AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pPAC0802329082

1RP - 1747

SOUTHWEST ROYALTIES INC

3/10/2016

PANTHER ENERGY SERVICES, LLC

P.O. BOX 1321 JAL N.M. 88252 PHONE: 575-395-2654 FAX: 575-395-2162

Company: Southwest Royalties, INC
6 Desta Drive Ste 2100
Midland, TX 79705

RECEIVED
APR 06 2011
HOBBSOCD

Lease: Sholes A and B Battery.
Unit: G, NE/4, Section: 25 Township: 25S Range 36E.
Latitude: N32° 06' 19.91"; Longitude: W103° 12' 54.40"
Lea County, New Mexico

Site Background

The site is located in Unit G, NE/4 of Section 25, T25S, R36E at an elevation of approximately 3,800 feet above mean sea level (amsl). The Surface rights are owned by a local rancher, Gregg Fulfer, and mineral rights are owned by the United States Department of the Interior and managed by the Bureau of Land Management (BLM). A search for water wells was completed utilizing the New Mexico Office of the State Engineers website. The results of the search found a well that is located in Sec 33, Township 25S, Range 36E. No wells (domestic, agriculture, or public) or bodies of surface water exist within a 1,000 feet radius of the Site. Also, according to the water well search groundwater data indicates average depth to water is 80'. Utilizing this information New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site are as follows:

Ranking Criteria

Depth to Ground Water	**Ranking Score**
<50 Feet	20
50-99	**10**
>100	0

Well Head Protection

<1000 feet from a water source or	
<200 feet from private domestic water sour	
Yes	20
No	**0**

Distance to Surface Water Body

>200 horizontal feet	20
200 – 1000 horizontal feet	10
>1000 horizontal feet	**0**

Site Ranking Score **10**

Parameter	Remedial Goal
Benzene	010 parts per million
BTEX	050 parts per million
TPH	1000 parts per million

Analytical Data Overview

Samples of the spill area were taken on two separate occasions. The first samples were taken by Republic Backhoe Service L.L.C. on March 3rd and 4th 2011. The samples taken on March 3rd were witnessed by the BLM and New Mexico OCD. The second samples were taken by Republic Backhoe Service L.L.C. on March 21, 2011. The results of the samples show that vertical delineation was found on the road, and spill area. All "pasture 1-8 and Road1-2" show TPH levels that are remarkably low highest one being 246 PPM. Samples "road 3" taken on March 3, 2011 shows very high TPH contamination, that is why further sampling was conducted on March 21, 2011 to delineate the area. They then sampled "Road 1-B" shows that vertical delineation was found at 2'. This was due to a quick response on behalf of Southwest Royalties, and a hard compacted sand layer beneath the top soil. The TPH contamination is limited a total of 10 stock piles (approx. 2000 yards) at the site. There is no chloride contamination at the site. All samples were taken to XENO Laboratories located at 12600 West I-20 East in Odessa Texas 79765. Please view Attachments Analytical Report 408735, and Analytical Report 410498 for detailed summary of the samples results.

Action Plan

The plan will be to remove all the stock piles (approx. 2000 yards) off the site and to the Doom Land Farm. Doom Land Farm is a New Mexico Oil Conservation Division permitted disposal site Permit # NM01-0033. A loader will be used to load belly dumps and dump trucks with contaminated material from the site. Then the material will be transported to the disposal site. Once all the material has been removed, further testing will be conducted at the site where the stock piles once were. This will be done to ensure that no vertical contamination has occurred beneath the stock piles. The road will be addressed as well. Samples "Road 3" shows that the run off of oil to the south contaminated the pasture in a 10' X 10' area. This area will be dug out to a dug of 2' to remove all contaminated soil. Sample "Road 1-B" shows that contamination did not penetrate passed 2 feet. Once the contaminated material has been hauled off the following activities will take place: Equipment will be used to backfill the affected area with the surrounding top soil and sand dunes. We have gotten permission from the Gregg Fulfer the property owner to uses the material as backfill. Equipment will be used to slope and contour the area to match the existing environment. Finally BLM seed will be used to seed the area. After all the work is completed, a closure report will be conducted in accordance with the NMOCD.

Analytical Report 408735

for

Clayton Williams, Inc.

Project Manager: Luis Gonzalez

Sholes A & B Battery

14-MAR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

14-MAR-11

Project Manager: **Luis Gonzalez**
Clayton Williams, Inc.
6 Desta Drive, Ste. 2100
Midland, TX 79705

Reference: XENCO Report No: **408735**
Sholes A & B Battery
Project Address: Jal, NM

Luis Gonzalez:

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 408735. 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. 408735 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 408735

Clayton Williams, Inc., Midland, TX

Sholes A & B Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Road # 1	S	Mar-03-11 14:33		408735-001
Road # 2	S	Mar-03-11 14:35		408735-002
Road # 3	S	Mar-03-11 14:37		408735-003
Pasture # 1	S	Mar-03-11 14:45		408735-004
Pasture # 2	S	Mar-03-11 14:47		408735-005
Pasture # 3	S	Mar-03-11 14:50		408735-006
Pasture # 4	S	Mar-03-11 15:05		408735-007
Pasture # 5	S	Mar-03-11 15:08		408735-008
Pasture # 6	S	Mar-03-11 15:20		408735-009
Pasture # 7	S	Mar-03-11 15:27		408735-010
Pasture # 8	S	Mar-03-11 08:35		408735-011
Stockplie # 1	S	Mar-03-11 15:40		408735-012
Stockpile # 2	S	Mar-03-11 15:40		408735-013
Stockpile # 3	S	Mar-03-11 15:45		408735-014
Background # 1	S	Mar-03-11 15:58		408735-015
Tank Battery	S	Mar-04-11 07:30		408735-016
Stockpile	S	Mar-04-11 07:40		408735-017

CASE NARRATIVE

Client Name: Clayton Williams, Inc.
Project Name: Sholes A & B Battery

Project ID:
Work Order Number: 408735

Report Date: 14-MAR-11
Date Received: 03/04/2011

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-846393 TPH By SW8015 Mod

Batch: LBA-846394 TPH By SW8015 Mod
SW8015MOD_NM

Batch 846394, C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike.
Samples affected are: 408735-017, -016.
The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons is within laboratory Control Limits

Batch: LBA-846513 BTEX by EPA 8021B
SW8021BM

Batch 846513, Ethylbenzene, o-Xylene recovered below QC limits in the Matrix Spike. Toluene, m_p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 408735-010, -004, -007, -017, -001, -002, -003, -005, -011, -016.
The Laboratory Control Sample for Toluene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

SW8021BM

Batch 846513, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 408735-003.
4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 408735-007 and -017.

SW8021BM

Batch 846513, m_p-Xylenes RPD was outside QC limits.
Samples affected are: 408735-010, -004, -007, -017, -001, -002, -003, -005, -011, -016

Project ID:
Work Order Number: 408735

Report Date: 14-MAR-11
Date Received: 03/04/2011

Batch: LBA-846676 BTEX by EPA 8021B
SW8021BM

Batch 846676, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 408735-012.

SW8021BM

Batch 846676, Benzene, Ethylbenzene, m_p-Xylenes recovered below QC limits in the Matrix Spike. o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 408735-015, -012, -006, -008, -009.
The Laboratory Control Sample for Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Batch: LBA-847443 BTEX by EPA 8021B

Certificate of Analysis Summary 408735

Clayton Williams, Inc., Midland, TX

Project Name: Sholes A & B Battery

Project Id:
Contact: Luis Gonzalez
Project Location: Jal, NM

Date Received in Lab: Fri Mar-04-11 11:09 am
Report Date: 14-MAR-11
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	408735-001		408735-002		408735-003		408735-004		408735-005		408735-006	
	Field Id:	Road # 1		Road # 2		Road # 3		Pasture # 1		Pasture # 2		Pasture # 3	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-03-11 14:33		Mar-03-11 14:35		Mar-03-11 14:37		Mar-03-11 14:45		Mar-03-11 14:47		Mar-03-11 14:50	
Anions by E300	*Extracted:*												
	Analyzed:	Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9.20	4.25	42.4	4.23	10.1	4.92	7.89	4.34	8.73	4.26	7.73	4.38
BTEX by EPA 8021B	*Extracted:*	Mar-04-11 15:45		Mar-04-11 15:45		Mar-04-11 15:45		Mar-04-11 15:45		Mar-04-11 15:45		Mar-07-11 16:35	
	Analyzed:	Mar-05-11 19:07		Mar-05-11 19:30		Mar-05-11 19:53		Mar-05-11 20:15		Mar-05-11 20:38		Mar-07-11 21:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0010	ND	0.00100	ND	0.0012	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0023	0.00976	0.0021	ND	0.0020	ND	0.0021
Ethylbenzene		ND	0.0010	ND	0.00100	0.00229	0.0012	0.0126	0.0010	ND	0.0010	ND	0.0010
m_p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0023	0.0185	0.0021	ND	0.0020	ND	0.0021
o-Xylene		ND	0.0010	ND	0.00100	ND	0.0012	0.0108	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	ND	0.00100	ND	0.0012	0.0293	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	ND	0.00100	0.00229	0.0012	0.0517	0.0010	ND	0.0010	ND	0.0010
Percent Moisture	*Extracted:*												
	Analyzed:	Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		1.12	1.00	ND	1.00	14.7	1.00	3.29	1.00	1.48	1.00	4.19	1.00
TPH By SW8015 Mod	*Extracted:*	Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20	
	Analyzed:	Mar-04-11 14:38		Mar-07-11 10:17		Mar-04-11 20:39		Mar-04-11 15:35		Mar-07-11 10:47		Mar-04-11 16:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.2	ND	15.1	290	88.3	ND	15.4	ND	15.1	ND	15.7
C12-C28 Diesel Range Hydrocarbons		246	15.2	ND	15.1	9880	88.3	115	15.4	40.4	15.1	ND	15.7
C28-C35 Oil Range Hydrocarbons		ND	15.2	ND	15.1	ND	88.3	15.7	15.4	ND	15.1	ND	15.7
Total TPH		246	15.2	ND	15.1	10200	88.3	131	15.4	40.4	15.1	ND	15.7

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 408735

Clayton Williams, Inc., Midland, TX

Project Name: Sholes A & B Battery

Project Id:

Contact: Luis Gonzalez

Project Location: Jal, NM

Date Received in Lab: Fri Mar-04-11 11:09 am

Report Date: 14-MAR-11

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	408735-007		408735-008		408735-009		408735-010		408735-011		408735-012	
	Field Id:	Pasture # 4		Pasture # 5		Pasture # 6		Pasture # 7		Pasture # 8		Stockplie # 1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-03-11 15:05		Mar-03-11 15:08		Mar-03-11 15:20		Mar-03-11 15:27		Mar-03-11 08:35		Mar-03-11 15:40	
Anions by E300	*Extracted:*												
	Analyzed:	Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7.42	4.26	8.18	4.23	8.00	4.26	51.7	4.22	9.35	5.13	9.43	4.26
BTEX by EPA 8021B	*Extracted:*	Mar-04-11 15:45		Mar-07-11 16:35		Mar-07-11 16:35		Mar-04-11 15:45		Mar-04-11 15:45		Mar-07-11 16:35	
	Analyzed:	Mar-05-11 22:09		Mar-07-11 22:09		Mar-07-11 22:32		Mar-05-11 23:16		Mar-05-11 23:39		Mar-08-11 01:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0012	ND	0.0050
Toluene		0.0614	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.0202	0.0024	0.132	0.0101
Ethylbenzene		0.0864	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0126	0.0012	0.481	0.0050
m_p-Xylenes		0.109	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.00933	0.0024	0.730	0.0101
o-Xylene		0.0525	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.00919	0.0012	0.445	0.0050
Total Xylenes		0.162	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0185	0.0012	1.18	0.0050
Total BTEX		0.309	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0513	0.0012	1.79	0.0050
Percent Moisture	*Extracted:*												
	Analyzed:	Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		1.49	1.00	ND	1.00	1.48	1.00	ND	1.00	18.1	1.00	1.32	1.00
TPH By SW8015 Mod	*Extracted:*	Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20	
	Analyzed:	Mar-04-11 16:51		Mar-07-11 11:47		Mar-04-11 17:30		Mar-07-11 12:17		Mar-07-11 12:46		Mar-04-11 18:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.2	ND	15.2	ND	15.1	ND	15.0	ND	18.2	696	153
C12-C28 Diesel Range Hydrocarbons		41.5	15.2	56.2	15.2	ND	15.1	ND	15.0	25.0	18.2	4490	153
C28-C35 Oil Range Hydrocarbons		ND	15.2	ND	15.2	ND	15.1	ND	15.0	ND	18.2	ND	153
Total TPH		41.5	15.2	56.2	15.2	ND	15.1	ND	15.0	25.0	18.2	5190	153

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 408735

Clayton Williams, Inc., Midland, TX

Project Name: Sholes A & B Battery

Project Id:
Contact: Luis Gonzalez
Project Location: Jal, NM

Date Received in Lab: Fri Mar-04-11 11:09 am
Report Date: 14-MAR-11
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	408735-013		408735-014		408735-015		408735-016		408735-017	
	Field Id:	Stockpile # 2		Stockpile # 3		Background # 1		Tank Battery		Stockpile	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-03-11 15:40		Mar-03-11 15:45		Mar-03-11 15:58		Mar-04-11 07:30		Mar-04-11 07:40	
Anions by E300	***Extracted:***										
	Analyzed:	Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37		Mar-04-11 21:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9.86	4.23	26.8	4.28	7.36	4.20	62.9	10.2	163	8.50
BTEX by EPA 8021B	***Extracted:***	Mar-09-11 15:00		Mar-09-11 15:00		Mar-07-11 16:35		Mar-04-11 15:45		Mar-04-11 15:45	
	Analyzed:	Mar-10-11 19:18		Mar-10-11 20:03		Mar-07-11 22:55		Mar-06-11 00:24		Mar-06-11 00:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0201	ND	0.255	ND	0.00100	ND	0.0012	0.00504	0.0010
Toluene		1.25	0.0402	8.92	0.510	0.00268	0.0020	ND	0.0024	0.110	0.0020
Ethylbenzene		1.33	0.0201	9.22	0.255	0.00132	0.00100	ND	0.0012	0.0470	0.0010
m_p-Xylenes		1.71	0.0402	12.8	0.510	ND	0.0020	ND	0.0024	0.0565	0.0020
o-Xylene		0.895	0.0201	2.31	0.255	ND	0.00100	ND	0.0012	0.0278	0.0010
Total Xylenes		2.61	0.0201	15.1	0.255	ND	0.00100	ND	0.0012	0.0843	0.0010
Total BTEX		5.19	0.0201	33.3	0.255	0.00400	0.00100	ND	0.0012	0.246	0.0010
Percent Moisture	***Extracted:***										
	Analyzed:	Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00		Mar-04-11 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		ND	1.00	1.81	1.00	ND	1.00	18.0	1.00	1.12	1.00
TPH By SW8015 Mod	***Extracted:***	Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20		Mar-04-11 13:20	
	Analyzed:	Mar-04-11 18:45		Mar-04-11 19:04		Mar-07-11 13:17		Mar-04-11 23:29		Mar-04-11 23:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		917	151	3030	305	ND	14.9	ND	18.3	1290	303
C12-C28 Diesel Range Hydrocarbons		5530	151	15600	305	ND	14.9	ND	18.3	11000	303
C28-C35 Oil Range Hydrocarbons		152	151	431	305	ND	14.9	ND	18.3	358	303
Total TPH		6600	151	19100	305	ND	14.9	ND	18.3	12600	303

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846513 **Sample:** 597271-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/05/11 15:21

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

Lab Batch #: 846513 **Sample:** 597271-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/05/11 15:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 846513 **Sample:** 597271-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/05/11 16:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 846513 **Sample:** 408735-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 19:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 846513 **Sample:** 408735-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 19:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0303	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846513 **Sample:** 408735-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 19:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0198	0.0300	66	80-120	*

Lab Batch #: 846513 **Sample:** 408735-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 20:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 846513 **Sample:** 408735-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 20:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 846513 **Sample:** 408735-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 22:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0380	0.0300	127	80-120	*

Lab Batch #: 846513 **Sample:** 408735-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 23:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846513 **Sample:** 408735-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 23:39

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 846513 **Sample:** 408735-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/06/11 00:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 846513 **Sample:** 408735-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/06/11 00:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0545	0.0300	182	80-120	*

Lab Batch #: 846513 **Sample:** 408679-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/06/11 01:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	80-120	

Lab Batch #: 846513 **Sample:** 408679-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/06/11 01:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846676 **Sample:** 597384-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/07/11 16:52

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

Lab Batch #: 846676 **Sample:** 597384-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/07/11 17:14

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 846676 **Sample:** 597384-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/07/11 18:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 846676 **Sample:** 408735-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 21:47

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 846676 **Sample:** 408735-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 22:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0303	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846676 **Sample:** 408735-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 22:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 846676 **Sample:** 408735-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 22:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 846676 **Sample:** 408907-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 23:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 846676 **Sample:** 408907-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 23:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 846676 **Sample:** 408735-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/08/11 01:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0555	0.0300	185	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 847443 **Sample:** 597830-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/11 17:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 847443 **Sample:** 597830-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/11 17:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 847443 **Sample:** 597830-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/10/11 18:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 847443 **Sample:** 408735-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/11 19:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0349	0.0300	116	80-120	

Lab Batch #: 847443 **Sample:** 408735-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/11 20:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 847443 **Sample:** 408735-014 D / MD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/10/11 20:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 846393 **Sample:** 597212-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 12:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.6	100	80	70-135	
o-Terphenyl	46.0	50.2	92	70-135	

Lab Batch #: 846393 **Sample:** 597212-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 12:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.8	99.7	80	70-135	
o-Terphenyl	46.6	49.9	93	70-135	

Lab Batch #: 846393 **Sample:** 597212-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 12:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.6	101	77	70-135	
o-Terphenyl	36.9	50.3	73	70-135	

Lab Batch #: 846393 **Sample:** 408735-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 14:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.6	100	77	70-135	
o-Terphenyl	35.5	50.2	71	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846393 **Sample:** 408735-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 15:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.4	99.6	84	70-135	
o-Terphenyl	38.5	49.8	77	70-135	

Lab Batch #: 846393 **Sample:** 408735-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 16:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	100	82	70-135	
o-Terphenyl	39.0	50.1	78	70-135	

Lab Batch #: 846393 **Sample:** 408735-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 16:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.1	100	82	70-135	
o-Terphenyl	36.5	50.0	73	70-135	

Lab Batch #: 846393 **Sample:** 408735-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 17:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.1	99.5	84	70-135	
o-Terphenyl	37.7	49.8	76	70-135	

Lab Batch #: 846393 **Sample:** 408735-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 18:26

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.2	101	91	70-135	
o-Terphenyl	46.0	50.3	91	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846393 **Sample:** 408735-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 18:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.7	99.7	90	70-135	
o-Terphenyl	45.5	49.9	91	70-135	

Lab Batch #: 846393 **Sample:** 408735-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 19:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	50.9	49.9	102	70-135	

Lab Batch #: 846393 **Sample:** 408679-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 19:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.3	99.7	87	70-135	
o-Terphenyl	42.8	49.9	86	70-135	

Lab Batch #: 846393 **Sample:** 408679-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 20:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.4	101	86	70-135	
o-Terphenyl	43.0	50.3	85	70-135	

Lab Batch #: 846393 **Sample:** 408735-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 20:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.2	100	88	70-135	
o-Terphenyl	46.3	50.2	92	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846393 **Sample:** 408735-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 10:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.9	120	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 846393 **Sample:** 408735-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 10:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.5	105	70-135	
o-Terphenyl	46.7	49.8	94	70-135	

Lab Batch #: 846393 **Sample:** 408735-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 11:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	101	116	70-135	
o-Terphenyl	50.9	50.3	101	70-135	

Lab Batch #: 846393 **Sample:** 408735-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 12:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.7	114	70-135	
o-Terphenyl	47.7	49.9	96	70-135	

Lab Batch #: 846393 **Sample:** 408735-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 12:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.6	122	70-135	
o-Terphenyl	58.2	49.8	117	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846393 **Sample:** 408735-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/07/11 13:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.5	111	70-135	
o-Terphenyl	45.6	49.8	92	70-135	

Lab Batch #: 846394 **Sample:** 597217-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 22:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.7	100	81	70-135	
o-Terphenyl	39.9	50.2	79	70-135	

Lab Batch #: 846394 **Sample:** 597217-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 22:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.3	99.7	81	70-135	
o-Terphenyl	39.4	49.9	79	70-135	

Lab Batch #: 846394 **Sample:** 597217-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/11 23:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.2	101	78	70-135	
o-Terphenyl	37.0	50.3	74	70-135	

Lab Batch #: 846394 **Sample:** 408735-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 23:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.6	99.9	84	70-135	
o-Terphenyl	40.3	50.0	81	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 408735,

Project ID:

Lab Batch #: 846394 **Sample:** 408735-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/11 23:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.9	115	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 846394 **Sample:** 408723-018 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 06:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.7	100	85	70-135	
o-Terphenyl	43.2	50.1	86	70-135	

Lab Batch #: 846394 **Sample:** 408723-018 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/05/11 06:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.6	100	85	70-135	
o-Terphenyl	42.6	50.0	85	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Sholes A & B Battery

Work Order #: 408735 **Project ID:**

Analyst: ASA **Date Prepared:** 03/04/2011 **Date Analyzed:** 03/05/2011

Lab Batch ID: 846513 **Sample:** 597271-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0820	82	0.100	0.0924	92	12	70-130	35	
Toluene	<0.00200	0.100	0.0823	82	0.100	0.0924	92	12	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0814	81	0.100	0.0920	92	12	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.166	83	0.200	0.189	95	13	70-135	35	
o-Xylene	<0.00100	0.100	0.0814	81	0.100	0.0923	92	13	71-133	35	

Analyst: ASA **Date Prepared:** 03/07/2011 **Date Analyzed:** 03/07/2011

Lab Batch ID: 846676 **Sample:** 597384-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.119	119	0.100	0.120	120	1	70-130	35	
Toluene	<0.00200	0.100	0.119	119	0.100	0.119	119	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.119	119	0.100	0.119	119	0	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.248	124	0.200	0.247	124	0	70-135	35	
o-Xylene	<0.00100	0.100	0.119	119	0.100	0.119	119	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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Sholes A & B Battery

Work Order #: 408735 **Project ID:**

Analyst: ASA **Date Prepared:** 03/09/2011 **Date Analyzed:** 03/10/2011

Lab Batch ID: 847443 **Sample:** 597830-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.109	109	0.100	0.110	110	1	70-130	35	
Toluene	<0.00200	0.100	0.110	110	0.100	0.110	110	0	70-130	35	
Ethylbenzene	<0.00100	0.100	0.111	111	0.100	0.110	110	1	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.230	115	0.200	0.229	115	0	70-135	35	
o-Xylene	<0.00100	0.100	0.112	112	0.100	0.111	111	1	71-133	35	

Analyst: LATCOR **Date Prepared:** 03/04/2011 **Date Analyzed:** 03/04/2011

Lab Batch ID: 846497 **Sample:** 846497-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.420	10.0	10.8	108	10.0	10.9	109	1	75-125	20	

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

BS / BSD Recoveries

Project Name: Sholes A & B Battery

Work Order #: 408735

Project ID:

Analyst: BEV **Date Prepared:** 03/04/2011 **Date Analyzed:** 03/04/2011

Lab Batch ID: 846393 **Sample:** 597212-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	913	91	997	904	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	814	81	997	833	84	2	70-135	35	

Analyst: BEV **Date Prepared:** 03/04/2011 **Date Analyzed:** 03/04/2011

Lab Batch ID: 846394 **Sample:** 597217-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	915	92	997	948	95	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	806	81	997	919	92	13	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: Sholes A & B Battery

Work Order #: 408735
Lab Batch #: 846497
Project ID:
Date Analyzed: 03/04/2011
Date Prepared: 03/04/2011
Analyst: LATCOR
QC- Sample ID: 408735-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	9.20	101	100	90	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: Sholes A & B Battery

Work Order # : 408735 **Project ID:**

Lab Batch ID: 846513 **QC- Sample ID:** 408679-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/06/2011 **Date Prepared:** 03/04/2011 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00104	0.104	0.0743	71	0.103	0.0854	83	14	70-130	35	
Toluene	<0.00207	0.104	0.0646	62	0.103	0.0663	64	3	70-130	35	X
Ethylbenzene	<0.00104	0.104	0.0722	69	0.103	0.0735	71	2	71-129	35	X
m_p-Xylenes	<0.00207	0.207	0.0543	26	0.207	0.0263	13	69	70-135	35	XF
o-Xylene	<0.00104	0.104	0.0728	70	0.103	0.0804	78	10	71-133	35	X

Lab Batch ID: 846676 **QC- Sample ID:** 408907-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/07/2011 **Date Prepared:** 03/07/2011 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00125	0.125	0.0868	69	0.124	0.0919	74	6	70-130	35	X
Toluene	<0.00250	0.125	0.0870	70	0.124	0.0910	73	4	70-130	35	
Ethylbenzene	<0.00125	0.125	0.0872	70	0.124	0.0895	72	3	71-129	35	X
m_p-Xylenes	<0.00250	0.250	0.173	69	0.248	0.178	72	3	70-135	35	X
o-Xylene	<0.00125	0.125	0.0795	64	0.124	0.0815	66	2	71-133	35	X

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Sholes A & B Battery

Work Order # : 408735 **Project ID:**

Lab Batch ID: 846393 **QC- Sample ID:** 408679-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/04/2011 **Date Prepared:** 03/04/2011 **Analyst:** BEV

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.3	1090	1070	98	1090	1040	95	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.3	1090	901	83	1090	776	71	15	70-135	35	

Lab Batch ID: 846394 **QC- Sample ID:** 408723-018 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/05/2011 **Date Prepared:** 03/04/2011 **Analyst:** BEV

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<17.0	1140	1040	91	1130	1070	95	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	18.5	1140	772	66	1130	889	77	14	70-135	35	X

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

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

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

Sample Duplicate Recovery

Project Name: Sholes A & B Battery

Work Order #: 408735

Lab Batch #: 846497 **Project ID:**
Date Analyzed: 03/04/2011 21:37 **Date Prepared:** 03/04/2011 **Analyst:** LATCOR
QC- Sample ID: 408735-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	9.20	8.70	6	20	

Lab Batch #: 847443
Date Analyzed: 03/10/2011 20:26 **Date Prepared:** 03/09/2011 **Analyst:** ASA
QC- Sample ID: 408735-014 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

BTEX by EPA 8021B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	<0.255	<0.255	NC	35	
Toluene	8.92	9.34	5	35	
Ethylbenzene	9.22	10.2	10	35	
m_p-Xylenes	12.8	14.1	10	35	
o-Xylene	2.31	2.72	16	35	

Lab Batch #: 846485
Date Analyzed: 03/04/2011 17:00 **Date Prepared:** 03/04/2011 **Analyst:** WRU
QC- Sample ID: 408679-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.23	5.22	0	20	

Lab Batch #: 846486
Date Analyzed: 03/04/2011 17:00 **Date Prepared:** 03/04/2011 **Analyst:** WRU
QC- Sample ID: 408735-016 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	18.0	18.4	2	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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Luis Gonzalez

Company Name: Clayton Williams Energy Inc.

Company Address: 6 Desta Drive Suite 2100

City/State/Zip: Midland TX. 79705

Telephone No: 432-661 4708 Fax No: 432-688 3250

Sampler Signature:

e-mail: LGonzales@ClaytonWilliams

Project Name: Sholes A & B Battery

Project #:

Project Loc: Jal NM.

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 408735

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Road #1			03/03/11	2:33		1	X									X				X					X				X
02	Road #2				2:35		1																							
03	Road #3				2:37		1																							
04	Pasture #1				2:45		1																							
05	Pasture #2				2:47		1																							
06	Pasture #3				2:50		1																							
07	Pasture #4				3:05		1																							
08	Pasture #5				3:08		1																							
09	Pasture #6				3:20		1																							
10	Pasture #7				3:27		1																							

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3-4-11	11:09			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				3-4-11	11:09

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample ~~Hand Delivered~~ by Sampler/Client Rep.?	Y	N

by ~~Courier?~~ UPS DHL FedEx Lone Star

Temperature Upon Receipt: 0.9 °C

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: _____ Project Name: _____

Company Name: Clayton Williams Project #: _____

Company Address: _____ Project Loc: _____

City/State/Zip: _____ PO #: _____

Telephone No: _____ Fax No: _____ Report Format: ☐ Standard ☐ TRRP ☐ NPDES

Sampler Signature: _____ e-mail: _____

(lab use only)

ORDER #: 408735

Analyze For:

TCLP:

TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 (8015M)	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	Pasture #8			3/3/11	8:35		1	X								S	X			X				X				X
12	Stockpile #1				8:50 3:40		1																					
13	Stockpile #2				3:40		1																					
14	Stockpile #3				3:45		1																					
15	Background #1				3:58		1																					
16	Tank Battery			3/4/11	7:30		1																					
17	Stockpile				7:40		1																					

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3-4-11	11:09			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date 3-4-11	Time 11:09

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 0.9 °C

XENCO Laboratories

XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Clayton Williams Energy
Date/Time: 3-4-11 11:09
Lab ID #: 408735
Initials: LM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	0.9 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 410498

for

Southwest Royalties

Project Manager: Luis Gonzalez

Sholes A & B Battery

24-MAR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

24-MAR-11

Project Manager: **Luis Gonzalez**
Southwest Royalties
6 Desta Dr Suite 1100
Midland, TX 79705

Reference: XENCO Report No: **410498**
Sholes A & B Battery
Project Address:

Luis Gonzalez:

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 410498. 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. 410498 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 410498

Southwest Royalties, Midland, TX

Sholes A & B Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Road # 1 B	S	Mar-21-11 11:35		410498-001
Stock Pile 1-A	S	Mar-21-11 11:50		410498-002
Stock Pile 1-B	S	Mar-21-11 11:50		410498-003
Stock Pile 1-C	S	Mar-21-11 11:55		410498-004
Stock Pile 1-D	S	Mar-21-11 11:59		410498-005
Stock Pile 1-E	S	Mar-21-11 12:05		410498-006
Stock Pile 1-F	S	Mar-21-11 12:06		410498-007

CASE NARRATIVE

Client Name: Southwest Royalties
Project Name: Sholes A & B Battery

Project ID:
Work Order Number: 410498

Report Date: 24-MAR-11
Date Received: 03/21/2011

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-849032 BTEX by EPA 8021B
SW8021BM

Batch 849032, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 410498-004,410498-003.

SW8021BM

Batch 849032, m_p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 410498-001, -005, -006, -002, -003, -004, -007.
The Laboratory Control Sample for m_p-Xylenes is within laboratory Control Limits

Certificate of Analysis Summary 410498

Southwest Royalties, Midland, TX

Project Name: Sholes A & B Battery

Project Id:

Contact: Luis Gonzalez

Project Location:

Date Received in Lab: Mon Mar-21-11 03:00 pm

Report Date: 24-MAR-11

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	410498-001		410498-002		410498-003		410498-004		410498-005		410498-006	
	Field Id:	Road # 1 B		Stock Pile 1-A		Stock Pile 1-B		Stock Pile 1-C		Stock Pile 1-D		Stock Pile 1-E	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Mar-21-11 11:35		Mar-21-11 11:50		Mar-21-11 11:50		Mar-21-11 11:55		Mar-21-11 11:59		Mar-21-11 12:05	
Anions by E300	*Extracted:*												
	Analyzed:	Mar-22-11 11:46		Mar-22-11 12:25		Mar-22-11 12:38		Mar-22-11 12:51		Mar-22-11 13:04		Mar-22-11 13:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7.39	5.24	7.90	4.75	10.7	4.24	7.54	4.22	5.69	4.22	45.4	4.23
BTEX by EPA 8021B	*Extracted:*	Mar-22-11 13:35		Mar-22-11 13:35		Mar-22-11 13:35		Mar-22-11 13:35		Mar-22-11 13:35		Mar-22-11 13:35	
	Analyzed:	Mar-23-11 01:29		Mar-23-11 01:52		Mar-23-11 02:37		Mar-23-11 03:22		Mar-23-11 04:07		Mar-23-11 04:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0013	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.00100	ND	0.0010
Toluene		ND	0.0025	ND	0.0023	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0013	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.00100	0.00310	0.0010
m_p-Xylenes		ND	0.0025	ND	0.0023	ND	0.0020	ND	0.0020	ND	0.0020	0.00533	0.0020
o-Xylene		ND	0.0013	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.00100	0.0122	0.0010
Total Xylenes		ND	0.0013	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.00100	0.0175	0.0010
Total BTEX		ND	0.0013	ND	0.0011	ND	0.0010	ND	0.0010	ND	0.00100	0.0206	0.0010
Percent Moisture	*Extracted:*												
	Analyzed:	Mar-22-11 17:00		Mar-22-11 17:00		Mar-22-11 17:00		Mar-22-11 17:00		Mar-22-11 17:00		Mar-22-11 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.8	1.00	11.5	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00
TPH By SW8015 Mod	*Extracted:*	Mar-22-11 10:00		Mar-22-11 10:00		Mar-22-11 10:00		Mar-22-11 10:00		Mar-22-11 10:00		Mar-22-11 10:00	
	Analyzed:	Mar-22-11 12:45		Mar-22-11 13:14		Mar-22-11 13:43		Mar-22-11 14:11		Mar-22-11 14:40		Mar-22-11 15:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	18.7	ND	84.7	ND	151	ND	75.4	ND	75.3	275	152
C12-C28 Diesel Range Hydrocarbons		ND	18.7	6390	84.7	9180	151	4420	75.4	3470	75.3	9010	152
C28-C35 Oil Range Hydrocarbons		ND	18.7	475	84.7	739	151	304	75.4	244	75.3	679	152
Total TPH		ND	18.7	6870	84.7	9920	151	4720	75.4	3710	75.3	9960	152

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 410498

Southwest Royalties, Midland, TX

Project Name: Sholes A & B Battery

Project Id:

Contact: Luis Gonzalez

Project Location:

Date Received in Lab: Mon Mar-21-11 03:00 pm

Report Date: 24-MAR-11

Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	410498-007						
	Field Id:	Stock Pile 1-F						
	Depth:							
	Matrix:	SOIL						
	Sampled:	Mar-21-11 12:06						
Anions by E300	*Extracted:*							
	Analyzed:	Mar-22-11 13:30						
	Units/RL:	mg/kg	RL					
Chloride		36.6	4.24					
BTEX by EPA 8021B	*Extracted:*	Mar-22-11 13:35						
	Analyzed:	Mar-23-11 05:37						
	Units/RL:	mg/kg	RL					
Benzene		ND	0.0010					
Toluene		ND	0.0020					
Ethylbenzene		ND	0.0010					
m_p-Xylenes		0.00379	0.0020					
o-Xylene		0.00539	0.0010					
Total Xylenes		0.00918	0.0010					
Total BTEX		0.00918	0.0010					
Percent Moisture	*Extracted:*							
	Analyzed:	Mar-22-11 17:00						
	Units/RL:	%	RL					
Percent Moisture		1.02	1.00					
TPH By SW8015 Mod	*Extracted:*	Mar-22-11 10:00						
	Analyzed:	Mar-22-11 15:39						
	Units/RL:	mg/kg	RL					
C6-C12 Gasoline Range Hydrocarbons		265	75.6					
C12-C28 Diesel Range Hydrocarbons		9250	75.6					
C28-C35 Oil Range Hydrocarbons		481	75.6					
Total TPH		10000	75.6					

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 410498,

Project ID:

Lab Batch #: 849032 **Sample:** 598778-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 22:28

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 849032 **Sample:** 598778-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 22:51

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 849032 **Sample:** 598778-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 23:58

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 849032 **Sample:** 410498-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 01:29

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

Lab Batch #: 849032 **Sample:** 410498-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 01:52

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 410498,

Project ID:

Lab Batch #: 849032 **Sample:** 410498-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 02:37

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0211	0.0300	70	80-120	*

Lab Batch #: 849032 **Sample:** 410498-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 03:22

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0238	0.0300	79	80-120	*

Lab Batch #: 849032 **Sample:** 410498-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 04:07

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 849032 **Sample:** 410498-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 04:52

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 849032 **Sample:** 410498-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 05:37

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 410498,

Project ID:

Lab Batch #: 849032 **Sample:** 410556-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 11:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 849032 **Sample:** 410556-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/23/11 11:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 848846 **Sample:** 598684-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 11:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	50.2	50.1	100	70-135	

Lab Batch #: 848846 **Sample:** 598684-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 11:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	101	105	70-135	
o-Terphenyl	47.2	50.3	94	70-135	

Lab Batch #: 848846 **Sample:** 598684-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/22/11 12:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	52.5	50.1	105	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 410498,

Project ID:

Lab Batch #: 848846 **Sample:** 410498-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 12:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

Lab Batch #: 848846 **Sample:** 410498-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 13:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.3	100	96	70-135	
o-Terphenyl	47.3	50.0	95	70-135	

Lab Batch #: 848846 **Sample:** 410498-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 13:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	55.1	50.0	110	70-135	

Lab Batch #: 848846 **Sample:** 410498-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 14:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.6	100	96	70-135	
o-Terphenyl	46.6	50.1	93	70-135	

Lab Batch #: 848846 **Sample:** 410498-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 14:40

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.2	99.8	95	70-135	
o-Terphenyl	45.6	49.9	91	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Sholes A & B Battery

Work Orders : 410498,

Project ID:

Lab Batch #: 848846 **Sample:** 410498-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 15:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.6	100	97	70-135	
o-Terphenyl	50.7	50.2	101	70-135	

Lab Batch #: 848846 **Sample:** 410498-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 15:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.8	112	70-135	
o-Terphenyl	58.0	49.9	116	70-135	

Lab Batch #: 848846 **Sample:** 410498-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 23:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.8	121	70-135	
o-Terphenyl	55.2	49.9	111	70-135	

Lab Batch #: 848846 **Sample:** 410498-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/22/11 23:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	48.4	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.

BS / BSD Recoveries

Project Name: Sholes A & B Battery

Work Order #: 410498 **Project ID:**

Analyst: ASA **Date Prepared:** 03/22/2011 **Date Analyzed:** 03/22/2011

Lab Batch ID: 849032 **Sample:** 598778-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0989	99	0.100	0.102	102	3	70-130	35	
Toluene	<0.00200	0.100	0.100	100	0.100	0.103	103	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0984	98	0.100	0.101	101	3	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.193	97	0.200	0.198	99	3	70-135	35	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.103	103	1	71-133	35	

Analyst: LATCOR **Date Prepared:** 03/22/2011 **Date Analyzed:** 03/22/2011

Lab Batch ID: 848855 **Sample:** 848855-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.420	10.0	9.85	99	10.0	9.84	98	0	75-125	20	

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

XENCO Laboratories

BS / BSD Recoveries

ACCREDITED IN ACCORDANCE WITH nelac

Project Name: Sholes A & B Battery

Work Order #: 410498 **Project ID:**

Analyst: BEV **Date Prepared:** 03/22/2011 **Date Analyzed:** 03/22/2011

Lab Batch ID: 848846 **Sample:** 598684-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	916	92	1010	907	90	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	931	93	1010	905	90	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: Sholes A & B Battery

Work Order #: 410498
Lab Batch #: 848855
Project ID:
Date Analyzed: 03/22/2011
Date Prepared: 03/22/2011
Analyst: LATCOR
QC- Sample ID: 410498-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	7.39	125	120	90	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: Sholes A & B Battery

Work Order # : 410498 **Project ID:**

Lab Batch ID: 849032 **QC- Sample ID:** 410556-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/23/2011 **Date Prepared:** 03/22/2011 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00105	0.105	0.0824	78	0.105	0.0916	87	11	70-130	35	
Toluene	<0.00210	0.105	0.0769	73	0.105	0.0853	81	10	70-130	35	
Ethylbenzene	<0.00105	0.105	0.0766	73	0.105	0.0850	81	10	71-129	35	
m_p-Xylenes	<0.00210	0.210	0.0986	47	0.210	0.112	53	13	70-135	35	X
o-Xylene	<0.00105	0.105	0.0787	75	0.105	0.0875	83	11	71-133	35	

Lab Batch ID: 848846 **QC- Sample ID:** 410498-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/22/2011 **Date Prepared:** 03/22/2011 **Analyst:** BEV

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<18.7	1240	1270	102	1250	1130	90	12	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<18.7	1240	1250	101	1250	1140	91	9	70-135	35	

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

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

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

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

Sample Duplicate Recovery

Project Name: Sholes A & B Battery

Work Order #: 410498

Lab Batch #: 848855 **Project ID:**

Date Analyzed: 03/22/2011 11:59 **Date Prepared:** 03/22/2011 **Analyst:** LATCOR

QC- Sample ID: 410498-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	7.39	7.20	3	20	

Lab Batch #: 848862

Date Analyzed: 03/22/2011 17:00 **Date Prepared:** 03/22/2011 **Analyst:** LATCOR

QC- Sample ID: 410498-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	19.8	19.4	2	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

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Luis Gonzales
Company Name: Southwest Royalties
Company Address:
City/State/Zip:
Telephone No:
Fax No:
Sampler Signature: [signature]
e-mail:

Project Name: Sholes Ad B Battery
Project #:
Project Loc:
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 410498

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other)	TPH: 418.1 (8015M) 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX (8021B/5030) or BTEX 8260	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Road #1.6			3-21-2011	11:35 am		1	✓								S	✓			✓					✓								✓
02	Stock Pile 1-A			3-21-2011	11:50 am		1	✓								S	✓			✓					✓								✓
03	Stock Pile 1-B			3-21-2011	11:50 am		1	✓								S	✓			✓					✓								✓
04	Stock Pile 1-C			3-21-2011	11:55 am		1	✓								S	✓			✓					✓								✓
05	Stock Pile 1-D			3-21-2011	11:59 am		1	✓								S	✓			✓					✓								✓
06	Stock Pile 1-E			3-21-2011	12:05 pm		1	✓								S	✓			✓					✓								✓
07	Stock Pile 1-F			3-21-2011	12:06 pm		1	✓								S	✓			✓					✓								✓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3-21-2011	3:00 pm			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Amy R Hernandez	3/21/11	15:00

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by (Sampler)/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 0 °C
4.0 ?C 9.

not froz?

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Southwest Royalties

Date/Time: 3/21/11 15:00

Lab ID#: 410498

Initials: AH

Sample Receipt Checklist

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

18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs (0) °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00938 POD1		STK	LE	4	4	4	33	25S	36E	663970	3550671*	360	80	280

Average Depth to Water: **80 feet**
Minimum Depth: **80 feet**
Maximum Depth: **80 feet**

Record Count: 1

PLSS Search:

Section(s): 1-36 **Township:** 25S **Range:** 36E

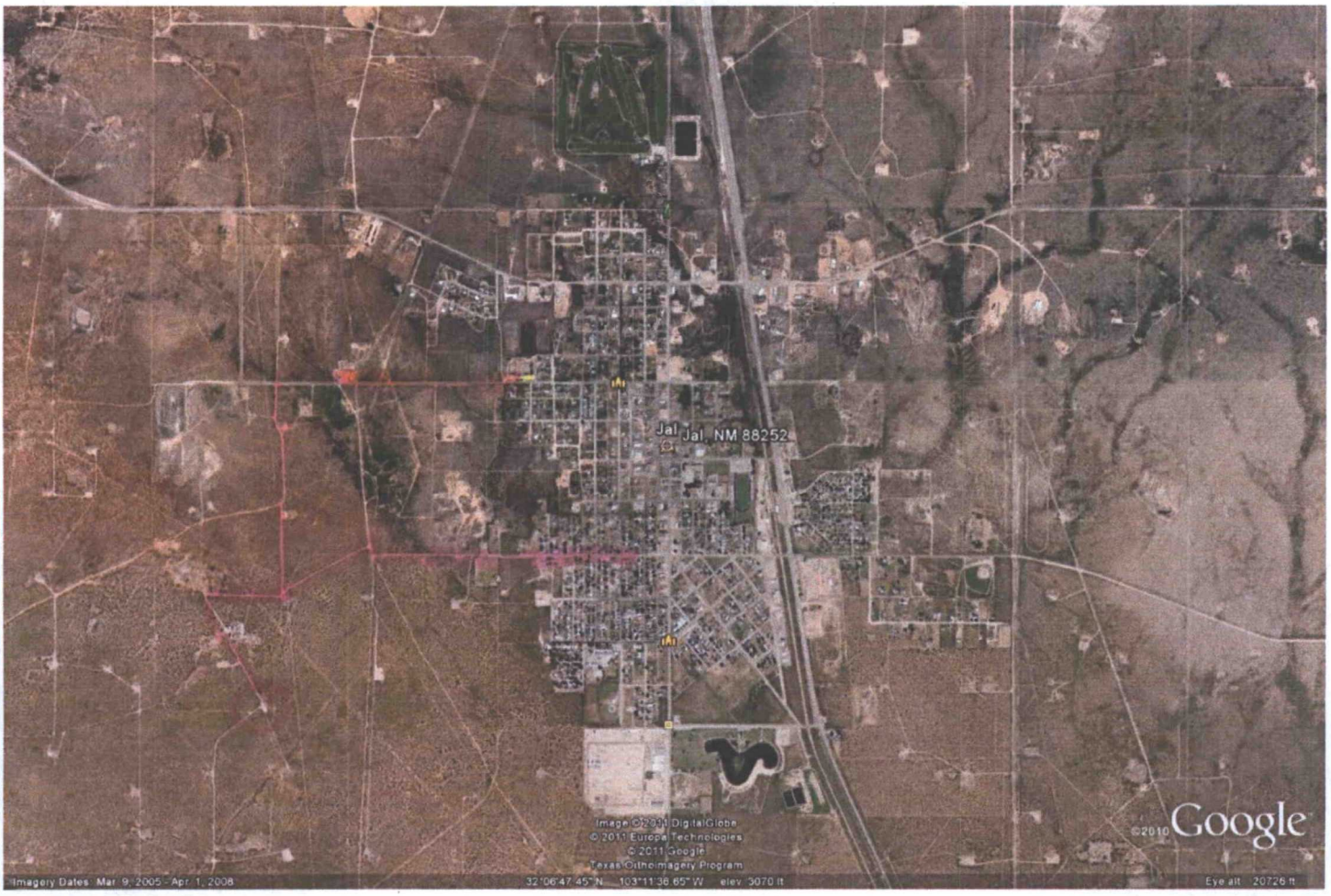
***UTM location was derived from PLSS - see Help**

SURFACE TIES
SHOLES A & B TB
05/04/11

DATE	NAME	ORGANIZATION	PHN# / EMAIL
05/04/11	GEOFF LEKING	NMOCD	(575) 393-6161 EXT 113
	Trishia Bad Bear	BLM	575 3933612
	Jonnie Miller	Rem-Tec +	432-523-9453
	Mark Rosenhoover	Rem-Tech	432-523-9453
	Raul Valenzuela	Stewart Inc.	432-523-2350
	Eric Garcia	Republic Services	575-631-0131
	Emmanuel Lujan	Panther Energy	575-631-6914
	Ariel Lujan	Panther Energy	575-631-2624
	Luis Gonzalez	Clayton Williams	432-661 4708

SW RUHALTIES
SHOLES TB

SW ROYALTIES
SKULLS BATTERY A & B


Jal Jal, NM 88252
Image © 2011 DigitalGlobe
© 2011 Europa Technologies
© 2011 Google
Texas Orthoimagery Program
©2010 Google
Imagery Dates: Mar 9, 2005 - Apr 1, 2008
32°06'47.45" N 103°11'36.65" W elev 3070 ft
Eye alt 20726 ft