

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
FEB - 5 2010
NMOCD ARTESIA

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 **X Final Report**

Name of Company	Lime Rock Resources	Contact	Michael Barrett
Address	1111 Bagby Street Suite 4600, Houston, TX 77002	Telephone No.	575-623-8424 505-353-2644
Facility Name	Staley State A #4	Facility Type	Oil Well

Surface Owner	Pulitzer Broadcasting	Mineral Owner	State of New Mexico	Lease No.	30-015-36252
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30-015-36252

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	30	17S	28E	990'	FSL	1980'	FWL	Eddy

Latitude 32° 48 08.34" North Longitude 104° 12 58.91" West

NATURE OF RELEASE

Type of Release	Produced Water and crude oil	Volume of Release	20 Bbbs Oil, 75 Bbbs Water	Volume Recovered	none
Source of Release	Poly Line Failed	Date and Hour of Occurrence	11/7/09 @ 0600	Date and Hour of Discovery	11/7/09 @ 0600
Was Immediate Notice Given?	X Yes No Not Required	If YES, To Whom?	Sherry Bonham		
By Whom?	Michael Barrett	Date and Hour	11/9/09 @1000		
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes No	If YES, Volume Impacting the Watercourse.	50 Bbbs of total fluid		

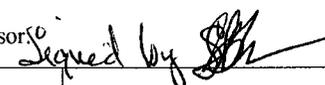
If a Watercourse was Impacted, Describe Fully.*
Runoff from leak to low lying area

Describe Cause of Problem and Remedial Action Taken:
Frac sand plugged 3" poly line causing it to fail.
Shut in wells, isolated line, cleared plug and repaired.

Describe Area Affected and Cleanup Action Taken.
Release site was remediated to applicable NMOCD standards, please see Basin Consulting *Remediation Summary and Site Closure Request*.

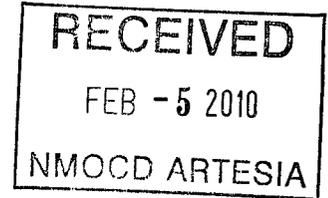
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases, which may endanger 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.

OIL CONSERVATION DIVISION

Signature:		Approved by District Supervisor		Signed by 	
Printed Name:	Michael Barrett	Approval Date:	2-5-10	Expiration Date:	N/A
Title:	Production Supervisor	Conditions of Approval:			
E-mail Address:	mbarrett@limerockresources.com	N/A			
Date:	11/10/09	Phone:	505-353-2644	2 PP. 36A	

Basin Environmental Consulting, LLC

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REMEDICATION SUMMARY AND SITE CLOSURE REQUEST

LIME ROCK RESOURCES OPERATING COMPANY, INC
Staley State A #4
Eddy County, New Mexico
UNIT K (NE/SW), Section 30, Township 17 South, Range 28 East
Latitude 32° 48' 08.53" North, Longitude 104° 12' 59.42" West

Prepared For:

Lime Rock Resources Operating Company, Inc.
1111 Bagby Street
Suite 4600
Houston, Texas 77002

Prepared By:
Basin Environmental Consulting, LLC

January 2010

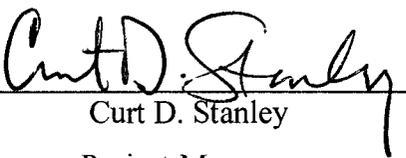

Curt D. Stanley
Project Manager

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1.0 INTRODUCTION

Basin Environmental Consulting, LLC (Basin), on behalf of Lime Rock Resources (Lime Rock), has prepared this Remediation Summary and Site Closure Request for the release site known as Staley State A #4. The site is located in Unit Letter K (NE ¼ SW ¼), Section 30, Township 17 South, Range 28 East, in Eddy County, New Mexico. The release was initially reported as Unit Letter N (SE ¼ SW ¼), Section 30, Township 17 South, Range 28 East. The property is owned by Pulitzer Broadcasting. The site latitude is 32° 48' 08.53" North and the longitude is 104° 12' 59.42" West. The release site latitude and longitude were initially reported as 32.8004891718328° North, 104.217172694796° West. The Site Location and Site Map are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action (NMOCD Form C-141) indicated twenty (20) barrels of crude oil and seventy-five (75) barrels of produced water were released from a Lime Rock poly line, with no recover during the initial response activities. General site photographs are included as Appendix B and the Initial and Final Release Notification and Corrective Action are provided as Appendix C.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database indicates there are no water wells within Section 30 of the above referenced township and range. A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicated groundwater should be encountered at approximately one hundred twenty five (125) feet below ground surface (bgs). The inferred depth to groundwater of approximately 125 feet bgs, results in a score of zero (0) being assigned to the site based on the depth to groundwater criteria.

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

The release affected a drainage channel located south of the highway right-of-way fence. The drainage channel terminates at Logan Draw, located approximately one (1) mile to the west of the release point. Based on the NMOCD ranking system ten (10) points will be assigned to the site as a result of these criteria.

The NMOCD guidelines indicate the Staley State A #4 release site has a ranking score of ten (10). Based on this score, the soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 1,000 mg/Kg (ppm)

Chloride remediation levels are site specific and are generally set at 250 mg/Kg by the NMOCD.

3.0 SUMMARY OF FIELD ACTIVITIES

On November 16, 2009, excavation of impacted soil began at the release site. Excavated soil was placed on a poly liner adjacent to the release site to mitigate any potential leaching of contaminants to the subsurface. Impacted soil was manifested and transported to Lea Land Disposal (WM-01-35 – New Mexico) throughout the excavation process.

On November 17, 2009, nine (9) delineation soil samples (East of RP #1, East of RP #2, East of RP #3, Main Ex. NSW @ 3.5', Main Ex. SSW @ 3.5', Main Ex. ESW @ 3.5', Main Ex. WSW @ 3.5', Main Ex. F-1 @ 4' and Main Ex. F-2 @ 2') were collected from the excavation and submitted to the laboratory for analysis. Soil samples "East of RP #1", "East of RP #2", "East of RP #3", Main Ex. SSW @ 3.5', Main Ex. WSW @ 3.5' and Main Ex. F-2 @ 2' were analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) concentrations using EPA Method 8021b and total petroleum hydrocarbons (TPH) concentrations using Method SW 848-8015M. The analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory method detection limits (MDL), with the exception of soil sample Main Ex. WSW @ 3.5' which exhibited a TPH concentration of 21.1 mg/Kg. A summary table of Concentrations of BTEX, TPH and Chlorides in Soil is provided as Table 1 and laboratory analytical reports are provided as Appendix A.

All nine (9) soil samples were analyzed for chloride concentrations using EPA Method 300.1. The analytical results indicated chloride concentrations ranged from less than the laboratory MDL of 26.3 mg/Kg in soil sample Main Ex. F-2 @ 2' to 381 mg/Kg in soil sample Main Ex. ESW @ 3.5'.

On November 19, 2009, thirty (30) delineation soil samples (SFP-1 @ 3', SFP-2 @ 2', SFP-3 @ 2', SFP-4 @ 3', SFP-5 @ 2', SFP-6 @ 2', SFP-7 @ 2', SFP-8 @ 2', WFP-1, WFP-2, EFPWSW, EFP-Floor @ 3', EFPESW, D1-Floor, D2-Floor, D3-Floor, D3-SSW @ 3', D4-Floor, D5-Floor, D6-Floor, D7-Floor, D8-Floor, D9-Floor, D9-NSW @ 6', D10-Floor, D10-SSW @ 5', D11-Floor, D11-NSW @ 10', D11-SSW @ 10', D12-Floor) were collected from the excavation and submitted to the laboratory for analysis. Soil samples SFP-1 @ 3', SFP-2 @ 2', SFP-3 @ 2', SFP-4 @ 3', SFP-5 @ 2', SFP-6 @ 2', SFP-7 @ 2', SFP-8 @ 2', WFP-2, EFPWSW, EFP-Floor @ 3', EFPESW, D1-Floor, D3-Floor, D3-SSW @ 3', D9-NSW @ 6', D10-SSW @ 5', D11-NSW @ 10', D11-SSW @ 10', D12-Floor were analyzed for BTEX and TPH concentrations. The analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL, with the exception of soil samples SFP-3 @ 2', SFP-4 @ 3' and SFP-7 @ 2' which exhibited TPH concentration of 116 mg/Kg, 322 mg/Kg and 42.6 mg/Kg, respectively.

All thirty (30) soil samples collected on November 19, 2009 were analyzed for chloride concentrations. The analytical results indicated chloride concentrations ranged from less than the laboratory MDL of 19.6 mg/Kg in soil sample WFP-2 to 15,600 mg/Kg in soil sample D7-Floor.

On November 30, 2009, representatives of Lime Rock, Basin and the NMOCD Artesia District Office met onsite. Lime Rock and Basin representatives presented the analytical results of the collected soil samples and proposed additional excavation activities in the drainage channel. The

proposed area of additional excavation included soil represented by soil samples D4-Floor, D5-Floor, D6-Floor, D7-Floor, D8-Floor, D9-Floor, D10-Floor, and D11-Floor. In addition, Lime Rock and Basin representatives proposed the collection of alternating north and south sidewall soil samples to further demonstrate the delineation and remediation of the drainage channel. On review, the NMOCD representative approved the proposed excavation activities, as well as approving the backfilling of areas adjacent to the drainage channel.

On November 30, 2009, a soil sample (West of D4) was collected and submitted to the laboratory. The soil sample was collected approximately forty (40) feet west of soil sample "D4-Floor" and was collected in response to the analytical results of soil sample "D4-Floor".

The analytical results indicated soil sample "West of D4" exhibited a benzene concentration of less than the laboratory MDL of 0.0012 mg/Kg, a BTEX concentration of less than the laboratory MDL of 0.0026 mg/Kg, and a TPH concentration of 716 mg/Kg. Analysis for chloride concentration indicated a concentration of 10.2 mg/Kg. Based on the analytical results of soil sample "West of D4", no further delineation was warranted.

On December 10, 2009, excavation of the proposed area of additional excavation commenced at the release site. Following the excavation activities eight (8) confirmation floor soil samples (D7A-Floor, D6A-Floor, D4A-Floor, D8A-Floor, D5A-Floor, D9A-Floor, D10A-Floor, D11A-Floor) were collected and submitted to the laboratory. The analytical results indicated benzene and BTEX concentrations in all eight (8) floor soil samples were less than the appropriate laboratory MDL. TPH concentrations ranged from less than the laboratory MDL in soil samples D7A-Floor and D8A Floor to 110.6 mg/Kg in soil sample D9A-Floor. Chloride concentrations ranged from 158 mg/Kg in soil sample D5A-Floor to 327 mg/Kg in soil sample D6A-Floor.

Following the excavation activities six (6) confirmation sidewall soil samples (D6-SSW @ 3.5', D5-NSW @ 7.5', D7-NSW @ 8', D4-WSW @ 8', D8-SSW @ 7', D4-SSW @ 8') were collected and submitted to the laboratory. The analytical results indicated benzene and BTEX concentrations in all six (6) floor soil samples were less than the appropriate laboratory MDL. TPH concentrations ranged from less than the laboratory MDL in soil samples D6-SSW @ 3.5' and D5-NSW @ 7.5' to 479 mg/Kg in soil sample D7A-NSW @ 8'. Chloride concentrations ranged from less than the laboratory MDL of 26.1 mg/Kg in soil sample D7-NSW @ 8' to 6,280 mg/Kg in soil sample D8-SSW @ 7'. Based on the analytical results, only soil sample D8-SSW @ 7' exhibited a chloride concentration unacceptable to the NMOCD.

On December 21, 2009, soil represented by and adjacent to D8-SSW @ 7' was excavated and stockpiled onsite pending transportation to Lea Land Disposal. Following the excavation activity, a soil sample (D8A-SSW @ 7') was collected from the sidewall and submitted to the laboratory. The analytical results indicated the chloride concentration was 80.4 mg/Kg.

On receipt of the analytical results, the NMOCD approved the backfilling of the drainage channel with locally purchased soil. Following backfill activities the release site was contoured to fit the surrounding topography. The surface of the backfill material was "ripped" to a depth of approximately six (6) inches bgs and the large blocks of gypsum removed from the excavation

were placed in the drainage channel to minimize wind and water erosion. The site will be reseeded with vegetation acceptable to the landowner when soil moisture conditions are optimal.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- Chloride concentrations in accordance with modified EPA Method

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 (COC) form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Based on the analytical results of the confirmation soil samples, Basin recommends Lime Rock provide the NMOCD Artesia District Office a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the Staley State A #4 release site.

6.0 LIMITATIONS

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

Basin Environmental Consulting, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Consulting, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin

Environmental Consulting, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Consulting, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Lime Rock Resources. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Consulting, LLC and/or Lime Rock Resources.

7.0 DISTRIBUTION:

Copy 1: Sherry Bonham
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Figures

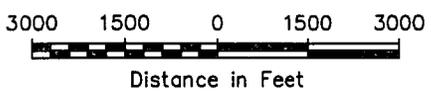
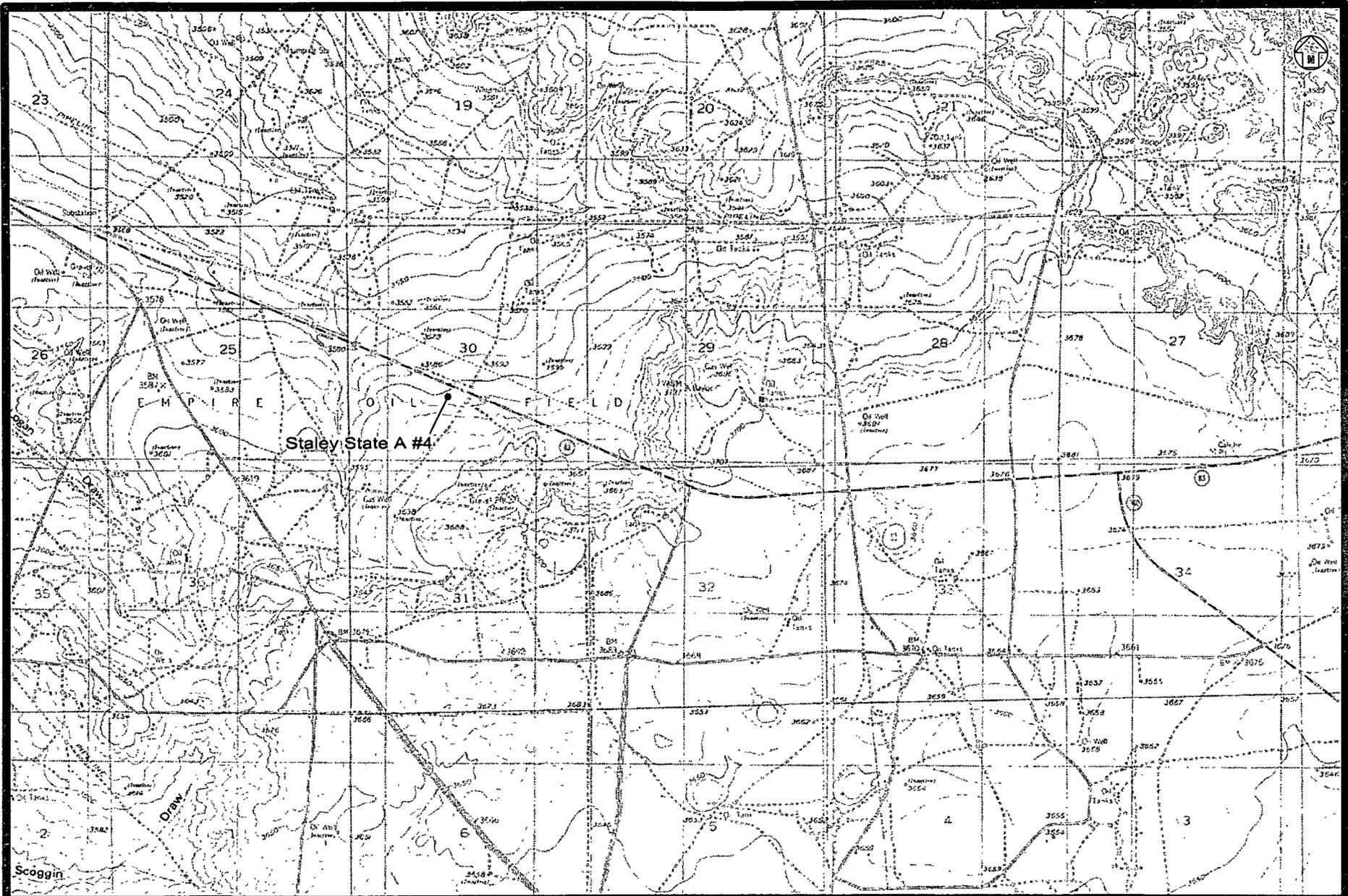
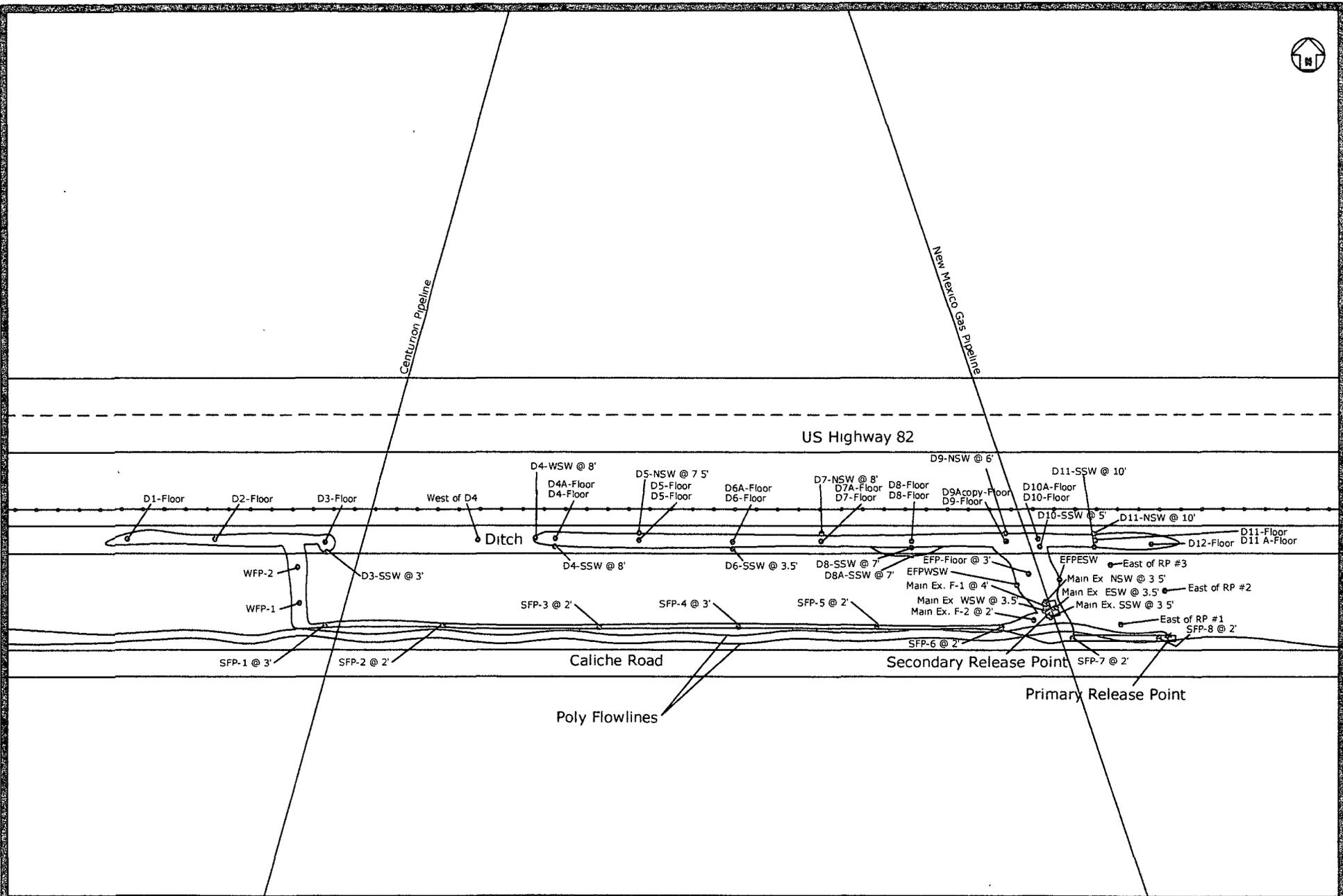


Figure 1
Site Location Map
Staley State A #4
 Lime Rock Resources
 Eddy County, New Mexico
 2RP-364

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
January 27, 2009	Scale 1"=3000'



Legend:

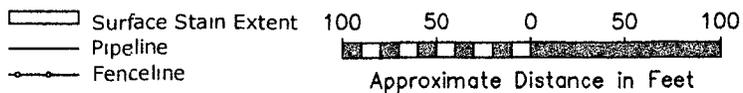


Figure 2
Site Map
 Lime Rock Resources
 Staley State A #4
 Eddy County, New Mexico
 2RP-364

Basin Environmental Consulting

Prep By CDS	Checked By CDS
November 18, 2009	Scale Approximately 1"=100'

Tables

Table 1

CONCENTRATIONS OF BTEX, TPH and CHLORIDES IN SOIL
LIME ROCK RESOURCES
STALEY STATE A #4
EDDY COUNTY, NEW MEXICO
2RP-364

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M				E 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 C6-C12 (mg/Kg)	DRO C12-C28 (mg/Kg)	ORO C28-C35 (mg/Kg)	TOTAL TPH C6-C35 (mg/Kg)	Chlorides (mg/Kg)
11/17/09	East of RP #1	Surface	In-Situ	<0.0013	<0.0027	<0.0013	<0.0027	<0.0013	<0.0027	<20.1	<20.1	<20.1	<20.1	210
11/17/09	East of RP #2	Surface	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.2	<19.2	<19.2	<19.2	221
11/17/09	East of RP #3	Surface	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.9	<18.9	<18.9	<18.9	137
11/17/09	Main Ex. NSW @ 3.5'	3.5 feet	In-Situ	-	-	-	-	-	-	-	-	-	-	355
11/17/09	Main Ex. SSW @ 3.5'	3.5 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.9	<17.9	<17.9	<17.9	195
11/17/09	Main Ex. WSW @ 3.5'	3.5 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.4	21.1	<18.4	21.1	129
11/17/09	Main Ex. ESW @ 3.5'	3.5 feet	In-Situ	-	-	-	-	-	-	-	-	-	-	381
11/17/09	Main Ex. F-1 @ 4'	4 feet	In-Situ	-	-	-	-	-	-	-	-	-	-	307
11/17/09	Main Ex. F-2 @ 2'	2 feet	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.8	<18.8	<18.8	<18.8	<26.3
11/19/09	SFP-1 @ 3'	3 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.7	<17.7	<17.7	<17.7	34.3
11/19/09	SFP-2 @ 2'	2 feet	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.4	<17.4	<17.4	<17.4	25.5
11/19/09	SFP-3 @ 2'	2 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	116	<18.0	<18.0	116	46.4
11/19/09	SFP-4 @ 3'	3 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.2	159	163	322	50.9
11/19/09	SFP-5 @ 2'	2 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.0	<18.0	<18.0	<18.0	59.8
11/19/09	SFP-6 @ 2'	2 feet	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.9	<18.9	<18.9	<18.9	38.3
11/19/09	SFP-7 @ 2'	2 feet	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.2	42.6	<19.2	42.6	59.7
11/19/09	SFP-8 @ 2'	2 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.2	<18.2	<18.2	<18.2	69.6
11/19/09	WFP-1	6 Inches	In-Situ	-	-	-	-	-	-	-	-	-	-	408
11/19/09	WFP-2	6 Inches	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.5	<17.5	<17.5	<17.5	<19.6
11/19/09	EFPWSW	1 foot	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.8	<18.8	<18.8	<18.8	149
11/19/09	EFP-Floor @ 3'	3 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.4	<18.4	<18.4	<18.4	54.3
11/19/09	EFPEWS	1 foot	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<19.3	<19.3	<19.3	<19.3	191
11/19/09	D1-Floor	-	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.5	<18.5	<18.5	<18.5	206
11/19/09	D2-Floor	-	In-Situ	-	-	-	-	-	-	-	-	-	-	429
11/19/09	D3-Floor	-	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.4	<18.4	<18.4	<18.4	190
11/19/09	D3-SSW @ 3'	3 feet	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.5	<17.5	<17.5	<17.5	230
11/19/09	D4-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	12,900
11/19/09	D5-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	2,140
11/19/09	D6-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	1,900
11/19/09	D7-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	15,600
11/19/09	D8-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	3,960
11/19/09	D9-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	433
11/19/09	D9-NSW @ 6'	6 feet	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.0	<17.0	<17.0	<17.0	175
11/19/09	D10-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	594

Table 1

CONCENTRATIONS OF BTEX, TPH and CHLORIDES IN SOIL
LIME ROCK RESOURCES
STALEY STATE A #4
EDDY COUNTY, NEW MEXICO
2RP-364

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						SW 848-8015M				E 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 C6-C12 (mg/Kg)	DRO C12-C28 (mg/Kg)	ORO C28-C35 (mg/Kg)	TOTAL TPH C6-C35 (mg/Kg)	Chlorides (mg/Kg)
11/19/09	D10-SSW @ 5'	5 feet	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.2	<19.2	<19.2	<19.2	177
11/19/09	D11-Floor	-	Excavated	-	-	-	-	-	-	-	-	-	-	748
11/19/09	D11-NSW @ 10'	10 feet	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.7	18.7	<18.7	<18.7	311
11/19/09	D11-SSW @ 10'	10 feet	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.4	<17.4	<17.4	<17.4	140
11/19/09	D12-Floor	-	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.7	18.7	<18.7	<18.7	42.6
11/30/09	West of D4	Surface	In-Situ	<0.0012	0.0172	<0.0012	<0.0024	<0.0012	<0.0024	54.5	484	177	716	10.2
12/10/09	D7A-Floor	9 feet	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.9	<18.9	<18.9	<18.9	255
12/10/09	D6A-Floor	4 feet	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	19	19.2	<18.7	38.2	327
12/10/09	D4A-Floor	9 feet	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.6	19.3	<18.6	19.3	304
12/10/09	D8A-Floor	8 feet	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.3	<19.3	<19.3	<19.3	160
12/10/09	D5A-Floor	8 feet	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.7	55	33.2	88.2	158
12/10/09	D9A-Floor	6 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.2	37	73.6	110.6	225
12/10/09	D10A-Floor	7 feet	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.1	93.9	<18.1	93.9	205
12/10/09	D11A-Floor	12 feet	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	20.3	22.1	<19.0	42.4	191
12/10/09	D6-SSW @ 3.5'	3.5'	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.0	<19.0	<19.0	<19.0	39.9
12/10/09	D5-NSW @ 7.5'	7.5'	In-Situ	<0.0013	<0.0026	<0.0013	<0.0026	<0.0013	<0.0026	<19.2	<19.2	<19.2	<19.2	139
12/10/09	D7-NSW @ 8'	8'	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0026	243	236	<18.6	479	<26.1
12/10/09	D4-WSW @ 8'	8'	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.5	22	<18.5	22	186
12/10/09	D8-SSW @ 7'	7'	Excavated	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.3	30	<18.3	30	6,280
12/10/09	D4-SSW @ 8'	8'	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	18.6	19.2	<18.5	37.8	32.2
12/21/09	D8A-SSW @ 7'	7'	In-Situ	-	-	-	-	-	-	-	-	-	-	80.4

Appendix A
Laboratory Analytical Reports

Analytical Report 353037

for

Basin Environmental Consulting, LLC

Project Manager: Curt Stanley

Staley State A # 4

Lime Rock Resources

02-FEB-10



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),

South Carolina(96031001), Louisiana(04154), Georgia(917)



02-FEB-10

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

Reference: XENCO Report No: **353037**
Staley State A # 4
Project Address: Eddy County, NM

Curt Stanley:

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 353037. 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. 353037 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II

Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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



Sample Cross Reference 353037



Basin Environmental Consulting, LLC, Lovington, NM
Staley State A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
East of RP # 1	S	Nov-17-09 10:00		353037-001
East of RP # 2	S	Nov-17-09 10:10		353037-002
East of RP # 3	S	Nov-17-09 10:20		353037-003
Main Ex. NSW @ 3.5'	S	Nov-17-09 14:20		353037-004
Main Ex. SSW @ 3.5'	S	Nov-17-09 14:25		353037-005
Main Ex. ESW @ 3.5'	S	Nov-17-09 14:30		353037-006
Main Ex. WSW @ 3.5'	S	Nov-17-09 14:35		353037-007
Main Ex. F-1 @ 4'	S	Nov-17-09 15:10		353037-008
Main Ex. F-2 @ 2'	S	Nov-17-09 15:20		353037-009
SFP-1 @ 3'	S	Nov-19-09 10:00		353037-010
SFP-2 @ 2'	S	Nov-19-09 10:05		353037-011
SFP-3 @ 2'	S	Nov-19-09 10:10		353037-012
SFP-4 @ 3'	S	Nov-19-09 10:15		353037-013
SFP-5 @ 2'	S	Nov-19-09 10:20		353037-014
SFP-6 @ 2'	S	Nov-19-09 10:30		353037-015
SFP-7 @ 2'	S	Nov-19-09 10:40		353037-016
SFP-8 @ 2'	S	Nov-19-09 10:50		353037-017
WFP-1	S	Nov-19-09 12:00		353037-018
WFP-2	S	Nov-19-09 12:05		353037-019
EFPWSW	S	Nov-19-09 13:10		353037-020
EFP-Floor @ 3'	S	Nov-19-09 13:15		353037-021
EFPEWS	S	Nov-19-09 13:20		353037-022
D1-Floor	S	Nov-19-09 14:05		353037-023
D2-Floor	S	Nov-19-09 14:10		353037-024
D3-Floor	S	Nov-19-09 14:15		353037-025
D4-Floor	S	Nov-19-09 14:20		353037-026
D3-SSW @ 3'	S	Nov-19-09 14:25		353037-027
D5-Floor	S	Nov-19-09 14:30		353037-028
D6-Floor	S	Nov-19-09 14:35		353037-029
D7-Floor	S	Nov-19-09 14:40		353037-030
D8-Floor	S	Nov-19-09 14:45		353037-031
D9-Floor	S	Nov-19-09 14:50		353037-032
D9-NSW @ 6'	S	Nov-19-09 15:00		353037-033
D10-Floor	S	Nov-19-09 15:05		353037-034
D10-SSW @ 5'	S	Nov-19-09 15:10		353037-035
D11-Floor	S	Nov-19-09 15:20		353037-036
D11-NSW @ 10'	S	Nov-19-09 15:30		353037-037
D11-SSW @ 10'	S	Nov-19-09 15:40		353037-038
D12-Floor	S	Nov-19-09 16:00		353037-039



CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC

Project Name: Staley State A # 4

Project ID: Lime Rock Resources
Work Order Number: 353037

Report Date: 02-FEB-10
Date Received: 11/20/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-782767 Percent Moisture

None

Batch: LBA-782775 Percent Moisture

None

Batch: LBA-782776 Percent Moisture

None

Batch: LBA-783001 Inorganic Anions by EPA 300

None

Batch: LBA-783006 Anions by E300

None

Batch: LBA-783011 Anions by E300

None

Batch: LBA-783611 TPH By SW8015 Mod

None

Batch: LBA-783656 TPH By SW8015 Mod

None



CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC

Project Name: Staley State A # 4

Project ID: Lime Rock Resources
Work Order Number: 353037

Report Date: 02-FEB-10
Date Received: 11/20/2009

Batch: LBA-783675 BTEX by EPA 8021B
SW8021BM

Batch 783675, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 353037-007, -011, -012, -017, -010, -016, -023, -025, -002, -015, -022, -005, -014, -019, -001, -003, -013, -021, -009, -020.

The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

Batch: LBA-783683 BTEX by EPA 8021B
SW8021BM

Batch 783683, Benzene, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 353037-033, -038, -039, -035, -037, -027.

The Laboratory Control Sample for m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits



Certificate of Analysis Summary 353037

Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-001	353037-002	353037-003	353037-004	353037-005	353037-006
	<i>Field Id:</i>	East of RP # 1	East of RP # 2	East of RP # 3	Main Ex NSW @ 3.5'	Main Ex. SSW @ 3.5'	Main Ex. ESW @ 3.5'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-17-09 10:00	Nov-17-09 10:10	Nov-17-09 10:20	Nov-17-09 14:20	Nov-17-09 14:25	Nov-17-09 14:30
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		210 56.4	221 27.0	137 26.6	355 52.7	195 50.3	381 99.7
BTEX by EPA 8021B	<i>Extracted:</i>	Nov-25-09 12:15	Nov-25-09 12:15	Nov-25-09 12:15		Nov-25-09 12:15	
	<i>Analyzed:</i>	Nov-27-09 19:25	Nov-27-09 19:47	Nov-27-09 20:08		Nov-27-09 20:29	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL		mg/kg RL	
Benzene		ND 0.0013	ND 0.0013	ND 0.0013		ND 0.0012	
Toluene		ND 0.0027	ND 0.0026	ND 0.0025		ND 0.0024	
Ethylbenzene		ND 0.0013	ND 0.0013	ND 0.0013		ND 0.0012	
m,p-Xylenes		ND 0.0027	ND 0.0026	ND 0.0025		ND 0.0024	
o-Xylene		ND 0.0013	ND 0.0013	ND 0.0013		ND 0.0012	
Total Xylenes		ND 0.0013	ND 0.0013	ND 0.0013		ND 0.0012	
Total BTEX		ND 0.0013	ND 0.0013	ND 0.0013		ND 0.0012	
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		25.5 1.00	22.2 1.00	20.9 1.00	20.4 1.00	16.4 1.00	15.7 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Nov-25-09 11:30	Nov-25-09 11:30	Nov-25-09 11:30		Nov-25-09 11:30	
	<i>Analyzed:</i>	Nov-26-09 16:30	Nov-26-09 16:55	Nov-26-09 17:22		Nov-26-09 17:47	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL		mg/kg RL	
C6-C12 Gasoline Range Hydrocarbons		ND 20.1	ND 19.2	ND 18.9		ND 17.9	
C12-C28 Diesel Range Hydrocarbons		ND 20.1	ND 19.2	ND 18.9		ND 17.9	
C28-C35 Oil Range Hydrocarbons		ND 20.1	ND 19.2	ND 18.9		ND 17.9	
Total TPH		ND 20.1	ND 19.2	ND 18.9		ND 17.9	

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

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Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037

Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-007	353037-008	353037-009	353037-010	353037-011	353037-012
	<i>Field Id:</i>	Main Ex. WSW @ 3.5'	Main Ex. F-1 @ 4'	Main Ex. F-2 @ 2'	SFP-1 @ 3'	SFP-2 @ 2'	SFP-3 @ 2'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-17-09 14:35	Nov-17-09 15:10	Nov-17-09 15:20	Nov-19-09 10:00	Nov-19-09 10:05	Nov-19-09 10:10
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08	Nov-23-09 09:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		129 25.9	307 52.1	ND 26.3	34.3 24.8	25.5 24.5	46.4 20.2
BTEX by EPA 8021B	<i>Extracted:</i>	Nov-25-09 12:15		Nov-25-09 12:15	Nov-25-09 12:15	Nov-25-09 12:15	Nov-25-09 12:15
	<i>Analyzed:</i>	Nov-27-09 20:50		Nov-27-09 21:12	Nov-27-09 21:33	Nov-27-09 21:54	Nov-27-09 22:15
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0012		ND 0.0013	ND 0.0012	ND 0.0012	ND 0.0012
Toluene		ND 0.0024		ND 0.0025	ND 0.0024	ND 0.0023	ND 0.0024
Ethylbenzene		ND 0.0012		ND 0.0013	ND 0.0012	ND 0.0012	ND 0.0012
m,p-Xylenes		ND 0.0024		ND 0.0025	ND 0.0024	ND 0.0023	ND 0.0024
o-Xylene		ND 0.0012		ND 0.0013	ND 0.0012	ND 0.0012	ND 0.0012
Total Xylenes		ND 0.0012		ND 0.0013	ND 0.0012	ND 0.0012	ND 0.0012
Total BTEX		ND 0.0012		ND 0.0013	ND 0.0012	ND 0.0012	ND 0.0012
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		18.8 1.00	19.4 1.00	20.1 1.00	15.2 1.00	14.3 1.00	16.8 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Nov-25-09 11:30		Nov-25-09 11:30	Nov-25-09 11:30	Nov-25-09 11:30	Nov-25-09 11:30
	<i>Analyzed:</i>	Nov-26-09 18:13		Nov-26-09 18:39	Nov-26-09 19:05	Nov-26-09 19:32	Nov-26-09 19:57
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 18.4		ND 18.8	ND 17.7	ND 17.4	116 18.0
C12-C28 Diesel Range Hydrocarbons		21.1 18.4		ND 18.8	ND 17.7	ND 17.4	ND 18.0
C28-C35 Oil Range Hydrocarbons		ND 18.4		ND 18.8	ND 17.7	ND 17.4	ND 18.0
Total TPH		21.1 18.4		ND 18.8	ND 17.7	ND 17.4	116 18.0

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

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037
Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-013	353037-014	353037-015	353037-016	353037-017	353037-018
	<i>Field Id:</i>	SFP-4 @ 3'	SFP-5 @ 2'	SFP-6 @ 2'	SFP-7 @ 2'	SFP-8 @ 2'	WFP-1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-19-09 10:15	Nov-19-09 10:20	Nov-19-09 10:30	Nov-19-09 10:40	Nov-19-09 10:50	Nov-19-09 12:00
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-23-09 09:08	Nov-23-09 17:00				
	<i>Units/RL:</i>	mg/kg RL					
Chloride		50.9 20.4	59.8 25.2	38.3 21.1	59.7 21.6	69.6 25.6	408 25.4
BTEX by EPA 8021B	<i>Extracted:</i>	Nov-25-09 12:15					
	<i>Analyzed:</i>	Nov-27-09 22:36	Nov-27-09 23:40	Nov-28-09 00:01	Nov-28-09 00:22	Nov-28-09 00:44	
	<i>Units/RL:</i>	mg/kg RL					
Benzene		ND 0.0012	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012	
Toluene		ND 0.0024	ND 0.0024	ND 0.0025	ND 0.0026	ND 0.0024	
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012	
m,p-Xylenes		ND 0.0024	ND 0.0024	ND 0.0025	ND 0.0026	ND 0.0024	
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012	
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012	
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012	
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-20-09 17:00					
	<i>Units/RL:</i>	% RL					
Percent Moisture		17.6 1.00	16.8 1.00	20.5 1.00	22.4 1.00	17.9 1.00	17.5 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Nov-25-09 11:30					
	<i>Analyzed:</i>	Nov-26-09 20:23	Nov-26-09 21:15	Nov-26-09 21:41	Nov-26-09 22:07	Nov-26-09 22:33	
	<i>Units/RL:</i>	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 18.2	ND 18.0	ND 18.9	ND 19.2	ND 18.2	
C12-C28 Diesel Range Hydrocarbons		159 18.2	ND 18.0	ND 18.9	42.6 19.2	ND 18.2	
C28-C35 Oil Range Hydrocarbons		163 18.2	ND 18.0	ND 18.9	ND 19.2	ND 18.2	
Total TPH		322 18.2	ND 18.0	ND 18.9	42.6 19.2	ND 18.2	

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Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037

Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	353037-019	353037-020	353037-021	353037-022	353037-023	353037-024
	Field Id:	WFP-2	EFPWSW	EFP-Floor @ 3'	EFPESW	D1-Floor	D2-Floor
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Nov-19-09 12:05	Nov-19-09 13:10	Nov-19-09 13:15	Nov-19-09 13:20	Nov-19-09 14:05	Nov-19-09 14:10
Anions by E300	Extracted:	Nov-23-09 17:00					
	Analyzed:	Nov-23-09 17:00					
	Units/RL:	mg/kg RL					
Chloride		ND 19.6	149 21.0	54.3 25.8	191 27.0	206 199	429 50.4
BTEX by EPA 8021B	Extracted:	Nov-25-09 12:15					
	Analyzed:	Nov-28-09 01:05	Nov-28-09 01:26	Nov-28-09 01:47	Nov-28-09 02:09	Nov-28-09 02:29	
	Units/RL:	mg/kg RL					
Benzene		ND 0.0012	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0012	
Toluene		ND 0.0023	ND 0.0025	ND 0.0024	ND 0.0025	ND 0.0025	
Ethylbenzene		ND 0.0012	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0012	
m,p-Xylenes		ND 0.0023	ND 0.0025	ND 0.0024	ND 0.0025	ND 0.0025	
o-Xylene		ND 0.0012	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0012	
Total Xylenes		ND 0.0012	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0012	
Total BTEX		ND 0.0012	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0012	
Percent Moisture	Extracted:	Nov-20-09 17:00					
	Analyzed:	Nov-20-09 17:00					
	Units/RL:	% RL					
Percent Moisture		14.3 1.00	20.0 1.00	18.7 1.00	22.2 1.00	19.4 1.00	16.7 1.00
TPH By SW8015 Mod	Extracted:	Nov-25-09 11:30					
	Analyzed:	Nov-26-09 22:58	Nov-26-09 23:24	Nov-26-09 23:50	Nov-27-09 00:16	Nov-27-09 00:42	
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 17.5	ND 18.8	ND 18.4	ND 19.3	ND 18.5	
C12-C28 Diesel Range Hydrocarbons		ND 17.5	ND 18.8	ND 18.4	ND 19.3	ND 18.5	
C28-C35 Oil Range Hydrocarbons		ND 17.5	ND 18.8	ND 18.4	ND 19.3	ND 18.5	
Total TPH		ND 17.5	ND 18.8	ND 18.4	ND 19.3	ND 18.5	

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Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037
Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources

Contact: Curt Stanley

Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-025	353037-026	353037-027	353037-028	353037-029	353037-030
	<i>Field Id:</i>	D3-Floor	D4-Floor	D3-SSW @ 3'	D5-Floor	D6-Floor	D7-Floor
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-19-09 14:15	Nov-19-09 14:20	Nov-19-09 14:25	Nov-19-09 14:30	Nov-19-09 14:35	Nov-19-09 14:40
Anions by E300	<i>Extracted:</i>	Nov-23-09 17:00					
	<i>Analyzed:</i>	Nov-23-09 17:00					
	<i>Units/RL:</i>	mg/kg RL					
Chloride		190 51.6	12900 544	230 49.1	2140 52.4	1900 51.8	15600 552
BTEX by EPA 8021B	<i>Extracted:</i>	Nov-25-09 12:15		Nov-25-09 12:30			
	<i>Analyzed:</i>	Nov-28-09 02:51		Nov-28-09 05:40			
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL			
Benzene		ND 0.0012		ND 0.0012			
Toluene		ND 0.0024		ND 0.0023			
Ethylbenzene		ND 0.0012		ND 0.0012			
m,p-Xylenes		ND 0.0024		ND 0.0023			
o-Xylene		ND 0.0012		ND 0.0012			
Total Xylenes		ND 0.0012		ND 0.0012			
Total BTEX		ND 0.0012		ND 0.0012			
Percent Moisture	<i>Extracted:</i>	Nov-20-09 17:00					
	<i>Analyzed:</i>	Nov-20-09 17:00					
	<i>Units/RL:</i>	% RL					
Percent Moisture		18.6 1.00	22.7 1.00	14.5 1.00	19.9 1.00	18.9 1.00	23.9 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Nov-25-09 11:30		Nov-25-09 11:30			
	<i>Analyzed:</i>	Nov-27-09 01:07		Nov-29-09 19:48			
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		ND 18.4		ND 17.5			
C12-C28 Diesel Range Hydrocarbons		ND 18.4		ND 17.5			
C28-C35 Oil Range Hydrocarbons		101 18.4		ND 17.5			
Total TPH		101 18.4		ND 17.5			

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037
Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources

Contact: Curt Stanley

Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-031	353037-032	353037-033	353037-034	353037-035	353037-036
	<i>Field Id:</i>	D8-Floor	D9-Floor	D9-NSW @ 6'	D10-Floor	D10-SSW @ 5'	D11-Floor
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-19-09 14:45	Nov-19-09 14:50	Nov-19-09 15:00	Nov-19-09 15:05	Nov-19-09 15:10	Nov-19-09 15:20
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-23-09 17:00	Nov-23-09 17:00	Nov-23-09 17:00	Nov-23-09 21:18	Nov-23-09 21:18	Nov-23-09 21:18
	<i>Units/RL:</i>	mg/kg RL					
Chloride		3960 102	433 49.6	175 23.8	594 25.6	177 26.8	748 213
BTEX by EPA 8021B	<i>Extracted:</i>			Nov-25-09 12:30		Nov-25-09 12:30	
	<i>Analyzed:</i>			Nov-28-09 06:01		Nov-28-09 06:22	
	<i>Units/RL:</i>			mg/kg RL		mg/kg RL	
Benzene				ND 0.0011		ND 0.0013	
Toluene				ND 0.0023		ND 0.0026	
Ethylbenzene				ND 0.0011		ND 0.0013	
m,p-Xylenes				ND 0.0023		ND 0.0026	
o-Xylene				ND 0.0011		ND 0.0013	
Total Xylenes				ND 0.0011		ND 0.0013	
Total BTEX				ND 0.0011		ND 0.0013	
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-20-09 17:00					
	<i>Units/RL:</i>	% RL					
Percent Moisture		18.0 1.00	15.3 1.00	11.9 1.00	17.8 1.00	21.8 1.00	21.1 1.00
TPH By SW8015 Mod	<i>Extracted:</i>			Nov-25-09 11:30		Nov-25-09 11:30	
	<i>Analyzed:</i>			Nov-29-09 20:14		Nov-29-09 20:39	
	<i>Units/RL:</i>			mg/kg RL		mg/kg RL	
C6-C12 Gasoline Range Hydrocarbons				ND 17.0		ND 19.2	
C12-C28 Diesel Range Hydrocarbons				ND 17.0		ND 19.2	
C28-C35 Oil Range Hydrocarbons				ND 17.0		ND 19.2	
Total TPH				ND 17.0		ND 19.2	

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 353037
Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Fri Nov-20-09 09:55 am

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	353037-037	353037-038	353037-039			
	<i>Field Id:</i>	D11-NSW @ 10'	D11-SSW @ 10'	D12-Floor			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Nov-19-09 15:30	Nov-19-09 15:40	Nov-19-09 16:00			
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-23-09 21:18	Nov-23-09 21:18	Nov-23-09 21:18			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		311 105	140 24.3	42.6 26.2			
BTEX by EPA 8021B	<i>Extracted:</i>	Nov-25-09 12:30	Nov-25-09 12:30	Nov-25-09 12:30			
	<i>Analyzed:</i>	Nov-28-09 06:43	Nov-28-09 07:04	Nov-28-09 07:25			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		ND 0.0012	ND 0.0012	ND 0.0012			
Toluene		ND 0.0025	ND 0.0023	ND 0.0025			
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0012			
m,p-Xylenes		ND 0.0025	ND 0.0023	ND 0.0025			
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0012			
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0012			
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0012			
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Nov-20-09 17:00	Nov-20-09 17:00	Nov-20-09 17:00			
	<i>Units/RL:</i>	% RL	% RL	% RL			
Percent Moisture		19.8 1.00	13.7 1.00	19.9 1.00			
TPH By SW8015 Mod	<i>Extracted:</i>	Nov-25-09 11:30	Nov-25-09 11:30	Nov-25-09 11:30			
	<i>Analyzed:</i>	Nov-29-09 21:05	Nov-29-09 21:30	Nov-29-09 21:56			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		ND 18.7	ND 17.4	ND 18.7			
C12-C28 Diesel Range Hydrocarbons		ND 18.7	ND 17.4	ND 18.7			
C28-C35 Oil Range Hydrocarbons		ND 18.7	ND 17.4	ND 18.7			
Total TPH		ND 18.7	ND 17.4	ND 18.7			

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 Brent Barron, II
 Odessa Laboratory Manager



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- * Outside XENCO's scope of NELAC Accreditation.

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2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lanc, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783675

Sample: 544333-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/27/09 18:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0291	0.0300	97	80-120	

Lab Batch #: 783675

Sample: 544333-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/27/09 18:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0288	0.0300	96	80-120	

Lab Batch #: 783675

Sample: 544333-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/27/09 19:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 783675

Sample: 353037-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 19:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 783675

Sample: 353037-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 19:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783675

Sample: 353037-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0270	0.0300	90	80-120	
4-Bromofluorobenzenc	0.0293	0.0300	98	80-120	

Lab Batch #: 783675

Sample: 353037-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 20:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0272	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0303	0.0300	101	80-120	

Lab Batch #: 783675

Sample: 353037-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 20:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0273	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0310	0.0300	103	80-120	

Lab Batch #: 783675

Sample: 353037-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 21:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0302	0.0300	101	80-120	

Lab Batch #: 783675

Sample: 353037-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 21:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0308	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783675

Sample: 353037-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 21:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0274	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0305	0.0300	102	80-120	

Lab Batch #: 783675

Sample: 353037-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 22:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0270	0.0300	90	80-120	
4-Bromofluorobenzenc	0.0304	0.0300	101	80-120	

Lab Batch #: 783675

Sample: 353037-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 22:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0275	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0309	0.0300	103	80-120	

Lab Batch #: 783675

Sample: 353037-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 23:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0295	0.0300	98	80-120	

Lab Batch #: 783675

Sample: 353037-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 00:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0266	0.0300	89	80-120	
4-Bromofluorobenzenc	0.0293	0.0300	98	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783675

Sample: 353037-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 00:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0269	0.0300	90	80-120	
4-Bromofluorobenzenc	0.0301	0.0300	100	80-120	

Lab Batch #: 783675

Sample: 353037-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 00:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0273	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0293	0.0300	98	80-120	

Lab Batch #: 783675

Sample: 353037-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 01:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0271	0.0300	90	80-120	
4-Bromofluorobenzenc	0.0294	0.0300	98	80-120	

Lab Batch #: 783675

Sample: 353037-020 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 01:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0302	0.0300	101	80-120	

Lab Batch #: 783675

Sample: 353037-021 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 01:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0278	0.0300	93	80-120	
4-Bromofluorobenzenc	0.0304	0.0300	101	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783675

Sample: 353037-022 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 02:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 783675

Sample: 353037-023 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 02:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 783675

Sample: 353037-025 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 02:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 783675

Sample: 353037-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 03:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 783675

Sample: 353037-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 03:33

SURROGATE RECOVERY STUDY

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783683

Sample: 544334-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/28/09 04:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0300	0.0300	100	80-120	
4-Bromofluorobenzenc	0.0298	0.0300	99	80-120	

Lab Batch #: 783683

Sample: 544334-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/28/09 04:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0296	0.0300	99	80-120	
4-Bromofluorobenzenc	0.0302	0.0300	101	80-120	

Lab Batch #: 783683

Sample: 544334-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/28/09 05:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0267	0.0300	89	80-120	
4-Bromofluorobenzenc	0.0293	0.0300	98	80-120	

Lab Batch #: 783683

Sample: 353037-027 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 05:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0279	0.0300	93	80-120	
4-Bromofluorobenzenc	0.0318	0.0300	106	80-120	

Lab Batch #: 783683

Sample: 353037-033 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 06:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0322	0.0300	107	80-120	

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



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783683

Sample: 353037-035 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 06:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0275	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0309	0.0300	103	80-120	

Lab Batch #: 783683

Sample: 353037-037 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 06:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0277	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0322	0.0300	107	80-120	

Lab Batch #: 783683

Sample: 353037-038 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 07:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0279	0.0300	93	80-120	
4-Bromofluorobenzenc	0.0316	0.0300	105	80-120	

Lab Batch #: 783683

Sample: 353037-039 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/28/09 07:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0277	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0302	0.0300	101	80-120	

Lab Batch #: 783683

Sample: 353037-027 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 00:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0253	0.0300	84	80-120	
4-Bromofluorobenzenc	0.0289	0.0300	96	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783683

Sample: 353037-027 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 00:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 783611

Sample: 544343-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/26/09 15:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	118	99.6	118	70-135	
o-Terphenyl	49.3	49.8	99	70-135	

Lab Batch #: 783611

Sample: 544343-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/26/09 15:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	52.9	50.0	106	70-135	

Lab Batch #: 783611

Sample: 544343-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/26/09 16:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	89.6	100	90	70-135	
o-Terphenyl	56.7	50.0	113	70-135	

Lab Batch #: 783611

Sample: 353037-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 16:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.5	99.6	97	70-135	
o-Terphenyl	61.5	49.8	123	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783611

Sample: 353037-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 16:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.2	99.8	95	70-135	
o-Terphenyl	60.0	49.9	120	70-135	

Lab Batch #: 783611

Sample: 353037-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 17:22

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.5	99.9	83	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

Lab Batch #: 783611

Sample: 353037-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 17:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	100	88	70-135	
o-Terphenyl	54.2	50.0	108	70-135	

Lab Batch #: 783611

Sample: 353037-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 18:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.4	99.6	74	70-135	
o-Terphenyl	42.7	49.8	86	70-135	

Lab Batch #: 783611

Sample: 353037-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 18:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.6	99.9	81	70-135	
o-Terphenyl	48.1	50.0	96	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783611

Sample: 353037-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 19:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	70.9	100	71	70-135	
o-Terphenyl	43.0	50.0	86	70-135	

Lab Batch #: 783611

Sample: 353037-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 19:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.4	99.7	83	70-135	
o-Terphenyl	50.9	49.9	102	70-135	

Lab Batch #: 783611

Sample: 353037-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 19:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.1	100	88	70-135	
o-Terphenyl	54.0	50.0	108	70-135	

Lab Batch #: 783611

Sample: 353037-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 20:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.8	100	85	70-135	
o-Terphenyl	51.9	50.0	104	70-135	

Lab Batch #: 783611

Sample: 353037-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 21:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	99.9	82	70-135	
o-Terphenyl	49.4	50.0	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783611

Sample: 353037-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 21:41

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.0	99.9	84	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 783611

Sample: 353037-016 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 22:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.6	99.6	85	70-135	
o-Terphenyl	51.4	49.8	103	70-135	

Lab Batch #: 783611

Sample: 353037-017 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 22:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.6	99.6	83	70-135	
o-Terphenyl	49.7	49.8	100	70-135	

Lab Batch #: 783611

Sample: 353037-019 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 22:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.7	100	92	70-135	
o-Terphenyl	55.9	50.0	112	70-135	

Lab Batch #: 783611

Sample: 353037-020 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 23:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.8	100	81	70-135	
o-Terphenyl	48.6	50.0	97	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783611

Sample: 353037-021 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/26/09 23:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.4	99.9	88	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 783611

Sample: 353037-022 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 00:16

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.1	100	83	70-135	
o-Terphenyl	50.5	50.0	101	70-135	

Lab Batch #: 783611

Sample: 353037-023 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 00:42

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.5	99.5	85	70-135	
o-Terphenyl	52.3	49.8	105	70-135	

Lab Batch #: 783611

Sample: 353037-025 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 01:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.1	99.7	85	70-135	
o-Terphenyl	52.6	49.9	105	70-135	

Lab Batch #: 783611

Sample: 353037-019 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 01:33

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	99.7	129	70-135	
o-Terphenyl	57.9	49.9	116	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783611

Sample: 353037-019 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/27/09 01:59

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	113	99.8	113	70-135	
o-Terphenyl	46.6	49.9	93	70-135	

Lab Batch #: 783656

Sample: 544365-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/29/09 18:32

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	118	99.9	118	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

Lab Batch #: 783656

Sample: 544365-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/29/09 18:57

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	120	99.8	120	70-135	
o-Terphenyl	49.9	49.9	100	70-135	

Lab Batch #: 783656

Sample: 544365-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/29/09 19:23

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	84.9	99.9	85	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

Lab Batch #: 783656

Sample: 353037-027 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 19:48

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	85.5	100	86	70-135	
o-Terphenyl	51.8	50.0	104	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783656

Sample: 353037-033 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 20:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.8	99.7	89	70-135	
o-Terphenyl	54.0	49.9	108	70-135	

Lab Batch #: 783656

Sample: 353037-035 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 20:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.6	99.9	87	70-135	
o-Terphenyl	51.9	50.0	104	70-135	

Lab Batch #: 783656

Sample: 353037-037 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 21:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.4	100	81	70-135	
o-Terphenyl	49.0	50.0	98	70-135	

Lab Batch #: 783656

Sample: 353037-038 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 21:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.3	100	84	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 783656

Sample: 353037-039 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/29/09 21:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.4	100	81	70-135	
o-Terphenyl	49.2	50.0	98	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: Staley State A # 4

Work Orders : 353037,

Project ID: Lime Rock Resources

Lab Batch #: 783656

Sample: 353037-027 S / MS

Batch: 1 **Matrix:** Soil

Units: mg/kg

Date Analyzed: 11/30/09 02:10

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	122	99.9	122	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 783656

Sample: 353037-027 SD / MSD

Batch: 1 **Matrix:** Soil

Units: mg/kg

Date Analyzed: 11/30/09 02:35

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	119	99.6	119	70-135	
o-Terphenyl	51.9	49.8	104	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



Blank Spike Recovery



Project Name: Staley State A # 4

Work Order #: 353037

Project ID: Lime Rock Resources

Lab Batch #: 783001

Sample: 783001-1-BKS

Matrix: Solid

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.9	109	75-125	

Lab Batch #: 783006

Sample: 783006-1-BKS

Matrix: Solid

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.5	105	75-125	

Lab Batch #: 783011

Sample: 783011-1-BKS

Matrix: Solid

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.7	107	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]

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

BRL - Below Reporting Limit



BS / BSD Recoveries



Project Name: Staley State A # 4

Work Order #: 353037

Analyst: ASA

Date Prepared: 11/25/2009

Project ID: Lime Rock Resources

Date Analyzed: 11/27/2009

Lab Batch ID: 783675

Sample: 544333-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	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
Analytes											
Benzene	ND	0.1000	0.0915	92	0.1	0.0956	96	4	70-130	35	
Toluene	ND	0.1000	0.0908	91	0.1	0.0917	92	1	70-130	35	
Ethylbenzene	ND	0.1000	0.0880	88	0.1	0.0899	90	2	71-129	35	
m,p-Xylenes	ND	0.2000	0.1886	94	0.2	0.1864	93	1	70-135	35	
o-Xylene	ND	0.1000	0.0951	95	0.1	0.0910	91	4	71-133	35	

Analyst: ASA

Date Prepared: 11/25/2009

Date Analyzed: 11/28/2009

Lab Batch ID: 783683

Sample: 544334-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	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
Analytes											
Benzene	ND	0.1000	0.0928	93	0.1	0.0930	93	0	70-130	35	
Toluene	ND	0.1000	0.0932	93	0.1	0.0929	93	0	70-130	35	
Ethylbenzene	ND	0.1000	0.0894	89	0.1	0.0888	89	1	71-129	35	
m,p-Xylenes	ND	0.2000	0.1916	96	0.2	0.1901	95	1	70-135	35	
o-Xylene	ND	0.1000	0.0965	97	0.1	0.0966	97	0	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: Staley State A # 4

Work Order #: 353037

Analyst: BEV

Date Prepared: 11/25/2009

Project ID: Lime Rock Resources

Date Analyzed: 11/26/2009

Lab Batch ID: 783611

Sample: 544343-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	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
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	996	925	93	1000	964	96	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	996	904	91	1000	823	82	9	70-135	35	

Analyst: BEV

Date Prepared: 11/25/2009

Date Analyzed: 11/29/2009

Lab Batch ID: 783656

Sample: 544365-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	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
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	999	908	91	998	929	93	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	999	880	88	998	907	91	3	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: Staley State A # 4

Work Order #: 353037

Lab Batch #: 783001

Date Analyzed: 11/23/2009

QC- Sample ID: 353024-001 S

Reporting Units: mg/kg

Project ID: Lime Rock Resources

Analyst: LATCOR

Date Prepared: 11/23/2009

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	45.3	405	469	105	75-125	

Lab Batch #: 783006

Date Analyzed: 11/23/2009

QC- Sample ID: 353037-014 S

Reporting Units: mg/kg

Date Prepared: 11/23/2009

Analyst: LATCOR

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	59.8	661	750	104	75-125	

Lab Batch #: 783011

Date Analyzed: 11/23/2009

QC- Sample ID: 353037-034 S

Reporting Units: mg/kg

Date Prepared: 11/23/2009

Analyst: LATCOR

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	594	669	1300	106	75-125	

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: Staley State A # 4

Work Order #: 353037

Project ID: Lime Rock Resources

Lab Batch ID: 783675

QC- Sample ID: 353037-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 11/28/2009

Date Prepared: 11/25/2009

Analyst: ASA

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	ND	0.1343	0.0880	66	0.1343	0.0845	63	4	70-130	35	X
Toluene	ND	0.1343	0.0844	63	0.1343	0.0817	61	3	70-130	35	X
Ethylbenzene	ND	0.1343	0.0847	63	0.1343	0.0816	61	4	71-129	35	X
m,p-Xylenes	ND	0.2685	0.1664	62	0.2685	0.1680	63	1	70-135	35	X
o-Xylene	ND	0.1343	0.0884	66	0.1343	0.0893	66	1	71-133	35	X

Lab Batch ID: 783683

QC- Sample ID: 353037-027 S

Batch #: 1 Matrix: Soil

Date Analyzed: 11/29/2009

Date Prepared: 11/25/2009

Analyst: ASA

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	ND	0.1170	0.0632	54	0.1163	0.0629	54	0	70-130	35	X
Toluene	ND	0.1170	0.1205	103	0.1163	0.0983	85	20	70-130	35	
Ethylbenzene	ND	0.1170	0.0607	52	0.1163	0.0626	54	3	71-129	35	X
m,p-Xylenes	ND	0.2340	0.1529	65	0.2326	0.1457	63	5	70-135	35	X
o-Xylene	ND	0.1170	0.0698	60	0.1163	0.0665	57	5	71-133	35	X

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: Staley State A # 4

Work Order #: 353037

Project ID: Lime Rock Resources

Lab Batch ID: 783611

QC- Sample ID: 353037-019 S

Batch #: 1 Matrix: Soil

Date Analyzed: 11/27/2009

Date Prepared: 11/25/2009

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1160	1120	97	1160	1130	97	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1160	868	75	1160	884	76	2	70-135	35	

Lab Batch ID: 783656

QC- Sample ID: 353037-027 S

Batch #: 1 Matrix: Soil

Date Analyzed: 11/30/2009

Date Prepared: 11/25/2009

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1170	1060	91	1170	1050	90	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1170	856	73	1170	1030	88	18	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



Sample Duplicate Recovery



Project Name: Staley State A # 4

Work Order #: 353037

Lab Batch #: 783001

Project ID: Lime Rock Resources

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

QC- Sample ID: 353024-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	45.3	46.4	2	20	

Lab Batch #: 783006

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

QC- Sample ID: 353037-014 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	59.8	53.4	11	20	

Lab Batch #: 783011

Date Analyzed: 11/23/2009

Date Prepared: 11/23/2009

Analyst: LATCOR

QC- Sample ID: 353037-034 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	594	607	2	20	

Lab Batch #: 782767

Date Analyzed: 11/20/2009

Date Prepared: 11/20/2009

Analyst: WRU

QC- Sample ID: 352913-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	13.3	14.0	5	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



Sample Duplicate Recovery



Project Name: Staley State A # 4

Work Order #: 353037

Lab Batch #: 782775

Project ID: Lime Rock Resources

Date Analyzed: 11/20/2009

Date Prepared: 11/20/2009

Analyst: WRU

QC- Sample ID: 353037-015 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	20.5	20.4	0	20	

Lab Batch #: 782776

Date Analyzed: 11/20/2009

Date Prepared: 11/20/2009

Analyst: WRU

QC- Sample ID: 353037-035 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	21.8	19.5	11	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

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

BRL - Below Reporting Limit

Environmental Lab of Texas
 Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env.
 Date/ Time: 11-20-09 @ 0955
 Lab ID #: 353037
 Initials: JMF

Sample Receipt Checklist

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

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Jeanne Fitch

From: Curt D. Stanley [cstanley@basinenv.com]
Sent: Tuesday, November 24, 2009 2:53 PM
To: Jeanne Fitch
Cc: Camille Bryant w/Basin
Subject: Re: WO#353037 Staley State A #4 (chlorides)
Jeanne,

Please proceed with BTEX / TPH analysis on all samples exhibiting chloride concentrations less than 250 ppm. In addition, please run BTEX / TPH on samples #27 and #37.

Thanks as always,

Curt

----- Original Message -----

From: Jeanne Fitch
To: 'Curt D. Stanley'; 'Camille J. Bryant'
Sent: Tuesday, November 24, 2009 10:43 AM
Subject: Re: WO#353037 Staley State A #4 (chlorides)

Hi Curt,

Here are your chloride results. Let me know if you want to proceed with the BTEX/TPH analysis as noted on your COC.

Thank You,

Jeanne Fitch

*Environmental Lab of Texas
a Xenco Company
12600 West I-20 East
Odessa, TX 79765
(432) 563-1800 ext. 1701*

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11/24/2009

Analytical Report 353806

for

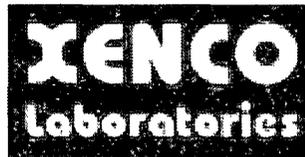
Basin Environmental Consulting, LLC

Project Manager: Curt Stanley

Staley State A # 4

Lime Rock Resources

08-DEC-09



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),

South Carolina(96031001), Louisiana(04154), Georgia(917)



08-DEC-09

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

Reference: XENCO Report No: **353806**
Staley State A # 4
Project Address: Eddy County, NM

Curt Stanley:

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 353806. 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. 353806 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

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Sample Cross Reference 353806



Basin Environmental Consulting, LLC, Lovington, NM
Staley State A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West of D4	S	Nov-30-09 10:05		353806-001



CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC

Project Name: Staley State A # 4

Project ID: Lime Rock Resources
Work Order Number: 353806

Report Date: 08-DEC-09
Date Received: 12/01/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-783922 Inorganic Anions by EPA 300
None

Batch: LBA-784036 TPH By SW8015 Mod
None

Batch: LBA-784038 Percent Moisture
None

Batch: LBA-784762 BTEX by EPA 8021B
SW8021BM

Batch 784762, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 353806-001.

The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits



Certificate of Analysis Summary 353806
Basin Environmental Consulting, LLC, Lovington, NM



Project Id: Lime Rock Resources

Project Name: Staley State A # 4

Date Received in Lab: Tue Dec-01-09 11:23 am

Contact: Curt Stanley

Report Date: 08-DEC-09

Project Location: Eddy County, NM

Project Manager: Brent Barron, II

Analysis Requested	<i>Lab Id:</i> 353806-001					
	<i>Field Id:</i> West of D4					
	<i>Depth:</i>					
	<i>Matrix:</i> SOIL					
	<i>Sampled:</i> Nov-30-09 10:05					
Anions by E300	<i>Extracted:</i>					
	<i>Analyzed:</i> Dec-01-09 12:02					
	<i>Units/RL:</i> mg/kg RL					
Chloride		10.2	4.75			
BTEX by EPA 8021B	<i>Extracted:</i> Dec-07-09 14:35					
	<i>Analyzed:</i> Dec-07-09 16:33					
	<i>Units/RL:</i> mg/kg RL					
Benzene		ND	0.0012			
Toluene		0.0172	0.0024			
Ethylbenzene		ND	0.0012			
m,p-Xylenes		ND	0.0024			
o-Xylene		ND	0.0012			
Total Xylenes		ND	0.0012			
Total BTEX		0.0172	0.0012			
Percent Moisture	<i>Extracted:</i>					
	<i>Analyzed:</i> Dec-01-09 17:00					
	<i>Units/RL:</i> % RL					
Percent Moisture		15.7	1.00			
TPH By SW8015 Mod	<i>Extracted:</i> Dec-01-09 13:00					
	<i>Analyzed:</i> Dec-02-09 13:30					
	<i>Units/RL:</i> mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		54.5	17.8			
C12-C28 Diesel Range Hydrocarbons		484	17.8			
C28-C35 Oil Range Hydrocarbons		177	17.8			
Total TPH		716	17.8			

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

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Brent Barron, II
 Odessa Laboratory Manager



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- * Outside XENCO's scope of NELAC Accreditation.

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 353806,

Project ID: Lime Rock Resources

Lab Batch #: 784762

Sample: 544968-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/07/09 15:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 784762

Sample: 544968-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/07/09 16:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 784762

Sample: 353806-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/07/09 16:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 784762

Sample: 353806-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/07/09 19:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 784762

Sample: 353806-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/07/09 20:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	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: Staley State A # 4

Work Orders : 353806,

Project ID: Lime Rock Resources

Lab Batch #: 784036

Sample: 544563-1-BKS / BKS

Batch: 1 **Matrix:** Solid

Units: mg/kg

Date Analyzed: 12/02/09 10:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.9	113	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 784036

Sample: 544563-1-BSD / BSD

Batch: 1 **Matrix:** Solid

Units: mg/kg

Date Analyzed: 12/02/09 10:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	46.9	50.0	94	70-135	

Lab Batch #: 784036

Sample: 544563-1-BLK / BLK

Batch: 1 **Matrix:** Solid

Units: mg/kg

Date Analyzed: 12/02/09 11:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.9	101	70-135	
o-Terphenyl	58.3	50.0	117	70-135	

Lab Batch #: 784036

Sample: 353806-001 / SMP

Batch: 1 **Matrix:** Soil

Units: mg/kg

Date Analyzed: 12/02/09 13:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	55.5	50.0	111	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.



Blank Spike Recovery



Project Name: Staley State A # 4

Work Order #: 353806

Project ID: Lime Rock Resources

Lab Batch #: 784762

Sample: 544968-1-BKS

Matrix: Solid

Date Analyzed: 12/07/2009

Date Prepared: 12/07/2009

Analyst: ASA

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.1000	0.0943	94	70-130	
Toluene	ND	0.1000	0.0979	98	70-130	
Ethylbenzene	0.0010	0.1000	0.0952	95	71-129	
m,p-Xylenes	ND	0.2000	0.1956	98	70-135	
o-Xylene	ND	0.1000	0.1027	103	71-133	

Lab Batch #: 783922

Sample: 783922-1-BKS

Matrix: Solid

Date Analyzed: 12/01/2009

Date Prepared: 12/01/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.13	91	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes

BRL - Below Reporting Limit



BS / BSD Recoveries



Project Name: Staley State A # 4

Work Order #: 353806

Analyst: BEV

Lab Batch ID: 784036

Units: mg/kg

Sample: 544563-1-BKS

Date Prepared: 12/01/2009

Batch #: 1

Project ID: Lime Rock Resources

Date Analyzed: 12/02/2009

Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	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
Analytes											
C6-C12 Gasoline Range Hydrocarbons	20.1	999	1070	107	1000	999	100	7	70-135	35	
C12-C28 Diesel Range Hydrocarbons	40.8	999	1000	100	1000	922	92	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 Recoveries



Project Name: Staley State A # 4

Work Order #: 353806

Lab Batch #: 783922

Date Analyzed: 12/01/2009

Date Prepared: 12/01/2009

Project ID: Lime Rock Resources

Analyst: LATCOR

QC- Sample ID: 353750-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	2200	1070	3260	99	75-125	

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: Staley State A # 4

Work Order #: 353806

Project ID: Lime Rock Resources

Lab Batch ID: 784762

QC- Sample ID: 353806-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/07/2009

Date Prepared: 12/07/2009

Analyst: ASA

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	ND	0.1187	0.0664	56	0.1184	0.0773	65	15	70-130	35	X
Toluene	0.0172	0.1187	0.0589	35	0.1184	0.0649	40	10	70-130	35	X
Ethylbenzene	ND	0.1187	0.0545	46	0.1184	0.0600	51	10	71-129	35	X
m,p-Xylenes	ND	0.2374	0.1040	44	0.2369	0.1122	47	8	70-135	35	X
o-Xylene	ND	0.1187	0.0604	51	0.1184	0.0660	56	9	71-133	35	X

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

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

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



Sample Duplicate Recovery



Project Name: Staley State A # 4

Work Order #: 353806

Lab Batch #: 783922

Project ID: Lime Rock Resources

Date Analyzed: 12/01/2009

Date Prepared: 12/01/2009

Analyst: LATCOR

QC- Sample ID: 353750-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	2200	2050	7	20	

Lab Batch #: 784038

Date Analyzed: 12/01/2009

Date Prepared: 12/01/2009

Analyst: WRU

QC- Sample ID: 353784-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	6.01	6.79	12	20	

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Curt Stanley PAGE 01 OF 01

Project Name: Staley State A #4

Company Name: Basin Environmental Consulting, LLC

Project #: Lime Rock Resources

Company Address: P. O. Box 381

Project Loc: Eddy County, NM

City/State/Zip: Lovington, NM 88260

PO #: _____

Telephone No: (505) 441-2244

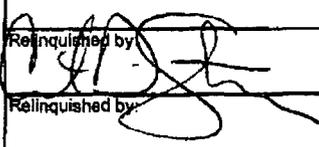
Fax No: (505) 396-1429

Report Format: Standard TRRP NPDES

Sampler Signature: 

e-mail: cstanley@basinenv.com

(lab use only)		Analyze For:																											
ORDER #:	LAB # (lab use only)	TCLP TOTAL: <input checked="" type="checkbox"/>																											
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers				Matrix		TPH: 418.1	TPH: TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi-volatiles	BTEX 802181530 or BTEX 8280	RCI	N.O.R.M	PAH 8270	TDS (EPA METHOD SM 2540c)	CHLORIDES (E 300)	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	West of D4			11/30/2009	1005		1	X														X						X	X

Special Instructions:						Laboratory Comments:					
Relinquished by: <u></u>	Date: <u>12/1/09</u>	Time: <u>1123</u>	Received by:	Date:	Time:	VOCs Free of Headspace?	<u></u> N				
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Custody seals on container(s)?	<u></u> N				
Relinquished by:	Date:	Time:	Received by: <u>Andrea Pen</u>	Date: <u>12-1-09</u>	Time: <u>11:23</u>	Sample Hand Delivered by Sampler/Client Rep.?	<u></u> N				
						by Courier? UPS DHL FedEx Lone Star	<u>4oz glass</u> N				
						Temperature Upon Receipt:	<u>1.6</u> °C				

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env.
 Date/ Time: 12.1.09 11:23
 Lab ID #: 353806
 Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	<input checked="" type="checkbox"/> Yes	No	1.6 °C	
#2 Shipping container in good condition?	<input checked="" type="checkbox"/> Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	<input checked="" type="checkbox"/> Yes	No	Not Present	
#5 Chain of Custody present?	<input checked="" type="checkbox"/> Yes	No		
#6 Sample instructions complete of Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
#7 Chain of Custody signed when relinquished/ received?	<input checked="" type="checkbox"/> Yes	No		
#8 Chain of Custody agrees with sample label(s)?	<input checked="" type="checkbox"/> Yes	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	<input checked="" type="checkbox"/> Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
#11 Containers supplied by ELOT?	<input checked="" type="checkbox"/> Yes	No		
#12 Samples in proper container/ bottle?	<input checked="" type="checkbox"/> Yes	No	See Below	
#13 Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	See Below	
#14 Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No		
#15 Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
#16 Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No		
#17 Sufficient sample amount for indicated test(s)?	<input checked="" type="checkbox"/> Yes	No	See Below	
#18 All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	Not Applicable	
#20 VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 355585

for

Basin Environmental Consulting, LLC

Project Manager: Curt Stanley

Staley State A # 4

Lime Rock Resources

02-FEB-10



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (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 (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida (E86240),

South Carolina (96031001), Louisiana (04154), Georgia (917)



02-FEB-10

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

Reference: XENCO Report No: **355585**
Staley State A # 4
Project Address: Eddy County, NM

Curt Stanley:

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 355585. 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. 355585 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

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Sample Cross Reference 355585



Basin Environmental Consulting, LLC, Lovington, NM
Staley State A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
D 7A-Floor	S	Dec-10-09 09:10		355585-001
D 6 A - Floor	S	Dec-10-09 09:20		355585-002
D 4 A - Floor	S	Dec-10-09 09:40		355585-003
D 8 A - Floor	S	Dec-10-09 10:00		355585-004
D 5 A - Floor	S	Dec-10-09 11:15		355585-005
D 9 A - Floor	S	Dec-10-09 11:30		355585-006
D 10 A - Floor	S	Dec-10-09 11:50		355585-007
D 11 A - Floor	S	Dec-10-09 12:05		355585-008
D 6 - SSW @ 3.5'	S	Dec-10-09 12:15		355585-009
D 5 - NSW @ 7.5'	S	Dec-10-09 12:25		355585-010
D 7 - NSW @ 8'	S	Dec-10-09 12:40		355585-011
D 4 - WSW @ 8'	S	Dec-10-09 12:55		355585-012
D 8 - SSW @ 7'	S	Dec-10-09 13:05		355585-013
D 4 - SSW @ 8'	S	Dec-10-09 13:15		355585-014



CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC

Project Name: Staley State A # 4

Project ID: Lime Rock Resources
Work Order Number: 355585

Report Date: 02-FEB-10
Date Received: 12/14/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-785868 Anions by E300
None

Batch: LBA-785882 Percent Moisture
None

Batch: LBA-786163 TPH By SW8015 Mod
None

Batch: LBA-786278 BTEX by EPA 8021B
SW8021BM

Batch 786278, m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 355585-006, -001, -002, -003, -005, -004.
The Laboratory Control Sample for m,p-Xylenes is within laboratory Control Limits

Batch: LBA-786459 BTEX by EPA 8021B
SW8021BM

Batch 786459, m,p-Xylenes recovered below QC limits in the Matrix Spike. Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 355585-009, -011, -007, -008, -012, -010, -014, -013.
The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits



Certificate of Analysis Summary 355585
Basin Environmental Consulting, LLC, Lovington, NM

Project Id: Lime Rock Resources

Contact: Curt Stanley

Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Mon Dec-14-09 05:20 pm

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	355585-001	355585-002	355585-003	355585-004	355585-005	355585-006
	<i>Field Id:</i>	D 7A-Floor	D 6 A - Floor	D 4 A - Floor	D 8 A - Floor	D 5 A - Floor	D 9 A - Floor
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-10-09 09:10	Dec-10-09 09:20	Dec-10-09 09:40	Dec-10-09 10:00	Dec-10-09 11:15	Dec-10-09 11:30
Anions by E300	<i>Extracted:</i>	Dec-15-09 14:06					
	<i>Analyzed:</i>	Dec-15-09 14:06					
	<i>Units/RL:</i>	mg/kg RL					
Chloride		255 53.1	327 26.3	304 52.2	160 54.3	158 55.4	225 51.0
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-17-09 13:30					
	<i>Analyzed:</i>	Dec-18-09 10:57	Dec-18-09 11:20	Dec-18-09 13:12	Dec-18-09 13:35	Dec-18-09 13:57	Dec-18-09 14:20
	<i>Units/RL:</i>	mg/kg RL					
Benzene		ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012
Toluene		ND 0.0025	ND 0.0025	ND 0.0025	ND 0.0026	ND 0.0026	ND 0.0024
Ethylbenzene		ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012
m,p-Xylenes		ND 0.0025	ND 0.0025	ND 0.0025	ND 0.0026	ND 0.0026	ND 0.0024
o-Xylene		ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012
Total Xylenes		ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012
Total BTEX		ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0012
Percent Moisture	<i>Extracted:</i>	Dec-15-09 17:00					
	<i>Analyzed:</i>	Dec-15-09 17:00					
	<i>Units/RL:</i>	% RL					
Percent Moisture		20.9 1.00	20.1 1.00	19.5 1.00	22.7 1.00	24.2 1.00	17.6 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Dec-15-09 14:00					
	<i>Analyzed:</i>	Dec-17-09 07:21	Dec-17-09 07:47	Dec-17-09 08:14	Dec-17-09 08:41	Dec-17-09 09:08	Dec-17-09 09:35
	<i>Units/RL:</i>	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 18.9	19.0 18.7	ND 18.6	ND 19.3	ND 19.7	ND 18.2
C12-C28 Diesel Range Hydrocarbons		ND 18.9	19.2 18.7	19.3 18.6	ND 19.3	55.0 19.7	37.0 18.2
C28-C35 Oil Range Hydrocarbons		ND 18.9	ND 18.7	ND 18.6	ND 19.3	33.2 19.7	73.6 18.2
Total TPH		ND 18.9	38.2 18.7	19.3 18.6	ND 19.3	88.2 19.7	110.6 18.2

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

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 355585

Basin Environmental Consulting, LLC, Lovington, NM

Project Id: Lime Rock Resources

Contact: Curt Stanley

Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Mon Dec-14-09 05:20 pm

Report Date: 02-FEB-10

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	355585-007	355585-008	355585-009	355585-010	355585-011	355585-012
	<i>Field Id:</i>	D 10 A - Floor	D 11 A - Floor	D 6 - SSW @ 3.5'	D 5 - NSW @ 7.5'	D 7 - NSW @ 8'	D 4 - WSW @ 8'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-10-09 11:50	Dec-10-09 12:05	Dec-10-09 12:15	Dec-10-09 12:25	Dec-10-09 12:40	Dec-10-09 12:55
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-15-09 14:06	Dec-15-09 14:06	Dec-15-09 14:06	Dec-15-09 14:06	Dec-15-09 14:06	Dec-15-09 14:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		205 50.8	191 26.7	39.9 26.8	139 53.8	ND 26.1	186 26.0
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-19-09 12:00	Dec-19-09 12:00	Dec-19-09 12:00	Dec-19-09 12:00	Dec-19-09 12:00	Dec-19-09 12:00
	<i>Analyzed:</i>	Dec-19-09 14:45	Dec-19-09 15:09	Dec-19-09 15:33	Dec-19-09 15:57	Dec-19-09 16:20	Dec-19-09 16:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0012
Toluene		ND 0.0024	ND 0.0025	ND 0.0026	ND 0.0026	ND 0.0025	ND 0.0025
Ethylbenzene		ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0012
m,p-Xylenes		ND 0.0024	ND 0.0025	ND 0.0026	ND 0.0026	ND 0.0025	ND 0.0025
o-Xylenec		ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0012
Total Xylenes		ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0012
Total BTEX		ND 0.0012	ND 0.0013	ND 0.0013	ND 0.0013	ND 0.0012	ND 0.0012
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-15-09 17:00	Dec-15-09 17:00	Dec-15-09 17:00	Dec-15-09 17:00	Dec-15-09 17:00	Dec-15-09 17:00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		17.4 1.00	21.2 1.00	21.6 1.00	21.9 1.00	19.6 1.00	19.2 1.00
TPH By SW8015 Mod	<i>Extracted:</i>	Dec-15-09 14:00	Dec-15-09 14:00	Dec-15-09 14:00	Dec-15-09 14:00	Dec-15-09 14:00	Dec-15-09 14:00
	<i>Analyzed:</i>	Dec-17-09 10:03	Dec-17-09 10:29	Dec-17-09 10:56	Dec-17-09 11:22	Dec-17-09 12:15	Dec-17-09 12:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 18.1	20.3 19.0	ND 19.0	ND 19.2	243 18.6	ND 18.5
C12-C28 Diesel Range Hydrocarbons		93.9 18.1	22.1 19.0	ND 19.0	ND 19.2	236 18.6	22.0 18.5
C28-C35 Oil Range Hydrocarbons		ND 18.1	ND 19.0	ND 19.0	ND 19.2	ND 18.6	ND 18.5
Total TPH		93.9 18.1	42.4 19.0	ND 19.0	ND 19.2	479 18.6	22.0 18.5

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 Brent Barron, II
 Odessa Laboratory Manager



Certificate of Analysis Summary 355585

Basin Environmental Consulting, LLC, Lovington, NM

Project Id: Lime Rock Resources
Contact: Curt Stanley
Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Mon Dec-14-09 05:20 pm
Report Date: 02-FEB-10
Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	355585-013	355585-014				
	<i>Field Id:</i>	D 8 - SSW @ 7'	D 4 - SSW @ 8'				
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL				
	<i>Sampled:</i>	Dec-10-09 13:05	Dec-10-09 13:15				
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-15-09 14:06	Dec-15-09 14:06				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Chloride		6280 206	32.2 25.8				
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-19-09 12:00	Dec-19-09 12:00				
	<i>Analyzed:</i>	Dec-19-09 17:08	Dec-19-09 17:31				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Benzene		ND 0.0012	ND 0.0012				
Toluene		ND 0.0025	ND 0.0025				
Ethylbenzene		ND 0.0012	ND 0.0012				
m,p-Xylenes		ND 0.0025	ND 0.0025				
o-Xylene		ND 0.0012	ND 0.0012				
Total Xylenes		ND 0.0012	ND 0.0012				
Total BTEX		ND 0.0012	ND 0.0012				
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-15-09 17:00	Dec-15-09 17:00				
	<i>Units/RL:</i>	% RL	% RL				
Percent Moisture		18.4 1.00	18.7 1.00				
TPH By SW8015 Mod	<i>Extracted:</i>	Dec-15-09 14:00	Dec-15-09 14:00				
	<i>Analyzed:</i>	Dec-17-09 13:08	Dec-17-09 13:35				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
C6-C12 Gasoline Range Hydrocarbons		ND 18.3	18.6 18.5				
C12-C28 Diesel Range Hydrocarbons		30.0 18.3	19.2 18.5				
C28-C35 Oil Range Hydrocarbons		ND 18.3	ND 18.5				
Total TPH		30.0 18.3	37.8 18.5				

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 Brent Barron, II
 Odessa Laboratory Manager



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786278

Sample: 545849-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/17/09 18:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 786278

Sample: 545849-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/17/09 18:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 786278

Sample: 545849-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/17/09 19:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 786278

Sample: 355585-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 10:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 786278

Sample: 355585-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 11:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786278

Sample: 355585-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 13:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 786278

Sample: 355585-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 13:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 786278

Sample: 355585-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 13:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 786278

Sample: 355585-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 14:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 786278

Sample: 355585-006 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 17:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786278

Sample: 355585-006 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/18/09 17:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 786459

Sample: 545940-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/19/09 12:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 786459

Sample: 545940-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/19/09 12:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 786459

Sample: 545940-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 12/19/09 13:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 786459

Sample: 355585-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 14:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786459

Sample: 355585-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 15:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0274	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0271	0.0300	90	80-120	

Lab Batch #: 786459

Sample: 355585-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 15:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0270	0.0300	90	80-120	
4-Bromofluorobenzenc	0.0264	0.0300	88	80-120	

Lab Batch #: 786459

Sample: 355585-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 15:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0276	0.0300	92	80-120	
4-Bromofluorobenzenc	0.0278	0.0300	93	80-120	

Lab Batch #: 786459

Sample: 355585-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 16:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0274	0.0300	91	80-120	
4-Bromofluorobenzenc	0.0280	0.0300	93	80-120	

Lab Batch #: 786459

Sample: 355585-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/19/09 16:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzenc	0.0278	0.0300	93	80-120	
4-Bromofluorobenzenc	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786459

Sample: 355585-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/19/09 17:08		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0271	0.0300	90	80-120	
4-Bromofluorobenzene		0.0276	0.0300	92	80-120	

Lab Batch #: 786459

Sample: 355585-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/19/09 17:31		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0268	0.0300	89	80-120	
4-Bromofluorobenzene		0.0268	0.0300	89	80-120	

Lab Batch #: 786459

Sample: 355585-014 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/19/09 23:01		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0302	0.0300	101	80-120	
4-Bromofluorobenzene		0.0283	0.0300	94	80-120	

Lab Batch #: 786459

Sample: 355585-014 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/19/09 23:25		SURROGATE RECOVERY STUDY		
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0311	0.0300	104	80-120	
4-Bromofluorobenzene		0.0290	0.0300	97	80-120	

Lab Batch #: 786163

Sample: 545779-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg		Date Analyzed: 12/17/09 06:01		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		124	99.5	125	70-135	
o-Terphenyl		55.0	49.8	110	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786163

Sample: 545779-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg	Date Analyzed: 12/17/09 06:27	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	123	99.6	123	70-135	
o-Terphenyl	55.1	49.8	111	70-135	

Lab Batch #: 786163

Sample: 545779-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg	Date Analyzed: 12/17/09 06:54	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	99.6	111	70-135	
o-Terphenyl	58.7	49.8	118	70-135	

Lab Batch #: 786163

Sample: 355585-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 07:21	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	109	99.8	109	70-135	
o-Terphenyl	57.5	49.9	115	70-135	

Lab Batch #: 786163

Sample: 355585-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 07:47	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	105	99.7	105	70-135	
o-Terphenyl	52.4	49.9	105	70-135	

Lab Batch #: 786163

Sample: 355585-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 08:14	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	112	99.9	112	70-135	
o-Terphenyl	57.9	50.0	116	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786163

Sample: 355585-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 08:41	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	109	99.7	109	70-135	
o-Terphenyl	56.9	49.9	114	70-135	

Lab Batch #: 786163

Sample: 355585-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 09:08	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	106	99.5	107	70-135	
o-Terphenyl	55.0	49.8	110	70-135	

Lab Batch #: 786163

Sample: 355585-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 09:35	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	88.4	99.8	89	70-135	
o-Terphenyl	46.0	49.9	92	70-135	

Lab Batch #: 786163

Sample: 355585-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 10:03	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	55.1	49.9	110	70-135	

Lab Batch #: 786163

Sample: 355585-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg	Date Analyzed: 12/17/09 10:29	SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	57.5	50.0	115	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786163

Sample: 355585-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 10:56

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	110	99.5	111	70-135	
o-Terphenyl	57.4	49.8	115	70-135	

Lab Batch #: 786163

Sample: 355585-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 11:22

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	111	100	111	70-135	
o-Terphenyl	58.1	50.0	116	70-135	

Lab Batch #: 786163

Sample: 355585-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 12:15

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	112	100	112	70-135	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 786163

Sample: 355585-012 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 12:42

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	111	99.7	111	70-135	
o-Terphenyl	58.2	49.9	117	70-135	

Lab Batch #: 786163

Sample: 355585-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 13:08

SURROGATE RECOVERY STUDY					
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	111	99.8	111	70-135	
o-Terphenyl	57.6	49.9	115	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: Staley State A # 4

Work Orders : 355585,

Project ID: Lime Rock Resources

Lab Batch #: 786163

Sample: 355585-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 13:35

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	110	100	110	70-135	
o-Terphenyl	58.0	50.0	116	70-135	

Lab Batch #: 786163

Sample: 355585-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 14:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	121	99.9	121	70-135	
o-Terphenyl	60.3	50.0	121	70-135	

Lab Batch #: 786163

Sample: 355585-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/17/09 14:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
l-Chlorooctane	119	99.8	119	70-135	
o-Terphenyl	60.6	49.9	121	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.



Blank Spike Recovery



Project Name: Staley State A # 4

Work Order #: 355585

Project ID: Lime Rock Resources

Lab Batch #: 785868

Sample: 785868-1-BKS

Matrix: Solid

Date Analyzed: 12/15/2009

Date Prepared: 12/15/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.8	108	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]

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

BRL - Below Reporting Limit



BS / BSD Recoveries



Project Name: Staley State A # 4

Work Order #: 355585

Analyst: ASA

Date Prepared: 12/17/2009

Project ID: Lime Rock Resources

Date Analyzed: 12/17/2009

Lab Batch ID: 786278

Sample: 545849-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	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
Analytes											
Benzene	ND	0.1000	0.1090	109	0.1	0.1089	109	0	70-130	35	
Toluene	ND	0.1000	0.1122	112	0.1	0.1122	112	0	70-130	35	
Ethylbenzene	ND	0.1000	0.1081	108	0.1	0.1079	108	0	71-129	35	
m,p-Xylenes	ND	0.2000	0.2399	120	0.2	0.2402	120	0	70-135	35	
o-Xylene	ND	0.1000	0.1192	119	0.1	0.1188	119	0	71-133	35	

Analyst: ASA

Date Prepared: 12/19/2009

Date Analyzed: 12/19/2009

Lab Batch ID: 786459

Sample: 545940-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	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
Analytes											
Benzene	ND	0.1000	0.1063	106	0.1	0.1014	101	5	70-130	35	
Toluene	ND	0.1000	0.1084	108	0.1	0.1041	104	4	70-130	35	
Ethylbenzene	ND	0.1000	0.1050	105	0.1	0.1022	102	3	71-129	35	
m,p-Xylenes	ND	0.2000	0.2366	118	0.2	0.2283	114	4	70-135	35	
o-Xylene	ND	0.1000	0.1164	116	0.1	0.1128	113	3	71-133	35	

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

Blank Spike Recovery [D] = 100*(C)/[B]

Blank Spike Duplicate Recovery [G] = 100*(F)/[E]

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



Project Name: Staley State A # 4

Work Order #: 355585

Analyst: BEV

Date Prepared: 12/15/2009

Project ID: Lime Rock Resources

Date Analyzed: 12/17/2009

Lab Batch ID: 786163

Sample: 545779-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	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
Analytes											
C6-C12 Gasoline Range Hydrocarbons	ND	995	879	88	996	871	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	995	761	76	996	753	76	1	70-135	35	

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

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Staley State A # 4

Work Order #: 355585

Lab Batch #: 785868

Project ID: Lime Rock Resources

Date Analyzed: 12/15/2009

Date Prepared: 12/15/2009

Analyst: LATCOR

QC- Sample ID: 355585-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	255	1260	1640	110	75-125	

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: Staley State A # 4

Work Order #: 355585

Project ID: Lime Rock Resources

Lab Batch ID: 786278

QC- Sample ID: 355585-006 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/18/2009

Date Prepared: 12/17/2009

Analyst: ASA

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	ND	0.1214	0.1066	88	0.1214	0.0948	78	12	70-130	35	
Toluene	ND	0.1214	0.1080	89	0.1214	0.0938	77	14	70-130	35	
Ethylbenzene	ND	0.1214	0.1002	83	0.1214	0.0870	72	14	71-129	35	
m,p-Xylenes	ND	0.2427	0.2181	90	0.2427	0.1543	64	34	70-135	35	X
o-Xylene	ND	0.1214	0.1050	86	0.1214	0.0912	75	14	71-133	35	

Lab Batch ID: 786459

QC- Sample ID: 355585-014 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/19/2009

Date Prepared: 12/19/2009

Analyst: ASA

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	ND	0.1231	0.0624	51	0.1231	0.0800	65	25	70-130	35	X
Toluene	ND	0.1231	0.0663	54	0.1231	0.0834	68	23	70-130	35	X
Ethylbenzene	ND	0.1231	0.0651	53	0.1231	0.0798	65	20	71-129	35	X
m,p-Xylenes	ND	0.2461	0.1468	60	0.2461	0.1770	72	19	70-135	35	X
o-Xylene	ND	0.1231	0.0670	54	0.1231	0.0831	68	21	71-133	35	X

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

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

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



Form 3 - MS / MSD Recoveries



Project Name: Staley State A # 4

Work Order #: 355585

Project ID: Lime Rock Resources

Lab Batch ID: 786163

QC- Sample ID: 355585-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/17/2009

Date Prepared: 12/15/2009

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1260	1230	98	1260	1210	96	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1260	994	79	1260	1160	92	15	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



Sample Duplicate Recovery

Project Name: Staley State A # 4

Work Order #: 355585

Lab Batch #: 785868

Project ID: Lime Rock Resources

Date Analyzed: 12/15/2009

Date Prepared: 12/15/2009

Analyst: LATCOR

QC- Sample ID: 355585-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	255	241	6	20	

Lab Batch #: 785882

Date Analyzed: 12/15/2009

Date Prepared: 12/15/2009

Analyst: WRU

QC- Sample ID: 355585-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	20.9	22.4	7	20	

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

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin
 Date/ Time: 12-14-09 @ 1720
 Lab ID #: 355585
 Initials: JMF

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	2.6 °C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	<u>Not Present</u>
#4	Custody Seals intact on sample bottles/ container? /labels	<u>Yes</u>	No	Not Present
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	Yes	<u>No</u>	Not Applicable
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 356484

for

Basin Environmental Consulting, LLC

Project Manager: Curt Stanley

Staley State A # 4

Lime Rock Resources

23-DEC-09



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (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 (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),

South Carolina(96031001), Louisiana(04154), Georgia(917)



23-DEC-09

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

Reference: XENCO Report No: **356484**
Staley State A # 4
Project Address: Eddy County, NM

Curt Stanley:

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 356484. 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. 356484 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

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Sample Cross Reference 356484



Basin Environmental Consulting, LLC, Lovington, NM
Staley State A # 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
D 8A - SSW @ 7'	S	Dec-21-09 10:05		356484-001



CASE NARRATIVE

Client Name: Basin Environmental Consulting, LLC

Project Name: Staley State A # 4

Project ID: Lime Rock Resources
Work Order Number: 356484

Report Date: 23-DEC-09
Date Received: 12/21/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-786838 Percent Moisture
None

Batch: LBA-786847 Anions by E300
None



Certificate of Analysis Summary 356484
Basin Environmental Consulting, LLC, Lovington, NM

Project Id: Lime Rock Resources

Contact: Curt Stanley

Project Location: Eddy County, NM

Project Name: Staley State A # 4

Date Received in Lab: Mon Dec-21-09 05:13 pm

Report Date: 23-DEC-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	356484-001				
	Field Id:	D 8A - SSW @ 7'				
	Depth:					
	Matrix:	SOIL				
	Sampled:	Dec-21-09 10:05				
Anions by E300	Extracted:					
	Analyzed:	Dec-22-09 11:56				
	Units/RL:	mg/kg RL				
Chloride		80.4 25.9				
Percent Moisture	Extracted:					
	Analyzed:	Dec-22-09 17:00				
	Units/RL:	% RL				
Percent Moisture		18.9 1.00				

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

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


 Brent Barron, II
 Odessa Laboratory Manager



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- * Outside XENCO's scope of NELAC Accreditation.

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	Phone	Fax
4143 Greenbriar Dr, Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Blank Spike Recovery



Project Name: Staley State A # 4

Work Order #: 356484

Project ID: Lime Rock Resources

Lab Batch #: 786847

Sample: 786847-1-BKS

Matrix: Solid

Date Analyzed: 12/22/2009

Date Prepared: 12/22/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	100	10.6	106	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]

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

BRL - Below Reporting Limit



Form 3 - MS Recoveries



Project Name: Staley State A # 4

Work Order #: 356484
Lab Batch #: 786847
Date Analyzed: 12/22/2009
QC- Sample ID: 356484-001 S
Reporting Units: mg/kg

Date Prepared: 12/22/2009

Project ID: Lime Rock Resources
Analyst: LATCOR

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	80.4	740	813	99	75-125	

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



Sample Duplicate Recovery

Project Name: Staley State A # 4

Work Order #: 356484

Lab Batch #: 786847

Project ID: Lime Rock Resources

Date Analyzed: 12/22/2009

Date Prepared: 12/22/2009

Analyst: LATCOR

QC- Sample ID: 356484-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	80.4	84.2	5	20	

Lab Batch #: 786838

Date Analyzed: 12/22/2009

Date Prepared: 12/22/2009

Analyst: JLG

QC- Sample ID: 356484-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	18.9	16.7	13	20	

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

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env.
 Date/ Time: 12-21-09 @ 1713
 Lab ID #: 356484
 Initials: JMF

Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	3.6 ° C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container? /label	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample Instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	<u>Not Applicable</u>	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

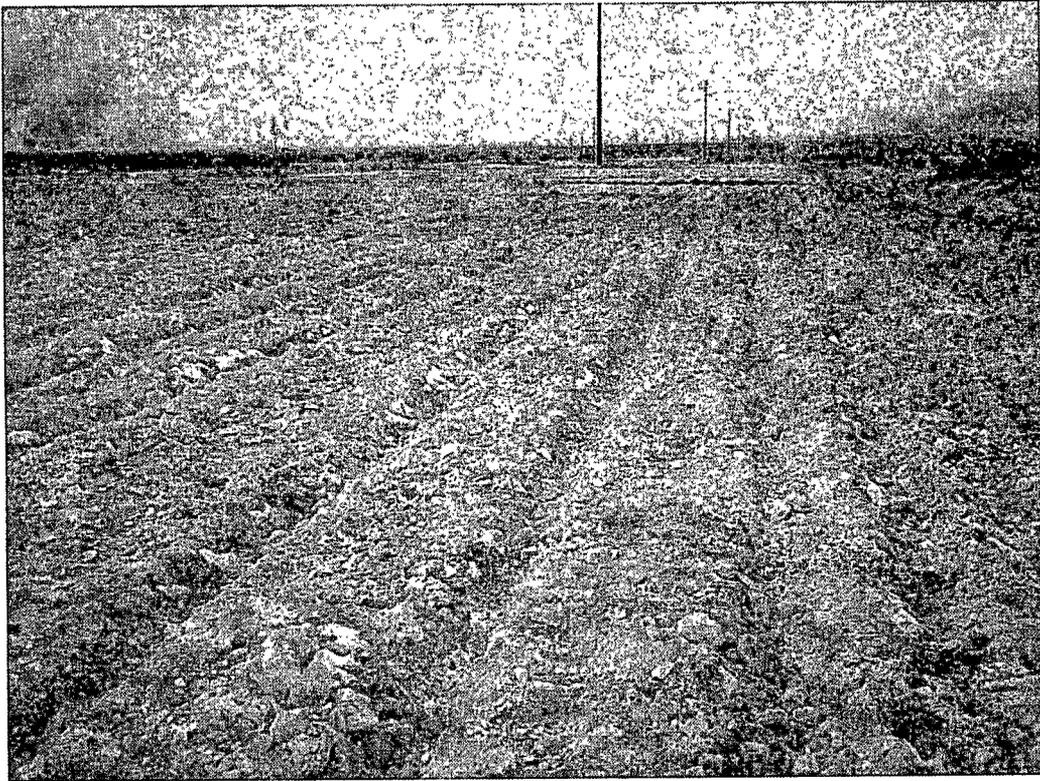
Appendix B
Photographs



Staley State A #4 – excavation in drainage channel, looking west



Staley State A #4 – excavation in drainage channel, looking east



Staley State A #4 – soil remediation complete and contoured, looking west



Staley State A #4 – soil remediation complete and contoured, looking west

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 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
NOV 13 2009
NMOCD ARTESIA

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	Lime Rock Resources	Contact	Michael Barrett
Address	1111 Bagby Street Suite 4600 <i>Houston, TX 77002</i>	Telephone No.	575-623-8424 505-353-2644
Facility Name	Staley State A #4	Facility Type	Oil Well

Surface Owner	Pulitzer Broadcasting	Mineral Owner	State	Lease No.	30-015-36252
---------------	-----------------------	---------------	-------	-----------	--------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	30	17S	28E	990'	FSL	1980'	FWL	Eddy

Latitude 32.8004891718328 Longitude 104.217172694796

NATURE OF RELEASE

Type of Release	Crude Oil, Produced Water	Volume of Release	20 Bbls Oil, 75 Bbls Water	Volume Recovered	0
Source of Release	Poly Line Bursted	Date and Hour of Occurrence	11/7/09 @ 6am	Date and Hour of Discovery	11/7/09 @ 6am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Sherry Bonham		
By Whom?	Michael Barrett	Date and Hour	11/9/09 @ 10am		
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	50 Bbls of total fluid		

If a Watercourse was Impacted, Describe Fully.*
Runoff from leak into low lying area.

Describe Cause of Problem and Remedial Action Taken.*
Frac sand plugged up 3" poly line causing it to burst.
Shut in wells, isolated line, cleared plug & repaired.

Describe Area Affected and Cleanup Action Taken.*
Packed caliche & rock.
Contaminated soil will be removed and replaced.

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:	<i>Michael Barrett</i>	OIL CONSERVATION DIVISION	
Printed Name:	Michael Barrett	Approved by District Supervisor:	<i>[Signature]</i>
Title:	Production Supervisor	Approval Date:	11-13-09
E-mail Address:	mbarrett@limerockresources.com	Expiration Date:	1-13-10
Date:	11/10/09	Conditions of Approval:	<i>*SEE ATTACHED*</i>
Phone:	505-353-2644	Attached	<input type="checkbox"/>

2RP-364

* Attach Additional Sheets If Necessary

NSEB0931754361
ISEB0931754641
SEB0931754715