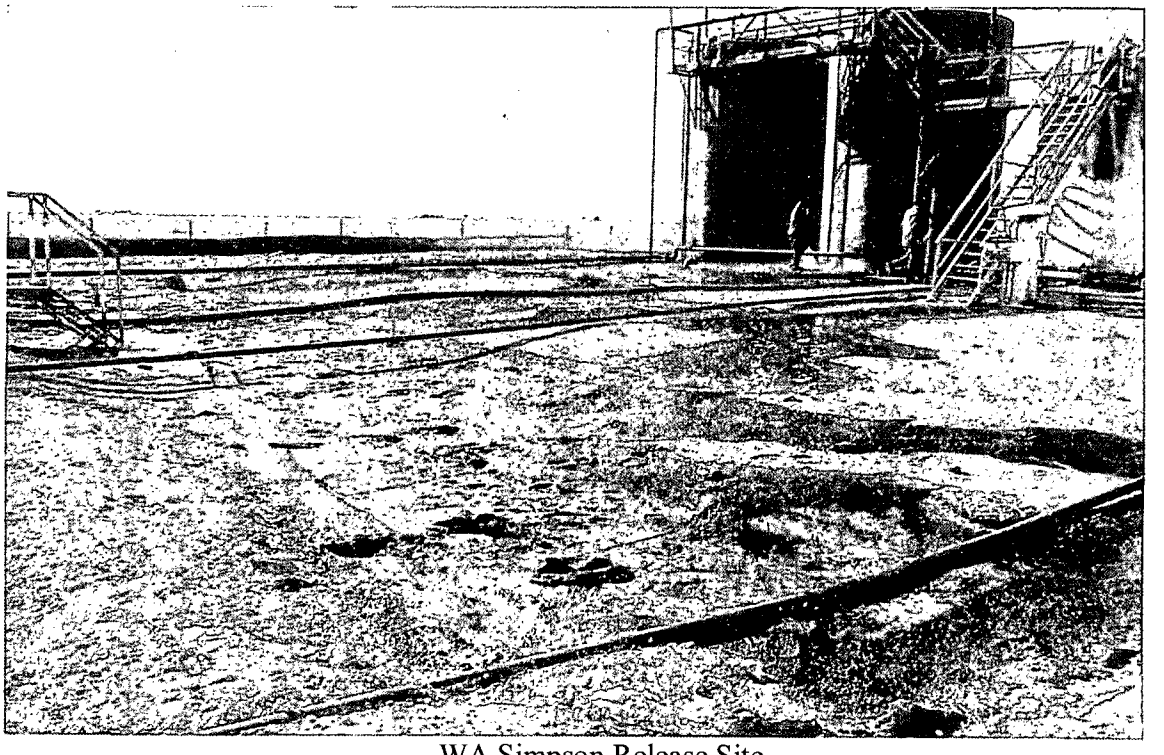
Signature: Kevin Bracey	OIL CONSERVATION DIVISION
Printed Name: Kevin Bracey	ENV. ENGINEER: Approved by ~~District Supervisor~~: Geoffrey Leking
Title: Production Foreman	Approval Date: 09/08/10 Expiration Date: 11/08/10
E-mail Address: kbracey@legacylp.com	Conditions of Approval: SUBMIT FINAL C-141 BY 11/08/10
Date: 9-8-2010 Phone: 432-238-2856	IRP-10-9-2609

Appendix B

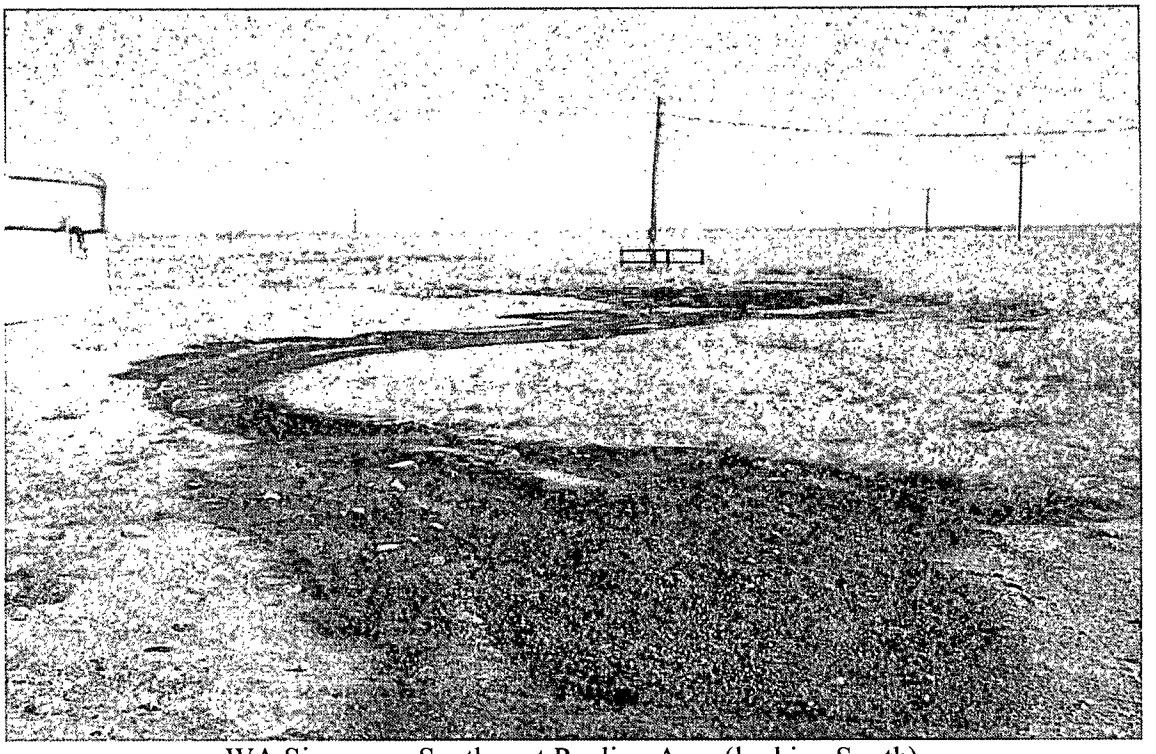
Photographs



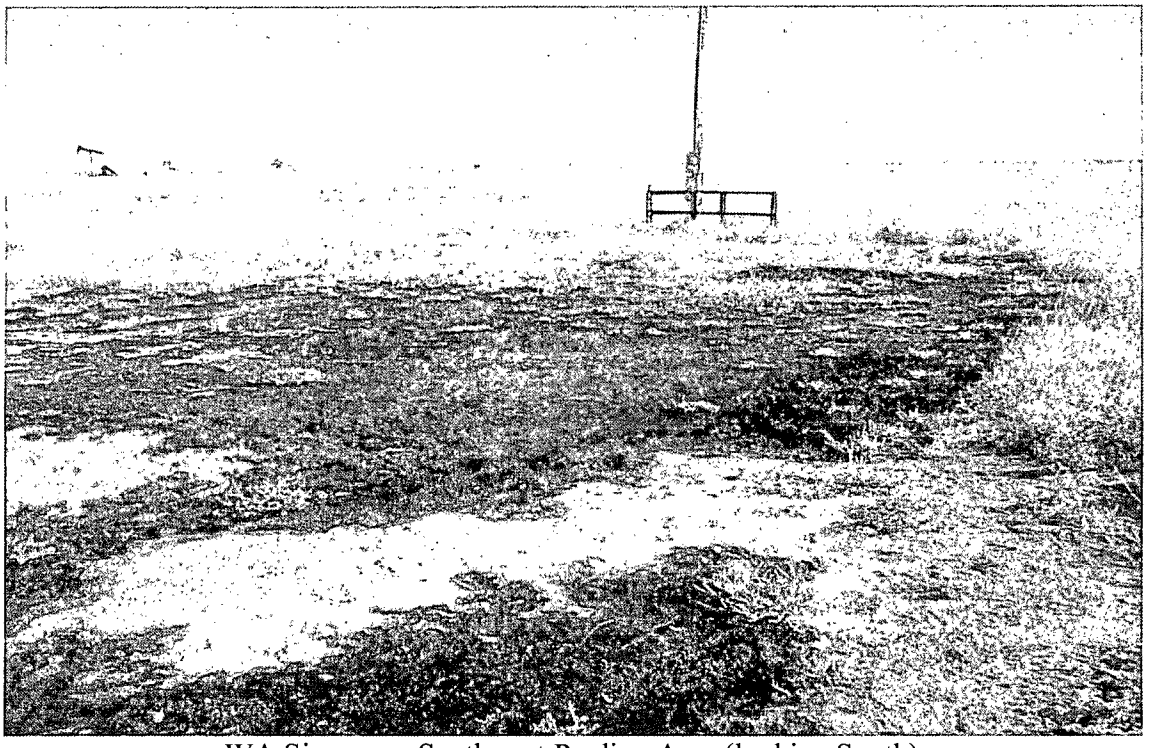
WA Simpson Release Site



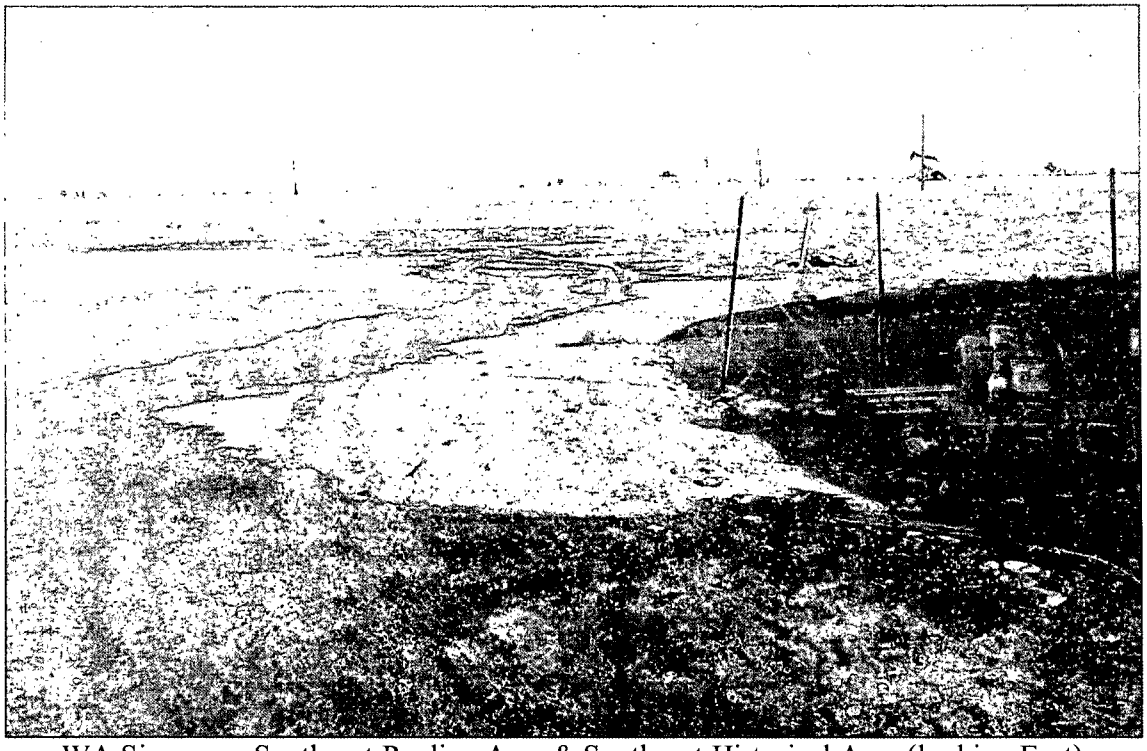
WA Simpson Release Site



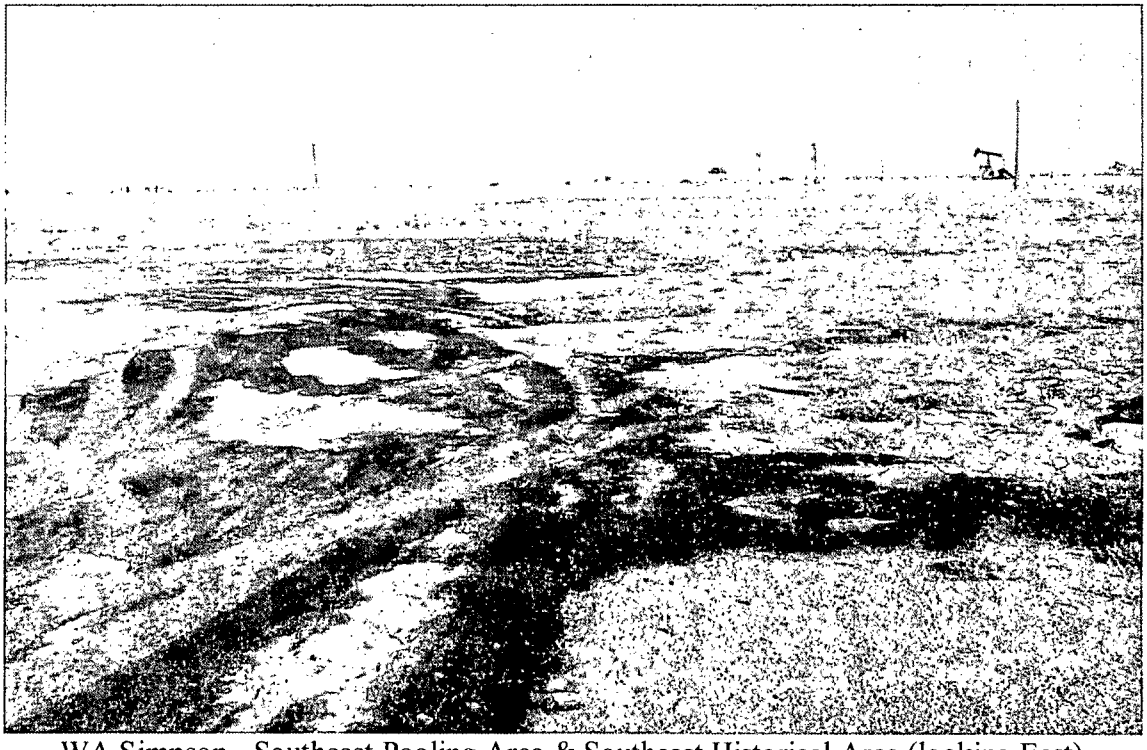
WA Simpson - Southwest Pooling Area (looking South)



WA Simpson - Southwest Pooling Area (looking South)

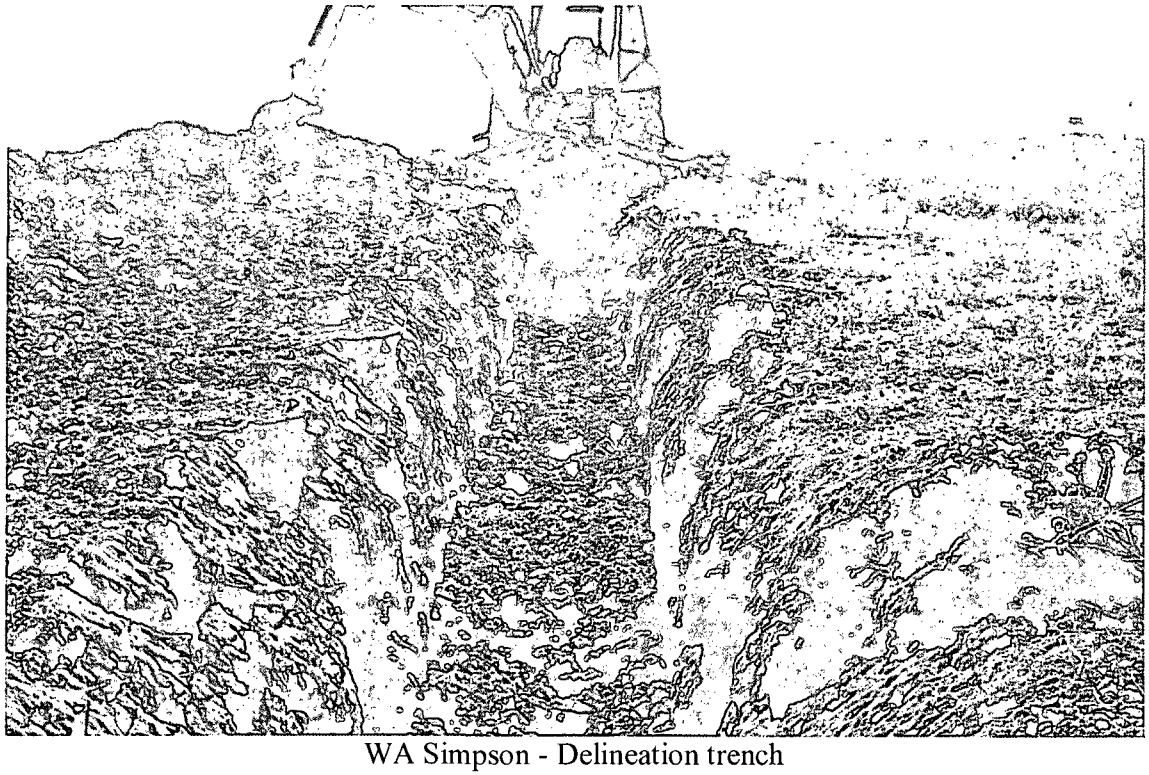


WA Simpson - Southeast Pooling Area & Southeast Historical Area (looking East)



WA Simpson - Southeast Pooling Area & Southeast Historical Area (looking East)

WA Simpson - Tank Battery Excavation



WA Simpson - Delineation trench

Appendix C

Laboratory Analytical Reports

Analytical Report 390697

for

Basin Environmental Consulting, LLC

Project Manager: Camille Bryant

WA Simpson

29-SEP-10

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), California(06244CA), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

29-SEP-10

Project Manager: **Camille Bryant**
Basin Environmental Consulting, LLC
P.O. Box 381
Lovington, NM 88260

Reference: XENCO Report No: **390697**
WA Simpson
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 390697. 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. 390697 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 390697

Basin Environmental Consulting, LLC, Lovington, NM

WA Simpson

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench 1 @ 3'	S	Sep-15-10 09:00		390697-001
Trench 1 @ 5'	S	Sep-15-10 09:45		390697-002
Trench 1 @ 6'	S	Sep-20-10 09:30		390697-003
Background	S	Sep-15-10 08:45		390697-004
Trench 2 @ 4'	S	Sep-20-10 10:00		390697-005
Trench 2 @ 6'	S	Sep-20-10 10:20		390697-006
Trench 2 @ 8'	S	Sep-20-10 10:50		390697-007
Trench 2 @ 10'	S	Sep-20-10 11:15		390697-008
Trench 2 @ 12'	S	Sep-20-10 11:50		390697-009
S. Trench Sample 5	S	Sep-20-10 12:00		390697-010
W. Trench Sample 1	S	Sep-20-10 12:15		390697-011
E. Trench Sample 1	S	Sep-20-10 12:45		390697-012

CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC
Project Name: WA Simpson

Project ID:
Work Order Number: 390697

Report Date: 29-SEP-10
Date Received: 09/21/2010

Sample receipt non conformances and Comments:
None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-824048 TPH By SW8015 Mod
None

Batch: LBA-824065 Percent Moisture
None

Batch: LBA-824070 Anions by E300
None

Batch: LBA-824701 BTEX by EPA 8021B
SW8021BM

Batch 824701, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 390697-011.
The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 824701, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by failure of the surrogate in both MS and MSD.
Samples affected are: 390697-011 S,390697-011 SD.

Batch: LBA-824704 BTEX by EPA 8021B
None

CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC
Project Name: WA Simpson

Project ID:
Work Order Number: 390697

Report Date: 29-SEP-10
Date Received: 09/21/2010

Batch: LBA-825008 BTEX by EPA 8021B
SW8021BM

Batch 825008, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 390697-001.

SW8021BM

Batch 825008, o-Xylene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 390697-001.
The Laboratory Control Sample for o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 390697

Basin Environmental Consulting, LLC, Lovington, NM

Project Name: WA Simpson

Project Id:
Contact: Camille Bryant
Project Location: Lea County, NM

Date Received in Lab: Tue Sep-21-10 03:00 pm
Report Date: 29-SEP-10
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	390697-001		390697-002		390697-003		390697-004		390697-005		390697-006	
	Field Id:	Trench 1 @ 3'		Trench 1 @ 5'		Trench 1 @ 6'		Background		Trench 2 @ 4'		Trench 2 @ 6'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-15-10 09:00		Sep-15-10 09:45		Sep-20-10 09:30		Sep-15-10 08:45		Sep-20-10 10:00		Sep-20-10 10:20	
Anions by E300	*Extracted:*												
	Analyzed:	Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		705	8.96	195	4.42	61.0	4.53	14.5	4.32	1070	18.7	369	9.23
BTEX by EPA 8021B	*Extracted:*	Sep-27-10 09:00		Sep-25-10 15:00		Sep-25-10 15:00				Sep-25-10 15:00		Sep-25-10 15:00	
	Analyzed:	Sep-27-10 14:35		Sep-25-10 20:51		Sep-25-10 17:45				Sep-25-10 18:08		Sep-25-10 18:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL
Benzene		ND	0.0053	ND	0.0011	ND	0.0011			ND	0.0011	ND	0.0011
Toluene		0.0395	0.0107	ND	0.0021	ND	0.0022			ND	0.0022	ND	0.0022
Ethylbenzene		0.1098	0.0053	ND	0.0011	ND	0.0011			ND	0.0011	ND	0.0011
m,p-Xylenes		0.8848	0.0107	ND	0.0021	ND	0.0022			ND	0.0022	ND	0.0022
o-Xylene		0.3282	0.0053	ND	0.0011	ND	0.0011			ND	0.0011	ND	0.0011
Total Xylenes		1.2130	0.0053	ND	0.0011	ND	0.0011			ND	0.0011	ND	0.0011
Total BTEX		1.3623	0.0053	ND	0.0011	ND	0.0011			ND	0.0011	ND	0.0011
Percent Moisture	*Extracted:*												
	Analyzed:	Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.25	1.00	4.88	1.00	7.31	1.00	2.81	1.00	10.4	1.00	9.00	1.00
TPH By SW8015 Mod	*Extracted:*	Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00	
	Analyzed:	Sep-21-10 19:19		Sep-21-10 19:38		Sep-21-10 19:57		Sep-21-10 20:37		Sep-21-10 20:56		Sep-21-10 21:16	
	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		907	16.0	18.0	15.7	ND	16.2	15.6	15.4	ND	16.7	ND	16.5
C12-C28 Diesel Range Hydrocarbons		4960	16.0	67.3	15.7	ND	16.2	25.9	15.4	ND	16.7	ND	16.5
C28-C35 Oil Range Hydrocarbons		176	16.0	ND	15.7	ND	16.2	17.9	15.4	ND	16.7	ND	16.5
Total TPH		6043	16.0	85.3	15.7	ND	16.2	59.4	15.4	ND	16.7	ND	16.5

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 390697

Basin Environmental Consulting, LLC, Lovington, NM

Project Name: WA Simpson

Project Id:

Contact: Camille Bryant

Project Location: Lea County, NM

Date Received in Lab: Tue Sep-21-10 03:00 pm

Report Date: 29-SEP-10

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	390697-007		390697-008		390697-009		390697-010		390697-011		390697-012	
	Field Id:	Trench 2 @ 8'		Trench 2 @ 10'		Trench 2 @ 12'		S. Trench Sample 5		W. Trench Sample 1		E. Trench Sample 1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-20-10 10:50		Sep-20-10 11:15		Sep-20-10 11:50		Sep-20-10 12:00		Sep-20-10 12:15		Sep-20-10 12:45	
Anions by E300	*Extracted:*												
	Analyzed:	Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32		Sep-21-10 16:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		275	9.28	284	9.43	157	4.52	7.67	4.52	23.5	4.55	191	9.05
BTEX by EPA 8021B	*Extracted:*	Sep-25-10 15:00		Sep-25-10 15:00		Sep-25-10 15:00		Sep-25-10 15:00		Sep-25-10 15:30		Sep-25-10 15:00	
	Analyzed:	Sep-25-10 18:55		Sep-25-10 19:18		Sep-25-10 19:41		Sep-25-10 20:04		Sep-26-10 06:07		Sep-25-10 20:27	
	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	0.0011	ND	0.0011	ND	0.0011
Toluene		ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022
Ethylbenzene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011
m,p-Xylenes		ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022	ND	0.0022
o-Xylene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011
Total Xylenes		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011
Total BTEX		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011
Percent Moisture	*Extracted:*												
	Analyzed:	Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00		Sep-21-10 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.53	1.00	10.9	1.00	7.02	1.00	7.08	1.00	7.66	1.00	7.17	1.00
TPH By SW8015 Mod	*Extracted:*	Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00		Sep-21-10 16:00	
	Analyzed:	Sep-21-10 21:36		Sep-21-10 21:55		Sep-21-10 22:14		Sep-21-10 22:34		Sep-21-10 22:54		Sep-21-10 23:13	
	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		31.8	16.6	ND	16.9	ND	16.2	ND	16.1	ND	16.2	ND	16.1
C12-C28 Diesel Range Hydrocarbons		19.0	16.6	ND	16.9	ND	16.2	ND	16.1	ND	16.2	ND	16.1
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	16.9	ND	16.2	ND	16.1	ND	16.2	ND	16.1
Total TPH		50.8	16.6	ND	16.9	ND	16.2	ND	16.1	ND	16.2	ND	16.1

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824701 **Sample:** 574331-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/26/10 04:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 824701 **Sample:** 574331-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/26/10 04:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 824701 **Sample:** 574331-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/26/10 05:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 824701 **Sample:** 390697-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/26/10 06:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 824701 **Sample:** 390697-011 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/26/10 09:58

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0352	0.0300	117	80-120	
4-Bromofluorobenzene	0.0390	0.0300	130	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824701 **Sample:** 390697-011 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/26/10 10:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0354	0.0300	118	80-120	
4-Bromofluorobenzene	0.0390	0.0300	130	80-120	**

Lab Batch #: 824704 **Sample:** 574328-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/25/10 15:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0340	0.0300	113	80-120	

Lab Batch #: 824704 **Sample:** 574328-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/25/10 16:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0341	0.0300	114	80-120	

Lab Batch #: 824704 **Sample:** 574328-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/25/10 17:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 824704 **Sample:** 390697-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 17:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0340	0.0300	113	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824704 **Sample:** 390697-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 18:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0349	0.0300	116	80-120	

Lab Batch #: 824704 **Sample:** 390697-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 18:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 824704 **Sample:** 390697-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 18:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 824704 **Sample:** 390697-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 19:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0358	0.0300	119	80-120	

Lab Batch #: 824704 **Sample:** 390697-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 19:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0349	0.0300	116	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824704 **Sample:** 390697-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 20:04

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0361	0.0300	120	80-120	

Lab Batch #: 824704 **Sample:** 390697-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 20:27

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	80-120	

Lab Batch #: 824704 **Sample:** 390697-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 20:51

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 824704 **Sample:** 390697-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 21:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

Lab Batch #: 824704 **Sample:** 390697-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/25/10 22:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 825008 **Sample:** 574496-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/27/10 11:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 825008 **Sample:** 574496-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/27/10 11:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 825008 **Sample:** 574496-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/27/10 12:28

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 825008 **Sample:** 390961-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/27/10 13:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 825008 **Sample:** 390961-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/27/10 13:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 825008 **Sample:** 390697-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/27/10 14:35

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.1236	0.0300	412	80-120	*

Lab Batch #: 824048 **Sample:** 573945-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/10 16:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.6	99.7	83	70-135	
o-Terphenyl	57.6	49.9	115	70-135	

Lab Batch #: 824048 **Sample:** 573945-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/10 16:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.5	99.8	83	70-135	
o-Terphenyl	53.5	49.9	107	70-135	

Lab Batch #: 824048 **Sample:** 573945-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/10 16:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.3	100	83	70-135	
o-Terphenyl	45.1	50.1	90	70-135	

Lab Batch #: 824048 **Sample:** 390697-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 19:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.7	99.9	93	70-135	
o-Terphenyl	41.5	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824048 **Sample:** 390697-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 19:38

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	99.8	84	70-135	
o-Terphenyl	45.6	49.9	91	70-135	

Lab Batch #: 824048 **Sample:** 390697-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 19:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.5	99.9	85	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 824048 **Sample:** 390697-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 20:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.9	110	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 824048 **Sample:** 390697-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 20:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	99.8	88	70-135	
o-Terphenyl	47.2	49.9	95	70-135	

Lab Batch #: 824048 **Sample:** 390697-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 21:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.5	99.8	87	70-135	
o-Terphenyl	46.6	49.9	93	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824048 **Sample:** 390697-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 21:36

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	46.4	50.2	92	70-135	

Lab Batch #: 824048 **Sample:** 390697-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 21:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.5	100	88	70-135	
o-Terphenyl	47.1	50.1	94	70-135	

Lab Batch #: 824048 **Sample:** 390697-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 22:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.7	101	86	70-135	
o-Terphenyl	46.6	50.3	93	70-135	

Lab Batch #: 824048 **Sample:** 390697-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 22:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.4	99.6	86	70-135	
o-Terphenyl	45.8	49.8	92	70-135	

Lab Batch #: 824048 **Sample:** 390697-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 22:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.8	99.7	87	70-135	
o-Terphenyl	46.7	49.9	94	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: WA Simpson

Work Orders : 390697,

Project ID:

Lab Batch #: 824048 **Sample:** 390697-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 23:13

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	99.9	87	70-135	
o-Terphenyl	46.9	50.0	94	70-135	

Lab Batch #: 824048 **Sample:** 390571-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/10 23:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.2	99.6	84	70-135	
o-Terphenyl	42.8	49.8	86	70-135	

Lab Batch #: 824048 **Sample:** 390571-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/10 00:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.9	101	82	70-135	
o-Terphenyl	43.3	50.3	86	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: WA Simpson

Work Order #: 390697 **Project ID:**

Analyst: BRB **Date Prepared:** 09/25/2010 **Date Analyzed:** 09/25/2010

Lab Batch ID: 824704 **Sample:** 574328-1-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	0.0896	90	0.1	0.0892	89	0	70-130	35	
Toluene	ND	0.1000	0.0884	88	0.1	0.0879	88	1	70-130	35	
Ethylbenzene	ND	0.1000	0.0908	91	0.1	0.0911	91	0	71-129	35	
m,p-Xylenes	ND	0.2000	0.1793	90	0.2	0.1798	90	0	70-135	35	
o-Xylene	ND	0.1000	0.0905	91	0.1	0.0902	90	0	71-133	35	

Analyst: BRB **Date Prepared:** 09/25/2010 **Date Analyzed:** 09/26/2010

Lab Batch ID: 824701 **Sample:** 574331-1-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	0.0866	87	0.1	0.0870	87	0	70-130	35	
Toluene	ND	0.1000	0.0859	86	0.1	0.0862	86	0	70-130	35	
Ethylbenzene	ND	0.1000	0.0876	88	0.1	0.0887	89	1	71-129	35	
m,p-Xylenes	ND	0.2000	0.1718	86	0.2	0.1738	87	1	70-135	35	
o-Xylene	ND	0.1000	0.0867	87	0.1	0.0876	88	1	71-133	35	

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

BS / BSD Recoveries

Project Name: WA Simpson

Work Order #: 390697 **Project ID:**

Analyst: SEE **Date Prepared:** 09/27/2010 **Date Analyzed:** 09/27/2010

Lab Batch ID: 825008 **Sample:** 574496-1-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	0.0949	95	0.1	0.1065	107	12	70-130	35	
Toluene	ND	0.1000	0.0831	83	0.1	0.0938	94	12	70-130	35	
Ethylbenzene	ND	0.1000	0.0911	91	0.1	0.1019	102	11	71-129	35	
m,p-Xylenes	ND	0.2000	0.1797	90	0.2	0.2035	102	12	70-135	35	
o-Xylene	ND	0.1000	0.0719	72	0.1	0.0841	84	16	71-133	35	

Analyst: LATCOR **Date Prepared:** 09/21/2010 **Date Analyzed:** 09/21/2010

Lab Batch ID: 824070 **Sample:** 824070-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 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	ND	10.0	9.74	97	10	9.69	97	1	75-125	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: WA Simpson

Work Order #: 390697
Analyst: BEV
Lab Batch ID: 824048 **Sample:** 573945-1-BKS
Units: mg/kg

Date Prepared: 09/21/2010
Batch #: 1

Project ID:
Date Analyzed: 09/21/2010
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	997	1020	102	998	1040	104	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	997	1010	101	998	932	93	8	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: WA Simpson

Work Order # : 390697 **Project ID:**

Lab Batch ID: 824701 **QC- Sample ID:** 390697-011 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/26/2010 **Date Prepared:** 09/25/2010 **Analyst:** BRB

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	0.1083	0.0732	68	0.1083	0.0858	79	16	70-130	35	X
Toluene	ND	0.1083	0.0732	68	0.1083	0.0841	78	14	70-130	35	X
Ethylbenzene	ND	0.1083	0.0749	69	0.1083	0.0857	79	13	71-129	35	X
m,p-Xylenes	ND	0.2166	0.1490	69	0.2166	0.1701	79	13	70-135	35	X
o-Xylene	ND	0.1083	0.0736	68	0.1083	0.0836	77	13	71-133	35	X

Lab Batch ID: 824704 **QC- Sample ID:** 390697-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/25/2010 **Date Prepared:** 09/25/2010 **Analyst:** BRB

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	0.1079	0.0976	90	0.1079	0.0950	88	3	70-130	35	
Toluene	ND	0.1079	0.0960	89	0.1079	0.0934	87	3	70-130	35	
Ethylbenzene	ND	0.1079	0.0993	92	0.1079	0.0964	89	3	71-129	35	
m,p-Xylenes	ND	0.2158	0.1964	91	0.2158	0.1899	88	3	70-135	35	
o-Xylene	ND	0.1079	0.0988	92	0.1079	0.0954	88	4	71-133	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

Form 3 - MS / MSD Recoveries

Project Name: WA Simpson

Work Order # : 390697 **Project ID:**

Lab Batch ID: 825008 **QC- Sample ID:** 390961-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/27/2010 **Date Prepared:** 09/27/2010 **Analyst:** SEE

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	0.1172	0.1239	106	0.1172	0.1052	90	16	70-130	35	
Toluene	ND	0.1172	0.1100	94	0.1172	0.0915	78	18	70-130	35	
Ethylbenzene	ND	0.1172	0.1208	103	0.1172	0.1005	86	18	71-129	35	
m,p-Xylenes	ND	0.2345	0.2392	102	0.2345	0.1988	85	18	70-135	35	
o-Xylene	ND	0.1172	0.0978	83	0.1172	0.0813	69	18	71-133	35	X

Lab Batch ID: 824048 **QC- Sample ID:** 390571-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/21/2010 **Date Prepared:** 09/21/2010 **Analyst:** BEV

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1070	1110	104	1080	1080	100	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	457	1070	1460	94	1080	1500	97	3	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: WA Simpson

Work Order #: 390697

Lab Batch #: 824065 **Project ID:**

Date Analyzed: 09/21/2010 **Date Prepared:** 09/21/2010 **Analyst:** WRU

QC- Sample ID: 390571-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.24	7.51	4	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

1 of 2

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant
Company Name: Basin Environmental Consulting, LLC
Company Address: P.O. Box 381
City/State/Zip: Lovington, NM 88260
Telephone No: (575)605-7210
Fax No: (505) 396-1429
Sampler Signature: [signature]
e-mail: cjbryant@basin-consulting.com

Project Name: WA Simpson
Project #:
Project Loc: Lea County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 390697

Analyze For: TCLP / TOTAL [X]

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH 418.1 (8015M) 8015B	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides 4500 CB		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	Trench 1 @ 3'			15-Sep-10	0900		1	x								Soil	x											X			X
02	Trench 1 @ 5'			15-Sep-10	0945		1	x								Soil	x											↓			↓
03	Trench 1 @ 6'			20-Sep-10	0930		1	x								Soil	x											↓			↓
04	Background			15-Sep-10	0845		1	x								Soil	x											↓			↓
05	Trench 2 @ 4'			20-Sep-10	1000		1	x								Soil	x											↓			↓
06	Trench 2 @ 6'			20-Sep-10	1020		1	x								Soil	x											↓			↓
07	Trench 2 @ 8'			20-Sep-10	1050		1	x								Soil	x											↓			↓
08	Trench 2 @ 10'			20-Sep-10	1115		1	x								Soil	x											↓			↓
09	Trench 2 @ 12'			20-Sep-10	1150		1	x								Soil	x											↓			↓
10	S. Trench Sample 5			20-Sep-10	1200		1	x								Soil	x											↓			↓

Special Instructions:
Hold for BTEX analysis

Relinquished by	Date	Time	Received by	Date	Time
Camille Bryant	9/21/10	11:30	SPT lowry	9/21/10	11:00
SPT lowry	9/21/10	3:00			
			Received by ELOT: Andrea Elam	9.21.10	15:00

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
402 91455
Temperature Upon Receipt: 3.1 °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: Camille Bryant
Company Name: Basin Environmental Consulting, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)605-7210 Fax No. (505) 396-1429
Sampler Signature: Camille Bryant e-mail: cibryant@basin-consulting.com

Project Name: WA Simpson
Project #:
Project Loc: Lea County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 390697

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	# of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: GW = Drinking Water SL = Sludge; SW = Groundwater S = Soil/Solid; NP = Non-Potable Specify Other	Analyze For: TPH: 418.1 / 8015M / TX1005	TPH: TX 1005	Chlorides (Cl), 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	PCI	N O R M	Chloride 300		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
11	W. Trench Sample 1			20-Sep-10	1215		1	x								Soil	x											X			X
12	E. Trench Sample 1			20-Sep-10	1245		1	x								Soil	x											X			X

Special Instructions:
Hold for BTEX analysis

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	9/21/10	11:30	Same Courier	9/21/10	3:00
Same Courier	9/21/10	3:00	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	9.21.10	15:00

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
4 oz. glass
Temperature Upon Receipt: 3.1 °C

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env

Date/Time: 9.21.10 15:00

Lab ID # : 390699

Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No
2. Shipping container in good condition?	(Yes)	No	None
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A
4. Chain of Custody present?	(Yes)	No	
5. Sample instructions complete on chain of custody?	(Yes)	No	
6. Any missing / extra samples?	Yes	(No)	
7. Chain of custody signed when relinquished / received?	(Yes)	No	
8. Chain of custody agrees with sample label(s)?	(Yes)	No	
9. Container labels legible and intact?	(Yes)	No	
10. Sample matrix / properties agree with chain of custody?	(Yes)	No	
11. Samples in proper container / bottle?	(Yes)	No	
12. Samples properly preserved?	(Yes)	No	N/A
13. Sample container intact?	(Yes)	No	
14. Sufficient sample amount for indicated test(s)?	(Yes)	No	
15. All samples received within sufficient hold time?	(Yes)	No	
16. Subcontract of sample(s)?	Yes	No	(N/A)
17. VOC sample have zero head space?	(Yes)	No	N/A

18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 3.1 °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis