LEGACY RESERVES

Vistrict I
625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
000 Rio Brazos Road, Azlec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division

1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

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

Release Notification and Corrective Action

					OPI	RATOR		itial Report	Final Report
Name of Co	ompany	Legacy Res	serves, LI	P		Kevin Bracey			
Address I	P. O. Box	0848, Midle	md, Texs	is 79702	Telephone	No. 432-238-28	56		
Facility Na	me LRC	Chamberlai	n Tank B	Battery	Facility T	ype Tank Batter	У		
Surface Ov	vner Da	rr Angel!		Mineral O	wner		Lease 1	No.	
				LOCA	TION OF R	ELEASE			
Unit Letter C	Section 14	Township 15S	Range 37E	Feet from the	North/South Line	and a state of the second s	East/West Line	County Lea	and an
			Latitu	ide 33° 01 20.3"	North	Longitude 10	3º 10 16.6" Wes	t	
				NAT	URE OF RE	LEASE			
Type of Rele	ease Produ	ced Water and	crude oil	[Volume	of Release 680 bb	ls Volume	Recovered 600	bbls
Source of Re	elease Tani	k			1/6/2010		ce Date and 1/6/2010	Hour of Discov	егу
Was Immed	iate Notice		Yes No	Not Required	If YES, Geoff L	Fo Whom? eking			
By Whom?	Camille Bt	yant				Hour 1/7/2010@			
Was a Water	roourse Rea	ched?	Yes	No No	IF YES,	Volume Impacting	the Watercourse.		
If a Waterco	norse was In	ipacted, Desci	ribe Fully.	\$			and the strength of a discovery of the strength of the strengt		5Y
				on Taken: The tran. AOCD guidelines.	sfer line on a 500	barrel tank became	e obstructed resultin	ng in a release of	f produced water
Describe An	ea Affected	and Cleanup	Action Ta	ken. Release impa	cted approximatel	27,000 square fee	t inside the tank ba	ttery.	
regulations a public health should their or the enviro	all operators h or the env operations omneat In	are required ironment. The have failed to	to report adequate dOCD acc	and/or file certain nce of a C-141 rep iv investigate and r	release notification ort by the NMOC emediate contami	ons and perform or D marked as "Fin nation that pose a t relieve the operat	and understand that orrective actions for al Report" does no threat to ground wa for of responsibility	or releases, which t relieve the operator, surface water, surface water, for compliance	th may endanger erator of liability er, human health
	11	~				OIL CON	SERVATION	DIVISION	
Signature:	how	in Br	acen.	6	Approved	ENU. ENGINE Bistrict Supervis			
Printed Nam	e: Kevin Br	acey	ť.	2	140100		Steeffer	ey Lebi	2
Title: Produ	iction Foren	an		the design of the second s	Approval I	ate: 011111	O Expiration	Date: 03/11	10
E-mail Addr	ess: kbracey	@legacylp.co	000		Conditions	of Approval: DEL	NEHTE TO		
Date: 1/7/20	10	- Y]	Phone: 432-238-28		SOUTH FINA	10 10 1	IRP-10.0	01.2390

RECEIVED

UMIN 1

HURRDUNN

LEGACY RESERVES

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

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr.

Form C-141 Revised October 10, 2003

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

Santa Fe, NM 87505 Release Notification and Corrective Action

					OP	ERATOR		nitial Report	Final Report
Name of Co		Legacy Res			Contact	Kevin Bracey		1.	
		10848, Midl				No. 432-238-28		1	
Facility Nat	me LR(Chamberlai	n Tank E	attery Sec. 14	Facility T	ype Tank Batter	ГУ		
Surface Ow	ner Da	rr Angell		Mineral C	Iwner		Lease	No.	
				LOCA	TION OF R	ELEASE			
Unit Letter C	Section 14	Township 15S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea	
			Latitu	de 33º 01 20.3"	North	Longitude 10	03° 10 16.6" Wes	t	
				NAT	URE OF RE	LEASE			
Type of Rele	ase Produ	ced Water			Volume	of Release 80 bbls	Volume	Recovered 60 bb	ls
Source of Ro					5/1/10 @	Hour of Occurrent	ce Dute and 5/1/10 @	Hour of Discover	У
Was Immedi	ate Notice (Yes No	Not Required	If YES, Geoff L	Fo Whom? eking			
By Whom?	Camille Br	yant		/	Date and	Hour 5/6/10 @ 0	900		
Was a Water	course Real		Yes	NO	If YES,	Volume Impacting	the Watercourse.		
		pacted, Descr			6.1. <u>6.</u> 2	5			1 1
produced wa	ter. The site	will be reme	diated to M	MOCD guideline	IS .		narge side of transf		m a release of
Describe Are	a Affected	and Cleanup	Action Tal	en. Release impa	cted approximatel	8,470 square feet	inside the tank batt	tery.	
regulations a public health should their or the enviro	or the env operations l	are required fronment. The have failed to addition, NM	to report acceptar adequatel AOCD acc	and/or file certain the of a C-141 re y investigate and	port by the NMOC remediate contami	ons and perform co D marked as "Fin nation that pose a t	and understand that orrective actions for al Report [*] does no threat to ground wa for of responsibility	r releases, which t relieve the open ter, surface water	may endanger ator of liability , human health
federal, state	or local la	ws and/or reg	ulations.					INDERGION	
1	1	K				and address they are also and the second sec	SERVATION	DIVISION	
Signature:	how	n. Dro	ren	*	Approved	ENV ENUME By District Supervis	SOF-		
Printed Nam	e: Kevin Br	acey	(Hest.	rent Joring	
Title: Produ	ction Foren	าสก		41	Approval I	Date: 05/10/10		Date: -07/14	10
E-mail Addr	ess: kbracey	@legacylp.co	orn		Conditions	of Approval:			
Date: 5/7/10			Phy	one: 432-238-2850	5			167-10.5.	1505
									2513

HOBBSULL

Basin Environmental Service Technologies, LLC

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

	CHRMBERLAIN
8	
Effective Solutions	

HOBBS OCD

JUN 0 3 2011

REMEDIATION SUMMARY

AND SITE CLOSURE REQUEST

LEGACY RESERVES, LP LR Chamberlain Tank Battery Lea County, New Mexico UNIT LTR "C" (NE ¼ NW ¼), Section 14, Township 15 South, Range 37 East Latitude 33° 01' 20.3" North, Longitude 103° 10' 16.6" West NMOCD Reference # 1RP-2390 and 1RP-2513

Prepared For:

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

Prepared By: Basin Environmental Service Technologies, LLC 2800 Plains Highway Lovington, New Mexico 88260

December 2010

BOGL LOWRY

Joel W. Lowry Project Manager

TABLE OF CONTENTS

1.0	INTRODUCTION	Ĺ
2.0	NMOCD SITE CLASSIFICATION	
3.0	SUMMARY OF SOIL REMEDIATION ACTIVITIES	!
4.0	QA/QC PROCEDURES	3
5.0	SITE CLOSURE REQUEST	5
6.0	LIMITATIONS	5
7.0	DISTRIBUTION	7

FIGURES

Figure 1 – Site Location Map Figure 2 – Site and Sample Location Map

TABLES

Table 1 – Concentrations of BTEX, TPH and Chloride in Soil Table 2 – Field Test Results for Chloride Concentrations

APPENDICES

Appendix A – Soil Boring Logs

Appendix B - Analytical Reports

Appendix C - Photographs

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

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Legacy Reserves, LP (Legacy), has prepared this *Remediation Summary and Site Closure Request* for the release site known as LR Chamberlain Tank Battery. The legal description of the release site is Unit Letter "C" (NE ¹/₄ NW ¹/₄), Section 14, Township 15 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by Mr. Darr Angell. The release site latitude is 32° 01' 20.3" North and the longitude is 103° 10' 16.6" West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map. General photographs are provided as Appendix C.

On January 6, 2010, Legacy discovered a release had occurred at the LR Chamberlain Tank Battery. The transfer line on a 500 barrel tank was obstructed, resulting in a release of produced water and crude oil. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on January 7, 2010. The Release Notification and Corrective Action (Form C-141) indicated approximately 680 barrels of produced water and crude oil was released and 600 barrels were recovered. The release was confined within the tank battery. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

On May 5, 2010, Legacy discovered an additional release had occurred at the LR Chamberlain Tank Battery. Equipment failure of a 3:1 swedge on the discharge side of the transfer pump resulted in a release of produced water. The release was reported to the NMOCD Hobbs District Office on May 6, 2010. The Release Notification and Corrective Action (Form C-141) indicated approximately 80 barrels of produced water was released and approximately 60 barrels were recovered. The release was confined within the tank battery. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

Remediation activities of the January 6, 2010, and May 5, 2010, releases will be conducted simultaneously.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database indicates the average depth to groundwater is approximately forty (40) feet below ground surface (bgs) in the section. This depth to groundwater results in a score of twenty (20) points being assigned to the site based on the NMOCD depth to groundwater criteria.

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

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

The NMOCD guidelines indicate the LR Chamberlain Tank Battery release site has an initial ranking score of twenty (20). Based on this score, the soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

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

The NMOCD chloride clean up level concentrations are site specific and will be 500 mg/kg per the NMOCD – Hobbs District Office.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On January 22, 2010, Basin began excavation activities at the LR Chamberlain Tank Battery release site. The area inside the tank battery was excavated to approximately 1.5 feet bgs. Approximately 1,200 cubic yards (cy) of impacted soil was excavated and stockpiled on-site pending final disposition.

On March 30, 2010, two (2) trenches (NE Corner and S. Middle) were advanced at the site to investigate the vertical and horizontal extent of impact at the site. Selected soil samples were submitted to the laboratory and analyzed for concentrations of benzene, toluene, ethyl-benzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and chlorides using EPA SW 846-8021b, SW 846-8015M and E 300, respectively. A summary of the analytical results are included in Table 1, Concentrations of BTEX, TPH and Chlorides in Soil. Laboratory analytical reports are provided as Appendix B.

The NE Corner Trench was advanced in the northeast corner of the tank battery to approximately seventeen (17) feet bgs. Four (4) soil samples (NE Corner @ 5', NE Corner @ 10', NE Corner @ 15' and NE Corner @ 17') were collected from the trench and submitted to the laboratory for analysis. Following soil sample collection, the trench was backfilled. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory method detection limit (MDL) for all the submitted soil samples. BTEX concentrations ranged from 0.0256 mg/kg for soil sample NE Corner @ 17' to 25.5 mg/kg for soil sample NE Corner @ 15'. TPH concentrations ranged from 431 mg/kg for soil sample NE Corner @ 17' to 5,435 mg/kg for soil sample NE Corner @ 15'. Chloride concentrations ranged from 624 mg/kg for soil sample NE Corner @ 15' to 1,420 mg/kg for soil sample NE Corner @ 5'.

The S. Middle trench was advanced in the center of the tank battery approximately forty (40) feet south of the eastern-most tank, to approximately fifteen (15) feet bgs. Four (4) soil samples (S. Middle @ 5', S. Middle @ 10', S. Middle @ 12' and S. Middle @ 15') were collected from the trench and submitted to the laboratory for analysis. Following soil sample collection, the trench was backfilled. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. BTEX concentrations ranged from 2.773 mg/kg for soil sample S. Middle @ 5' to 173.5 mg/kg for soil sample S. Middle @ 12'. TPH concentrations ranged from 3,391 mg/kg for soil sample S. Middle @ 5' to 9,477 mg/kg for soil sample S. Middle @ 12'. Chloride concentrations ranged from 1,680 mg/kg for soil sample S. Middle @ 10' to 3,110 mg/kg for soil sample S. Middle @ 12'.

On April 28, 2010, five (5) delineation trenches (T-1, T-2, T-3, T-4 and T-5) were advanced outside of the tank battery to investigate the vertical and horizontal extent of impacted soil at the site. Trenches T-1, T-2 and T-3 were advanced to the north of the tank battery. Trenches T-4

and T-5 were advanced to the west and east, respectively. The delineation trenches were positioned against the berm and extended perpendicular to the direction of the berm. Selected soil samples were collected from the trenches and submitted to the laboratory for determination of BTEX, TPH and chloride concentrations.

Trench #1 was advanced on the northwest side of the tank battery to an approximate depth of seventeen (17) feet bgs. Twelve (12) soil samples (T-1 Sample 1 @ 2', T-1 Sample 1 @ 7', T-1 Sample 1 @ 15', T-1 Sample 1 @ 17', T-1 Sample 2 @ 2', T-1 Sample 2 @ 5', T-1 Sample 3 @ 2', T-1 Sample 3 @ 5', T-1 Sample 4 @ 2', T-1 Sample 4 @ 5', T-1 Sample 5 @ 2' and T-1 Sample 5 @ 3') were collected and submitted to the laboratory for analysis. Following soil sample collection, the trench was backfilled. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. TPH concentrations were less than the appropriate laboratory MDL for all the submitted soil samples, with the exception of soil samples T-1 Sample 5 @ 2' and T-1 Sample 5 @ 3', which exhibited TPH concentrations of 113.5 mg/kg and 180.6 mg/kg, respectively. Chloride concentrations ranged from 8.95 mg/kg for soil sample T-1 Sample 5 @ 3' to 1,460 mg/kg for soil sample T-1 Sample 4 @ 5'.

Trench #2 was advanced on the north central side of the tank battery to an approximate depth of thirteen (13) feet bgs, where a solid rock layer was encountered. Eight (8) soil samples (T-2 Sample 1 @ 2', T-2 Sample 1 @ 7', T-2 Sample 1 @ 12', T-2 Sample 1 @ 13', T-2 Sample 2 @ 2', T-2 Sample 2 @ 5', T-2 Sample 3 @ 2' and T-2 Sample 3 @ 5') were collected and submitted to the laboratory for analysis. Following soil sample collection, the trench was backfilled. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. Chloride concentrations ranged from 66.3 mg/kg for soil sample T-2 Sample 3 @ 5' to 837 mg/kg for soil sample T-2 Sample 1 @ 2'.

Trench #3 was advanced on the northeast side of the tank battery to an approximate depth of seven (7) feet bgs. Seven (7) soil samples (T-3 Sample 1 @ 2', T-3 Sample 1 @ 5', T-3 Sample 1 @ 7', T-3 Sample 2 @ 5', T-3 Sample 3 @ 5', T-3 Sample 4 @ 2' and T-3 Sample 4 @ 5') were collected and submitted to the laboratory for analysis. Following soil sample collection, the trench was backfilled. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for all submitted soil samples. Chloride concentrations ranged from 71.6 mg/kg for soil sample T-3 Sample 4 @ 2' to 981 mg/kg for soil sample T-3 Sample 3 @ 5'.

Trench #4 was advanced on the west side of the tank battery to an approximate depth of three (3) feet bgs. A solid rock layer was encountered on the west side of the tank battery at depths ranging from one and half (1.5) feet to three (3) feet bgs. Four (4) soil samples (T-4 Sample 1 @ 1.5', T-4 Sample 2 @ 1.5', T-4 Sample 3 @ 2' and T-4 Sample 3 @ 3') were collected and submitted to the laboratory for analysis. Following soil sample collection the trench was backfilled. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. Chloride concentrations ranged from 67.6 mg/kg for soil sample T-4 Sample 3 @ 2' to 885 mg/kg for soil sample T-4 Sample 2 @ 1.5'.

Trench #5 was advanced on the east side of the tank battery to an approximate depth of three and a half (3.5) feet bgs. A solid rock layer was encountered on the east side of the battery at depths ranging from approximately one and a half (1.5) feet to three and a half (3.5) feet bgs. Three (3) soil samples (T-5 Sample 1 @ 2', T-5 Sample 1 @ 3.5' and T-5 Sample 2 @ 2') were collected and submitted to the laboratory for analysis. Following soil sample collection the trench was backfilled. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. Chloride concentrations ranged from 66.4 mg/kg for soil sample T-5 Sample 2 @ 2' to 2,870 mg/kg for soil sample T-5 Sample 1 @ 2'.

On June 29, 2010, with NMOCD approval, one (1) soil boring (SB-1) was advanced inside the LR Chamberlain Tank Battery to investigate the vertical extent of soil impact. Soil boring logs are provided as Appendix A. Soil samples were collected a five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID) and a chloride field screening kit. Selected soil samples were submitted to the laboratory for determination of concentrations of BTEX, TPH and chlorides.

Soil boring SB-1 was advanced in the southern portion of the tank battery to a total depth of approximately thirty (30) feet bgs. Soil samples collected at five (5) feet, ten (10) feet, fifteen (15) feet, twenty (20) feet, twenty-five (25) feet and thirty (30) feet were submitted to the lab for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL for all the submitted soil samples. TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples SB-1 @ 10', SB-1 @ 15', SB-1 @ 20' and SB-1 @ 25' to 51.9 mg/kg for soil sample SB-1 @ 5'. Chloride concentrations ranged from 72.7 mg/kg for soil sample SB-1 @ 25' to 2,170 mg/kg for soil sample SB-1 @ 5'.

August 11, 2010, Legacy submitted a *Remediation Summary and Site Closure Proposal* to a representative of the NMOCD Hobbs District Office. The Proposal was approved by the NMOCD representative.

On September 30, 2010, Basin resumed excavation activities at the site. The area inside the tank battery was excavated to the solid rock layer, with the exception of the areas defined by and including South Middle Trench and NE Trench, which were excavated to fifteen (15) feet bgs. Upon completing the excavation activities, the excavation was backfilled to approximately two (2) feet bgs with locally purchased, non-impacted soil.

Between October 8 and 15, 2010, a one (1) foot clay cap was installed in the excavation and compacted. Following the installation of the clay cap, the site was backfilled with locally purchased non-impacted caliche, compacted in twelve (12) inch lifts and graded.

On October 28, 2010, Basin began excavation activities outside of the containment. As outlined in the *Remediation Summary and Site Closure Proposal*, the area defined by and including Trench #1 was excavated to approximately ten (10) feet bgs and advanced to the north until field tests indicated chloride concentrations were less than 500 mg/kg. A summary of results from chloride field tests are presented in Table 2, Field Test Results for Chloride Concentrations. The area defined by and including Trench #2 was excavated to approximately eight (8) feet bgs and advanced to the north until field tests indicated chloride concentrations were less than 500 mg/kg. The area defined by and including Trench #3 was excavated to approximately five (5) feet bgs and advanced to the north until field tests indicated chloride concentrations were less than 500 mg/kg. The area defined by and including Trench #4 was excavated to approximately two (2) feet bgs and advanced to the west until field tests indicated chloride concentrations were less than 500 mg/kg. Upon completing excavation activities, the remainder of the excavation was backfilled to approximately two (2) feet bgs with locally purchased, non-impacted soil.

The dimensions of the excavated area were approximately three hundred thirty (330) feet in length, one hundred fifty (150) feet in width and two (2) to fifteen (15) feet in depth. Between October 5 and November 8, 2010, Basin transported approximately 6,840 cy of excavated soil to Gandy Marley, Inc. (NMOCD Permit #DP-1041) for disposal.

On November 10 and 11, 2010, a one (1) foot clay cap was installed in the remaining excavation and compacted. Following the installation of the clay cap, the site was backfilled with locally purchased, non-impacted caliche, compacted in twelve (12) inch lifts and contoured to fit the surrounding topography.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- Chloride concentrations in accordance with EPA Method 300.1

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Basin recommends Legacy provide the NMOCD Hobbs District Office a copy of the *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the LR Chamberlain Tank Battery.

6.0 LIMITATIONS

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

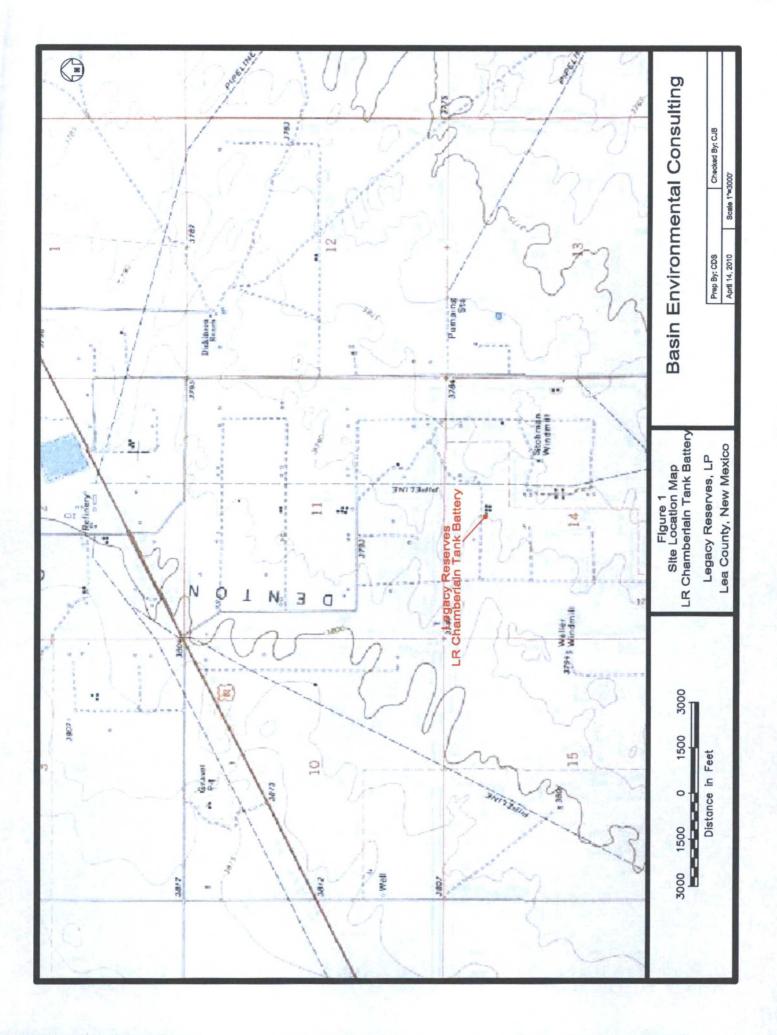
Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Legacy Reserves, L.P. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Legacy Reserves, L.P.

7.0 **DISTRIBUTION:**

Copy 1:	Geoffrey Leking
	New Mexico Energy, Minerals and Natural Resources Department
	Oil Conservation Division (District 1)
	625 N. French Drive
	Hobbs, New Mexico 88240
Copy 2:	Kevin Bracey

- Legacy Reserves, LP PO Box 10848 Midland, Texas 79702
- Copy 3: Darr Angell P.O. Box 190 Lovington, New Mexico 88260
- Copy 3: Basin Environmental Service Technologies, LLC P.O. Box 301 Lovington, New Mexico 88260



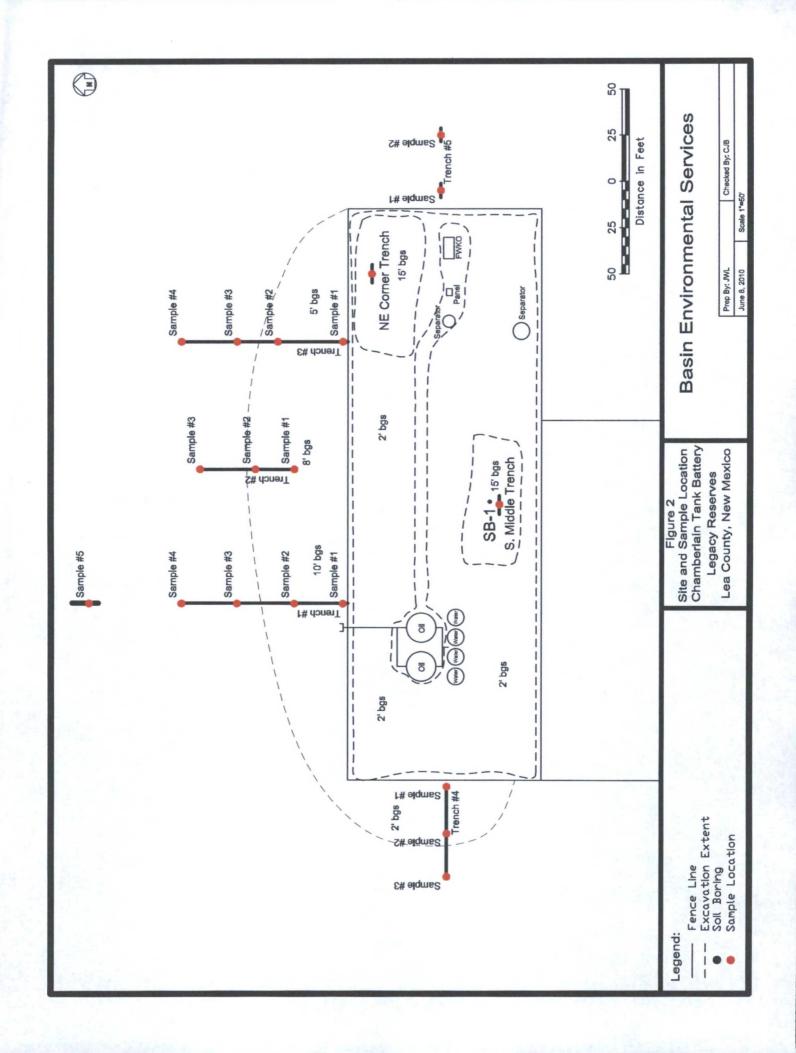


TABLE 1

CONCENTRATIONS OF BTEX, TPH AND CHLORIDES IN SOIL

LEGACY RESERVES, LP LR CHAMBERLAIN TANK BATTERY LEA COUNTY, NEW MEXICO NMOCD # 1RP-2390

			Γ		METHO	METHOD: EPA SW 846-8021B, 5030	846-8021B,	5030			SW 84	SW 846-8015M		300.1
SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	STATUS	BENZENE TOLUENE (mg/Kg)		ETHYL- BENZENE (mg/Kg)	M,P- XYLENE (mg/Kg)	O- XYLENE (mg/Kg)	TOTAL GRO BTEX C ₆ .C ₁₂ (mg/Kg)	GRO C ₆₋ C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
NE Corner @ 5'	5 Feet	03/30/10	In-Situ	<0.0012	<0.0024	0.0077	0.0257	0.0222	0.0556	137	475	111	723	1,420
NE Corner @ 10'	10 Feet	03/30/10	In-Situ	<0.1147	<0.2294	0.7867	2.546	0.1846	3.517	621	1,020	90.6	1,731.6	867
NE Corner @ 15'	15 Feet	03/30/10	In-Situ	<0.5637	<1.127	8.455	11.23	5.829	25.5	1,870	3,340	225	5,435	624
NE Corner @ 17	17 Feet	03/30/10	In-Situ	<0.0011	<0.0023	0.0035	0.0142	0.0079	0.0256	102	308	21.0	431	755
S. Middle @ 5'	5 Feet	03/30/10	In-Situ	<0.0118	0.0281	0.4166	1.366	0.9622	2.773	611	2,600	180	3,391	2,790
S. Middle @ 10'	10 Feet	03/30/10	In-Situ	<5.562	<11.12	32.48	54.84	10.18	97.5	3,240	4,290	334	7,864	1,680
S. Middle @ 12'	12 Feet	03/30/10	In-Situ	<5.682	<11.36	43.07	104.1	26.31	173.5	3,770	5,330	377	9,477	3,110
S. Middle @ 15'	15 Feet	03/30/10	In-Situ	<5.605	<11.21	26.68	64.24	16.87	107.79	2,680	3,770	279	6,729	1,700
			and the second second		ACTION NO.	South States		A STATE OF	Lange Land			Constant Street	Party Party	and the second second
	2 Feet	04/28/10	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.3	<17.3	<17.3	<17.3	1,180
T-1 Sample 1 @ 7'	7 Feet	04/28/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.7	<17.7	<17.7	<17.7	976
T-1 Sample 1 @ 15'	15 Feet	04/28/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<17.0	<17.0	<17.0	<17.0	317
T-1 Sample 1 @ 17	17 Feet	04/28/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.7	<16.7	<16.7	<16.7	144
T-1 Sample 2 @ 2'	2 Feet	04/28/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.1	<17.1	<17.1	<17.1	530
T-1 Sample 2 @ 5'	5 Feet	04/28/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.1	<17.1	<17.1	<17.1	387
T-1 Sample 3 @ 2'	2 Feet	04/28/10	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.4	<17.4	<17.4	<17.4	218
T-1 Sample 3 @ 5'	5 Feet	04/28/10	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.3	<18.3	<18.3	<18.3	428
T-1 Sample 4 @ 2'	2 Feet	04/28/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.0	<16.0	<16.0	<16.0	23.2
T-1 Sample 4 @ 5'	5 Feet	04/28/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<16.8	<16.8	<16.8	<16.8	1,460
T-1 Sample 5 @ 2'	2 Feet	04/30/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.0	88.1	25.4	113.5	14.1
T-1 Sample 5 @ 3'	3 Feet	04/30/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.8	129	51.6	180.6	8.95
T-2 Sample 1 @ 2'	2 Feet	04/28/10	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.3	<17.3	<17.3	<17.3	837
T-2 Sample 1 @ 7	7 Feet	04/28/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.2	<18.2	<18.2	<18.2	818
T-2 Sample 1 @ 12'	12 Feet	04/28/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1	250
T-2 Sample 1 @ 13'	13 Feet	04/28/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1	228
T-2 Sample 2 @ 2'	2 Feet	04/28/10	In-Situ	<0.0012	<0.0025	<0.0012	<0.0025	<0.0012	<0.0025	<18.3	<18.3	<18.3	<18.3	820
T-2 Sample 2 @ 5'	5 Feet	04/28/10	In-Situ	<0.0013	<0.0025	<0.0013	<0.0025	<0.0013	<0.0025	<18.9	<18.9	<18.9	<18.9	553
T-2 Sample 3 @ 2'	2 Feet	04/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.4	<16.4	<16.4	<16.4	184
8	5 Feet	04/29/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024		<0.0024	<18.2	<18.2	<18.2	<18.2	66.3
T-3 Sample 1 @ 2'	2 Feet	04/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.9	<16.9	<16.9	<16.9	497

TABLE 1

CONCENTRATIONS OF BTEX, TPH AND CHLORIDES IN SOIL

LEGACY RESERVES, LP LR CHAMBERLAIN TANK BATTERY LEA COUNTY, NEW MEXICO NMOCD # 1RP-2390

SI		-			METHC	MEIHUU: EPA 3W 846-6021B, 5030	046-0V41-0	0000			MICI DO-040 MAC			
Sumple Location (6	SAMPLE DEPTH (Below Grade Surface)	SAMPLE	STATUS	BENZENE TOLUENE (mg/Kg) (mg/Kg)		ETHYL- BENZENE (mg/Kg)	M,P- XYLENE (mg/Kg)	O- XYLENE (mg/Kg)	TOTAL GRO BTEX C ₆ C ₁₂ (mg/Kg) (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
T-3 Sample 1 @ 5' 5	5 Feet (04/29/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.0	<17.0	<17.0	<17.0	135
T-3 Sample 1 @ 7' 7	7 Feet (04/29/10	In-Situ	<0.0012	<0.0023	<0.0012	<0.0023	<0.0012	<0.0023	<17.4	<17.4	<17.4	<17.4	117
2		04/29/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.8	<17.8	<17.8	<17.8	784
T-3 Sample 3 @ 5' 5	5 Feet (04/29/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<16.9	<16.9	<16.9	<16.9	981
	2 Feet (04/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.4	<16.4	<16.4	<16.4	71.6
	5 Feet (04/29/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.0	<16.0	<16.0	<16.0	84.3
	1.5 Feet (04/29/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.8	<15.8	<15.8	<15.8	699
	1.5 Feet (04/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.4	<16.4	<16.4	<16.4	885
	2 Feet	04/29/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.1	<17.1	<17.1	<17.1	67.6
T-4 Sample 3 @ 3'	3 Feet (04/29/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.0	<18.0	<18.0	<18.0	123
	2 Feet	04/29/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<18.1	<18.1	<18.1	<18.1	2,870
T-5 Sample 1 @ 3.5' 3.	3.5 Feet (04/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.6	<16.6	<16.6	<16.6	1,550
T-5 Sample 2 @ 2' 2	2 Feet	04/29/10	In-Situ	<0.0012	<0.0024	<0.0012	<0.0024	<0.0012	<0.0024	<17.5	<17.5	<17.5	<17.5	66.4
			No and and	NAME OF ANY	191 T 2 19 19			A CONTRACTOR			All the set	applies and		Sector All
SB-1@5'	5 Feet	06/29/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<17.2	51.9	<17.2	51.9	2,170
-	10 Feet (06/29/10	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<16.8	<16.8	<16.8	<16.8	1,250
	15 Feet (06/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.7	<16.7	<16.7	<16.7	778
	_	06/29/10	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.8	<15.8	<15.8	<15.8	169
	25 Feet (06/29/10	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<16.1	<16.1	<16.1	<16.1	72.7
	30 Feet (06/29/10	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.8	26.3	<15.8	26.3	103
	Seller 2	and the second	Bare aller		State and the	a subsection of		Sector Sector Sector	10 × × ×	The second	States of the second		「「「「「「「「」」	Report of the
NMOCD Regulatory Standard	p			10					20				100	250

Page 2 of 2

TABLE 2

FIELD TEST RESULTS FOR CHLORIDE CONCENTRATIONS

LEGACY RESERVES, LP LR CHAMBERLAIN TANK BATTERY LEA COUNTY, NEW MEXICO NMOCD # 1RP-2390

				Hach Quantab
SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	CHLORIDE (PPM)
Trench #1	10 Feet	11/03/10	In-Situ	364
Trench #2	8 Feet	11/01/10	In-Situ	224
Trench #3	5 Feet	10/29/10	In-Situ	150
Trench #4	2 Feet	11/11/10	In-Situ	208
NMOCD Regulator	ry Standard			500

Depth				So	il Boring SB-1	
ground surface	Soil Columns	Chloride PID Field Test Reading	Odor	etroleum Stain	Soil Description	Boring SB-1 Date Drilled June 29, 2010
Ē		(2,040) (6.3)	Slight	Slight	0-10' - Calliche, tan, minor clay, dry	Thickness of Bentonite Seat <u>30 Fl</u> Depth of Exploratory Borling <u>30 Fl bgs</u> Depth to Groundwator
- 10		(1,788) (4.8)	None	None		Ground Water Elevation
- 15		(1,256) (15.8)	None	None		Indicates the PSH level measured on Indicates the groundwater level
20		(280) (2.2)	None	None	10-30' - Sand, tan, fine grained, minor sandstone nodules, dry	measured on
-25			None	None		with a photo-ionization detector,
Ē."		128 6.1	None	None		

Completion Notes

 The monitor well was advanced on date using air rotary drilling techniques.
 The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be creatual

Soil Boring SB-1

Legacy Reserves Chamberlain Tank Battery Lea County, New Mexico

Basin Environmental Services Prep By: JML Checked By: CJB

Prep By: JWL July 7, 2010

Analytical Report 367582

for

Basin Environmental Consulting, LLC

Project Manager: Camille Bryant

LR Chamberlain Tank Battery Legacy Reserves West

07-APR-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-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: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295)

Final Ver. 1.000





07-APR-10

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

Reference: XENCO Report No: 367582 LR Chamberlain Tank Battery Project Address: Lea County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 367582. 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. 367582 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,

BATTO AD

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



Sample Cross Reference 367582



Basin Environmental Consulting, LLC, Lovington, NM

LR Chamberlain Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NE Corner @ 5'	S	Mar-30-10 12:30		367582-001
NE Corner @ 10'	S	Mar-30-10 12:45		367582-002
NE Corner @ 15'	S	Mar-30-10 13:10		367582-003
NE Corner @ 17'	S	Mar-30-10 13:30		367582-004
S. Middle @ 5'	S	Mar-30-10 14:10		367582-005
S. Middle @ 10'	S	Mar-30-10 14:30		367582-006
S. Middle @ 12'	S	Mar-30-10 14:45		367582-007
S. Middle @ 15'	S	Mar-30-10 15:00		367582-008

CASE NARRATIVE



Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Legacy Reserves West Work Order Number: 367582 Report Date: 07-APR-10 Date Received: 04/01/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-800761 TPH By SW8015 Mod SW8015MOD_NM

Batch 800761, o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 367582-001. 1-Chlorooctane recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 367582-001,367582-002.

Batch: LBA-800773 Percent Moisture None

Batch: LBA-800848 BTEX by EPA 8021B SW8021BM Batch 800848, Ethylbenzene, m,p-Xylenes , o-Xylene RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 367582-003, -002.

SW8021BM

Batch 800848, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 367078-001 D,367582-002,367582-003. 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 367078-001 D,367582-003,367582-002.





Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Legacy Reserves West Work Order Number: 367582 Report Date: 07-APR-10 Date Received: 04/01/2010

Batch: LBA-801040 BTEX by EPA 8021B SW8021BM

Batch 801040, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 367582-005,367582-007,367582-006. 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 367582-005.

Batch: LBA-801122 Inorganic Anions by EPA 300 None

Batch: LBA-801206 BTEX by EPA 8021B SW8021BM

Batch 801206, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 367582-004,367582-001. 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 367432-001 D,367582-004,367582-001.

SW8021BM Batch 801206, Ethylbenzene, m,p-Xylenes, o-Xylene RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 367582-004, -001.



Project Id: Legacy Reserves West Contact: Camille Bryant Ā

Basin Environmental Consulting, LLC, Lovington, NM **Certificate of Analysis Summary 367582** Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu Apr-01-10 08:52 am 07_ADD_10 The state 4

					Project Manager: E	Brent Barron, II	
	Lab Id:	367582-001	367582-002	367582-003	367582-004	367582-005	367582-006
Auchicic Damacted	Field Id:	NE Corner @ 5'	NE Comer @ 10'	NE Corner @ 15'	NE Corner @ 17'	S. Middle @ 5'	S. Middle @ 10'
naisanhay sisting	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-30-10 12:30	Mar-30-10 12:45	Mar-30-10 13:10	Mar-30-10 13:30	Mar-30-10 14:10	Mar-30-10 14:30
Anions by E300	Extracted:						
	Analyzed:	Apr-05-10 20:14	Apr-05-10 20:14	Apr-05-10 20:14	Apr-05-10 20:14	Apr-05-10 20:14	Apr-05-10 20:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1420 25.1	867 9.63	624 9.47	755 9.60	2790 49.6	1680 23.4
BTEX by EPA 8021B	Extracted:	Apr-06-10 07:30	Apr-01-10 09:00	Apr-01-10 09:00	Apr-06-10 07:30	Apr-03-10 11:00	Apr-03-10 11:00
	Analyzed:	Apr-06-10 13:21	Apr-01-10 18:02	Apr-01-10 18:43	Apr-06-10 11:51	Apr-03-10 19:06	Apr-03-10 19:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0012	ND 0.1147	ND 0.5637	ND 0.0011	ND 0.0118	ND 5.562
Toluene		ND 0.0024	ND 0.2294	ND 1.127	ND 0.0023	0.0281 0.0236	ND 11.12
Ethylbenzene		0.0077 0.0012	0.7867 0.1147	8.455 0.5637	0.0035 0.0011	0.4166 0.0118	32.48 5.562
m,p-Xylenes		0.0257 0.0024	2.546 0.2294	11.23 1.127	0.0142 0.0023	1.366 0.0236	54.84 11.12
o-Xylene		0.0222 0.0012	0.1846 0.1147	5.829 0.5637	0.0079 0.0011	0.9622 0.0118	10.18 5.562
Total Xylenes		0.0479 0.0012	2.731 0.1147	17.06 0.5637	0.0221 0.0011	2.328 0.0118	65.02 5.562
Total BTEX		0.0556 0.0012	3.517 0.1147	25.51 0.5637	0.0256 0.0011	2.773 0.0118	97.50 5.562
Percent Moisture	Extracted:						
	Analyzed:	Apr-01-10 17:00	Apr-01-10 17:00	Apr-01-10 17:00	Apr-01-10 17:00	Apr-01-10 17:00	Apr-01-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		16.5 1.00	12.8 1.00	11.3 1.00	12.5 1.00	15.3 1.00	10.1 1.00
TPH By SW8015 Mod	Extracted:	Apr-01-10 14:00	Apr-01-10 14:00	Apr-01-10 14:00	Apr-01-10 14:00	Apr-01-10 14:00	Apr-01-10 14:00
	Analyzed:	Apr-01-10 19:07	Apr-01-10 19:34	Apr-01-10 20:01	Apr-01-10 20:28	Apr-01-10 20:55	Apr-01-10 21:23
	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		137 90.1	621 86.2	1870 84.6	102 17.1	611 17.8	3240 167
C12-C28 Diesel Range Hydrocarbons		475 90.1	1020 86.2	3340 84.6	308 17.1	2600 17.8	4290 167
C28-C35 Oil Range Hydrocarbons		111 90.1	90.6 86.2	225 84.6	21.0 17.1	180 17.8	334 167
Total TPH		723 90.1	1732 86.2	5435 84.6	431 17.1	3391 17.8	7864 167

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Final Ver. 1.000

Odessa Laboratory Manager

Brent Barron, II



Project Id: Legacy Reserves West Contact: Camille Bryant P

Basin Environmental Consulting, LLC, Lovington, NM **Certificate of Analysis Summary 367582** Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu Apr-01-10 08:52 am . . 6

			-			
	Lab Id:	367582-007		367582-008		
Analysis Damastad	Field Id:	S. Middle @ 12'	2'	S. Middle @ 15'		
naicanhau ciclinuu	Depth:		-			
	Matrix:	SOIL		SOIL		
	Sampled:	Mar-30-10 14:45	45	Mar-30-10 15:00		
Anions by E300	Extracted:					
	Analyzed:	Apr-05-10 20:14	14	Apr-05-10 20:14		
	Units/RL:	mg/kg	RL	mg/kg RL		
Chloride	-		47.7	1700 23.5		
BTEX by EPA 8021B	Extracted:	Apr-03-10 11:00	00	Apr-03-10 11:00		
	Analyzed:	Apr-03-10 20:36	36	Apr-03-10 20:58		
	Units/RL:	mg/kg	RL	mg/kg RL		
Benzene			5.682	ND 5.605		
Toluene		ND 1	11.36	ND 11.21		
Ethylbenzene		43.07 5	5.682	26.68 5.605		
m,p-Xylenes		104.1 1	11.36	64.24 11.21		
o-Xylene		26.31 5	5.682	16.87 5.605		
Total Xylenes		130.4 5	5.682	81.11 5.605		
Total BTEX		173.5 5	5.682	107.79 5.605		
Percent Moisture	Extracted:					
	Analyzed:	Apr-01-10 17:00	00	Apr-01-10 17:00		
	Units/RL:	0%	RL	% RL		
Percent Moisture		12.0	1.00	10.8 1.00		
TPH By SW8015 Mod	Extracted:	Apr-01-10 14:00	00	Apr-01-10 14:00		
	Analyzed:	Apr-01-10 21:50	50	Apr-01-10 22:46		
	Units/RL:	mg/kg	RL	mg/kg RL		
C6-C12 Gasoline Range Hydrocarbons		3770	171	2680 168		
C12-C28 Diesel Range Hydrocarbons		5330	171	3770 168		
C28-C35 Oil Range Hydrocarbons		377	171	279 168		
Total TPH		9477	171	6729 168		

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager

Brent Barron, II

٦

Final Ver. 1.000





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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and OUALITY

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

Final Ver. 1.000



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 800848	Sample: 559729-1-BKS / BI			x:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 10:27	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0309	0.0300	103	80-120	
4-Bromofluorobenzene		0.0272	0.0300	91	80-120	
Lab Batch #: 800848	Sample: 559729-1-BSD / BS			x:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 10:48	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0324	0.0300	108	80-120	
4-Bromofluorobenzene		0.0270	0.0300	90	80-120	
Lab Batch #: 800848	Sample: 559729-1-BLK / B			x:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 11:51	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0281	0.0300	94	80-120	
4-Bromofluorobenzene		0.0281	0.0300	94	80-120	
Lab Batch #: 800848	Sample: 367582-002 / SMP	Bate	h: 1 Matrix	x: Soil		
Units: mg/kg	Date Analyzed: 04/01/10 18:02		RROGATE R	ECOVERY	STUDY	
	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0173	0.0300	58	80-120	**
4-Bromofluorobenzene		0.0204	0.0300	68	80-120	**
Lab Batch #: 800848	Sample: 367582-003 / SMP	Batc	h: 1 Matrix	x:Soil		
Units: mg/kg	Date Analyzed: 04/01/10 18:43	SU	RROGATE R	ECOVERY S	STUDY	
втех	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0219	0.0300	73	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.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 800848	Sample: 367078-001 D / MD			:Sludge		
Units: mg/kg	Date Analyzed: 04/01/10 21:09	st	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0235	0.0300	78	80-120	**
4-Bromofluorobenzene		0.0170	0.0300	57	80-120	**
Lab Batch #: 801040	Sample: 559843-1-BKS / BK			x:Solid		
Units: mg/kg	Date Analyzed: 04/03/10 11:58	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	Analytes	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene		0.0291	0.0300	104	80-120	
Lab Batch #: 801040	Sample: 559843-1-BSD / BS			s: Solid		
	Date Analyzed: 04/03/10 12:21		RROGATE R		STUDY	
Units: mg/kg			1			
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0293	0.0300	98	80-120	
4-Bromofluorobenzene		0.0305	0.0300	102	80-120	
Lab Batch #: 801040	Sample: 559843-1-BLK / BL	K Bate	h: 1 Matrix	: Solid		_
Units: mg/kg	Date Analyzed: 04/03/10 13:29		RROGATE R	ECOVERY	STUDY	_
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0244	0.0300	81	80-120	
4-Bromofluorobenzene		0.0315	0.0300	105	80-120	-
Lab Batch #: 801040	Sample: 367582-005 / SMP	Bate	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/03/10 19:06	SU	RROGATE R	ECOVERY S	STUDY	0.5
BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0221	0.0300	74	80-120	*
The search of th		0.1796	0.0300	599	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.



Project Name: LR Chamberlain Tank Battery

ork Orders : 367582, Lab Batch #: 801040	Sample: 367582-006 / SMP	Batel		D:Legacy Re x:Soil	301 VCS WCS			
Units: mg/kg	Date Analyzed: 04/03/10 19:28	SU	RROGATE R	ECOVERY	STUDY			
	by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag		
	Analytes			[D]				
1,4-Difluorobenzene		0.0227	0.0300	76	80-120	*		
4-Bromofluorobenzene		0.0353	0.0300	118	80-120			
Lab Batch #: 801040	Sample: 367582-007 / SMP	Batcl						
Units: mg/kg	Date Analyzed: 04/03/10 20:36	SU	RROGATE R	ECOVERY	STUDY			
	by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
1,4-Difluorobenzene		0.0221	0.0300	74	80-120	*		
4-Bromofluorobenzene		0.0357	0.0300	119	80-120			
Lab Batch #: 801040	Sample: 367582-008 / SMP	Batc	h: 1 Matrix	x: Soil				
Units: mg/kg	Date Analyzed: 04/03/10 20:58		RROGATE R		STUDY			
	by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
1,4-Difluorobenzene	Analytes	0.0227 0.0300 76 80-120 0.0348 0.0300 116 80-120 559940-1-BKS / BKS Batch: 1 Matrix: Solid	[D]		0.0227 0.0300 76 80-120			*
4-Bromofluorobenzene			*					
Lab Batch #: 801206	Sample: 559940-1-BKS / BKS	Batcl	a: 1 Matrix	:Solid				
Units: mg/kg	Date Analyzed: 04/06/10 08:07	SU	RROGATE R	ECOVERY S	STUDY			
	by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag		
1,4-Difluorobenzene		0.0313	0.0300	104	80-120	1		
4-Bromofluorobenzene		0.0326	0.0300	109	80-120			
Lab Batch #: 801206	0.0326 0.0300 109 80-120 Sample: 559940-1-BSD / BSD Batch: 1 Matrix: Solid							
Units: mg/kg	Date Analyzed: 04/06/10 08:29	SU	RROGATE R	ECOVERY S	STUDY			
	by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage		
1,4-Difluorobenzene		0.0300	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.



Project Name: LR Chamberlain Tank Battery

Vork Orders : 367582 Lab Batch #: 801206	2, Sample: 559940-1-BLK / B	BLK Batc		D: Legacy Re	eserves Wes	st
Units: mg/kg	Date Analyzed: 04/06/10 10:21		RROGATE R		STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Analytes	0.0239	0.0300		80.120	
4-Bromofluorobenzene		0.0239	0.0300	80	80-120 80-120	
	a 2/2/202 004 / 01/1				80-120	
Lab Batch #: 801206 Units: mg/kg	Sample: 367582-004 / SMP Date Analyzed: 04/06/10 11:51		h: 1 Matrix RROGATE R		STUDY	
	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	Analytes	0.0237	0.0300	79	80-120	**
4-Bromofluorobenzene		0.0237	0.0300	287	80-120	**
	a 2/7592.001 / GM				80-120	
Lab Batch #: 801206	Sample: 367582-001 / SMP		h: 1 Matrix RROGATE R		STUDY	_
Units: mg/kg	Date Analyzed: 04/06/10 13:21	50	KRUGATE K	ECOVERI	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0233	0.0300	78	80-120	**
4-Bromofluorobenzene		0.0668	0.0300	223	80-120	**
Lab Batch #: 801206	Sample: 367432-001 D / M	D Bate	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/06/10 14:52	SU	RROGATE R	ECOVERY S	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0499	0.0300	166	80-120	**
Lab Batch #: 800761	Sample: 559673-1-BKS / B	KS Bate	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 16:27		RROGATE R		STUDY	
TDU		Amount	True		Control	
IPH	By SW8015 Mod	Found [A]	Amount [B]	Recovery %R	Limits %R	Flags
1 PH	By SW8015 Mod Analytes	Found	11 in the			Flags

* 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 / BAll results are based on MDL and validated for QC purposes.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 800761	Sample: 559673-1-BSD / BS			:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 16:54	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		124	100	124	70-135	
o-Terphenyl		58.4	50.2	116	70-135	
Lab Batch #: 800761	Sample: 559673-1-BLK / BI	K Batc	h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 04/01/10 17:20	SU	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	129	99.8	129	70-135	
o-Terphenyl		64.2	49.9	129	70-135	-
	C 1 267592 001 / SMD				10-155	_
Lab Batch #: 800761	Sample: 367582-001 / SMP	Batc	h: 1 Matrix RROGATE R		TUDY	
Units: mg/kg	Date Analyzed: 04/01/10 19:07	50	KRUGATE R	ECOVERIS	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		140 100 140 70-135 73.0 50.2 145 70-135 : 367582-002 / SMP Batch: 1 Matrix: Soil	*			
o-Terphenyl			70-135	*		
Lab Batch #: 800761	Sample: 367582-002 / SMP					
Units: mg/kg	Date Analyzed: 04/01/10 19:34		RROGATE R		STUDY	1
	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		137	100	137	70-135	*
o-Terphenyl		65.5	50.1	131	70-135	1
Lab Batch #: 800761	Sample: 367582-003 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/01/10 20:01		RROGATE R	ECOVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		126	100	126	70-135	1

* 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.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 800761	Sample: 367582-004 / SMP	Batc				
Units: mg/kg	Date Analyzed: 04/01/10 20:28	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1-Chlorooctane		121	99.5	122	70-135	
o-Terphenyl		60.0	49.8	120	70-135	
Lab Batch #: 800761	Sample: 367582-005 / SMP	Batc				
Units: mg/kg	Date Analyzed: 04/01/10 20:55	SU	RROGATE R	ECOVERY S	STUDY	
TPH	y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		130	100	130	70-135	
o-Terphenyl		63.7	50.2	127	70-135	
Lab Batch #: 800761	Sample: 367582-006 / SMP	Batc		u Soil		
Units: mg/kg	Date Analyzed: 04/01/10 21:23		RROGATE R		STUDY	
		Amount	True		Control	
Irni	By SW8015 Mod	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flag
1-Chlorooctane	Analytes	127	100		70-135	
o-Terphenyl		65.4	100	127	70-135	
	2/7592.007/00/0	007 / SMP Batch: 1 Matrix: Soil	70-155	5		
Lab Batch #: 800761	Sample: 367582-007 / SMP				TUDY	-
Units: mg/kg	Date Analyzed: 04/01/10 21:50	30	KROGATE K	ECOVERIC	STUDI	_
TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		119	101	118	70-135	
o-Terphenyl		64.0	50.3	127	70-135	
Lab Batch #: 800761	Sample: 367582-008 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 04/01/10 22:46	SU	RROGATE R	ECOVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1-Chlorooctane		126	99.7	126	70-135	75.1

* 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 / BAll results are based on MDL and validated for QC purposes.





Project Name: LR Chamberlain Tank Battery

Work Order #: 367582

Project ID:

Legacy Reserves West

Lab Batch #: 801122 Date Analyzed: 04/05/2010	Sample: 801122- Date Prepared: 04/05/20		Matrix Analyst	: Solid : LATCOF	ł	
Reporting Units: mg/kg	Batch #: 1	BLANK /	BLANK SPI	KE REC	COVERY S	STUDY
Anions by E300	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
Analytes	[A]	[B]	Result [C]	%R [D]	%R	
Chloride	ND	11.0	11.1	101	75-125	

Blank Spike Recovery [D] = 100*[C]/[B] All results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit



BS / BSD Recoveries



Project Name: LR Chamberlain Tank Battery

Work Order #: 367582 Lab Batch ID: 800848 Analyst: ASA

Sample: 559729-1-BKS

Date Prepared: 04/01/2010 Batch #: 1

Project ID: Legacy Reserves West Date Analyzed: 04/01/2010 Matrix: Solid

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Units: mg/kg			BLAN	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	CRY STUD	Å	
BTEX by EPA 8021B		Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes		[Y]	[B]	Result [C]	%R [D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	
Benzene		QN	0.1000	0.0961	96	0.1	0.1020	102	9	70-130	35	
Toluene		Ð	0.1000	0.0967	16	0.1	0.1028	103	9	70-130	35	
Ethylbenzene		Q	0.1000	0.0985	66	0.1	0.1046	105	9	71-129	35	
m,p-Xylenes		QN	0.2000	0.1999	100	0.2	0.2130	107	9	70-135	35	
o-Xylene		QN	0.1000	0.0985	66	0.1	0.1054	105	7	71-133	35	
Analyst: JLG		Da	te Prepare	Date Prepared: 04/03/2010	0			Date AI	nalyzed: 0	Date Analyzed: 04/03/2010		
Lab Batch ID: 801040 Sa	Sample: 559843-1-BKS	KS	Batch #: 1	1#: 1					Matrix: Solid	solid		
Units: mg/kg			BLANI	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	PIKE / B	LANK S	PIKE DUPI	ICATE 1	RECOVE	ERY STUD	Y	

			and the second s			A REAL PROPERTY AND A REAL					
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	QN	0.1000	0.0979	86	0.1	0.1045	105	7	70-130	35	
Toluene	QN	0.1000	0.0952	95	0.1	0.1017	102	7	70-130	35	
Ethylbenzene	Q	0.1000	0.0970	76	0.1	0.1033	103	6	71-129	35	
m,p-Xylenes	Q	0.2000	0.1922	96	0.2	0.2044	102	9	70-135	35	
o-Xylene	QN	0.1000	0.0960	96	0.1	0.1024	102	6	71-133	35	

Units: mg/kg

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

Final Ver. 1.000



BS / BSD Recoveries



Project Name: LR Chamberlain Tank Battery

Sample: 559940-1-BKS Work Order #: 367582 Lab Batch ID: 801206 mg/ka Analyst: ASA Twite.

Date Prepared: 04/06/2010

Batch #:

Project ID: Legacy Reserves West Date Analyzed: 04/06/2010 Matrix: Solid

Units: mg/kg		BLANH	K/BLANK S	PIKE / B	LANK S	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	ICATE I	RECOVE	RY STUD	Y	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[0]	[E]	Result [F]	[G]				
Benzene	QN	0.1000	0.0936	94	0.1	0.1011	101	8	70-130	35	
Toluene	QN	0.1000	0.0915	92	0.1	0.0992	66	80	70-130	35	
Ethylbenzene	Q	0.1000	0.0933	93	0.1	0.1010	101	80	71-129	35	
m,p-Xylenes	QN	0.2000	0.1853	93	0.2	0.2007	100	8	70-135	35	
o-Xylene	QN	0.1000	0.0930	93	0.1	0.1013	101	6	71-133	35	
Analyst: BEV	Da	te Prepare	Date Prepared: 04/01/2010	0			Date AI	Date Analyzed: 04/01/2010	4/01/2010		
Lab Batch ID: 800761 Sample: 559673-1-BKS	3KS	Batch #:	#: 1					Matrix: S	Solid		

Flag Limits %RPD Control 35 35 BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY Control Limits %R 70-135 70-135 RPD % 4 3 Blk. Spk Dup. %R [G] 121 101 Blank Spike Duplicate Result [F] 1210 1010 **Spike** Added 1000 1000 E Blank Spike %R [D] 115 86 Blank Spike Result [C] 1160 985 Spike 1010 1010 B Blank Sample Result [Y] Ð Ð TPH By SW8015 Mod C6-C12 Gasoline Range Hydrocarbons C12-C28 Diesel Range Hydrocarbons Units: mg/kg Analytes

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

Final Ver. 1.000



Form 3 - MS Recoveries



Project Name: LR Chamberlain Tank Battery

Work Order #: 367582								
Lab Batch #: 801122			Pro	ject ID:	Legacy Res	serves W		
Date Analyzed: 04/05/2010	Date Prepared: 04/05	Analyst: LATCOR						
QC- Sample ID: 367288-001 S	Batch #: 1 Matrix: Soil							
Reporting Units: mg/kg	MATRIX / MATRIX SPIKE RECOVERY STUDY							
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag		
Analytes	[A]	[B]	1.57					
Chloride	1540	1290	2870	103	75-125			

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

BRL - Below Reporting Limit



Sample Duplicate Recovery



Project Name: LR Chamberlain Tank Battery

Work Order #: 367582

Lab Batch #: 801122			Project I	D: Legacy R	leserves W				
Date Analyzed: 04/05/2010	Date Prepared: 04/05/2010 Analyst: LATCOR								
QC- Sample ID: 367288-001 D	Batch #: 1	n#: 1 Matrix: Soil							
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY				
Anions by E300 Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag				
Chloride	1540	1540	0	20					
Lab Batch #: 800848									
Date Analyzed: 04/01/2010	Date Prepared: 04/01/2010) Ana	alyst:ASA						
QC- Sample ID: 367078-001 D	Batch #: 1	Ma	trix: Sludg	e					
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY				
BTEX by EPA 8021B Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag				
Benzene	0.0028	0.0022	24	35					
Toluene	0.0057	0.0054	5	35					
Ethylbenzene	0.0021	0.0066	103	35	F				
m,p-Xylenes	0.0033	0.0050	41	35	F				
o-Xylene	0.0011	0.0066	143	35	F				
a,a,a-Trifluorotoluene	0.030	0.030	0	35					
Lab Batch #: 801206 Date Analyzed: 04/06/2010 QC- Sample ID: 367432-001 D Reporting Units: mg/kg	Date Prepared: 04/06/2010 Batch #: 1 SAMPLE								
BTEX by EPA 8021B Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag				
Benzene	ND	ND	NC	35					
Toluene	ND	ND	NC	35					
Ethylbenzene	0.0025	0.0015	50	35	F				
m,p-Xylenes	0.0099	0.0057	54	35	F				
o-Xylene	0.0067	0.0034	65	35	F				
a,a,a-Trifluorotoluene	0.032	0.032	0	35					

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



Sample Duplicate Recovery



Project Name: LR Chamberlain Tank Battery

Work Order #: 367582

Lab Batch #: 800773 Date Analyzed: 04/01/2010 QC- Sample ID: 367572-001 D Reporting Units: %	Date Prepared: 04/01/2010 Batch #: 1 SAMPLE /	Ma	alyst:JLG trix: Soil		Reserves West
Percent Moisture	Parent Sample Result	Sample Duplicate	RPD	Control Limits	Flag
Analyte	[A]	Result [B]		%RPD	
Percent Moisture	16.0	16.0	0	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

		West			DES	C	suų z	1 '87	AC (etuberto2-ord) TAT H&US YAO A TAT brisbrist	×	×	×	×	×	×	×	×	ZZ	zzzz	N e Star	ç
	λ.						4		Enlower es	_								30	z z(z)z 00≻€	FedEx Lone Star	36
JEST 3-1800 3-1713	nk Batte	Seeu		ulting	TRRP			N	RCI BCI CDIDUGES RS	×	×	×	×	×	×	×	×	-	圣	DHL Fe	
AL YSIS REQUEST Phone: 432-563-1800 Fax: 432-563-1713	erlain Ta	N	W	Isin Cons		Anahza Enr		09	BIEX 2051 Big 30 or BIEX 35	×	×	×	×	×	×	×	×	nemts: s intact? dspace?	er(s) container(s cooler(s)	UPS [Beceipt:
ANAL YS Phone Fax:	Chambe	EGACY RESERVES	County, 1	PO #: Please bill Basin Consulting	Standard	Anak	TCLP: TOTAL:	_	Volaties Metals: As Ag Ba Cd Cr Pb Hg VClaties		_	-			-	+		Laboratory Comments: Sample Containers Intext? VOCs Free of Headspace?	Labels on container(s) Custody seals on container(s) Custody seals on cooler(s) / Semulo Hand Daiwood	by Counter UPS	Temperature Upon Beceipt:
CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST t I-20 East xas 79765 Fax: 432-563-171;	Project Name: LR Chamberlain Tank Battery	Project #: L	Project Loc: Lea County, NM	PO #: Ple	×		101		TPH: TX 1005 TX 1006 Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity)		_			-				Labora Sample VOCs F			Temper
RECON	Project N	Proj	Project		Report Format:	EL		891 2		XI	×	×	×	×	-	+	×		L) 39		U8:53
USTODY	I	I			Rei	ting.co		Matrix	Other (Specify) DW=Drinking Weter SL=Sludge GW = Groundwater S=SolySolid	Soil	Soil	Soil	Soll	Soil	Soil	Soil	Soil	_	Date 31/10		Patte 1/10
IN OF CI East 9765						cjbryant@basin-consulting.com		f Containers	₆ O ₅ 2 ₅₈ N enoN										3	-	4
CHAIN OF 12600 West I-20 East Odessa, Texas 79765					129	Øbasin		Preservation & # of Containers	И®0Н Н³20° НСІ		_	-			+	+		-			
12600 V Odessa					505) 396-1429	bryant(HNO ³ JCB	X	×	×	×	×	-	×	×				
							5×17		Field Filtered	-	-	-	-	-	-	-	-	-	2		
					Fax No:	e-mail:			belqms2 emiT	1230	1245	1310	1330	1410	1430	1445	1500		肉		T R
									belqms2 etsQ	30-Mar-10	30-Mar-10	30-Mar-10	30-Mar-10	30-Mar-10	30-Mar-10	30-Mar-10	30-Mar-10		Hand berg	5	Received by ELOT:
2		ug, LLC				fuit	>		tiqqing Depth						-				1139	2580	Lime
EX.		Consulti				A			dtgenning Depth			-	-	_	+	+	+	-			
10 0	ryant	Basin Environmental Consulting, LLC	381	Lovington, NM 88260	7210	Complete						in				-			23110	HILIO	Date
Environmental Lap of Jexas	r: Camille Bryant		Company Address: P. O. Box 381	Lovington	(575)805-7210			367582	FIELD CODE	NE Corner @ 5'	NE Corner @ 10'	NE Corner @ 15'	NE Corner @ 17'	S. Middle @ 5'	S. Middle @ 10'	S. Middle @ 12'	S. Middle @ 15		and	1	5
nmei	Project Manager:	Company Name	anv Addre	Citv/State/Zip:	Telephone No:	Sampler Signature		35		N	N	NE	NE	S)	Ś	Ś	Ś	tions:	Bue	Ken	h
	Projec	Comp	Comp	Citv/S	Telepl	Samp	(lab use only)	ORDER #:	(vino esu dsi) # 8A.J	10	10	63	9	8	N	5	8	Special Instructions:	Configuration by:	(+ K	Relinquished by:
Ľ							(lab	OR		2	0	9	0	D	4	4	7	Spe	0		Rei

Final Ver. 1.000

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

SUN 10 08:52 lient: late/ Time: 367582 ab ID #: nitials:

Sample Receipt Checklist

				Client Initia
#1	Temperature of container/ cooler?	(es)	No	36°C
#2	Shipping container in good condition?	(Yes)	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present
#5	Chain of Custody present?	Tes	No	
#6	Sample instructions complete of Chain of Custody?	Yes	No	
#7	Chain of Custody signed when relinquished/ received?	Yes	No	
#8	Chain of Custody agrees with sample label(s)?	Tes	No	iD written on Cont./ Lid
#9	Container label(s) legible and intact?	Nes	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	1785	No	
#11	Containers supplied by ELOT?	Xee	No	
#12	Samples in proper container/ bottle?	(Yes)	No	See Below
#13	Samples properly preserved?	(Yes)	No	See Below
#14	Sample bottles intact?	(es)	No	
#15	Preservations documented on Chain of Custody?	(es)	No	
#16	Containers documented on Chain of Custody?	Yes	No	
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Below
#19	Subcontract of sample(s)?	Yes'	No	Not Applicable
#20	VOC samples have zero headspace?	Tes	No	Not Applicable

Variance Documentation

Contact:		Contacted by:	Date/ Time:	
Regarding:				
		· · · · · · · · · · · · · · · · · · ·		
Corrective Action Taken	1:			
				_
Check all that Apply:		See attached a-mail/ fax		

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

Analytical Report 371873

for

Basin Environmental Consulting, LLC

Project Manager: Camille Bryant

LR Chamberlain Tank Battery

14-MAY-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-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: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295)





14-MAY-10

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

Reference: XENCO Report No: 371873 LR Chamberlain Tank Battery Project Address: Lea County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 371873. 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. 371873 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,

ATA

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



Sample Cross Reference 371873



Basin Environmental Consulting, LLC, Lovington, NM

LR Chamberlain Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T-1 Sample 1 @ 2'	S	Apr-28-10 08:00		371873-001
T-1 Sample 1 @ 7'	S	Apr-28-10 08:20		371873-002
T-1 Sample 1 @ 15'	S	Apr-28-10 08:40		371873-003
T-1 Sample 1 @ 17'	S	Apr-28-10 09:00		371873-004
T-1 Sample 2 @ 2'	S	Apr-28-10 09:40		371873-005
T-1 Sample 2 @ 5'	S	Apr-28-10 10:00		371873-006
T-1 Sample 3 @ 2'	S	Apr-28-10 10:40		371873-007
T-1 Sample 3 @ 5'	S	Apr-28-10 11:00		371873-008
T-1 Sample 4 @ 2'	S	Apr-28-10 11:20		371873-009
T-1 Sample 4 @ 5'	S	Apr-28-10 11:40		371873-010
T-1 Sample 5 @ 2'	S	Apr-30-10 11:00		371873-011
T-1 Sample 5 @ 3'	S	Apr-30-10 11:30		371873-012
T-2 Sample 1 @ 2'	S	Apr-28-10 12:00		371873-013
T-2 Sample 1 @ 7'	S	Apr-28-10 12:30	×	371873-014
T-2 Sample 1 @ 12'	S	Apr-28-10 13:00		371873-015
T-2 Sample 1 @ 13'	S	Apr-28-10 13:20		371873-016
T-2 Sample 2 @ 2'	S	Apr-28-10 14:20		371873-017
T-2 Sample 2 @ 5'	S	Apr-28-10 14:40		371873-018
T-2 Sample 3 @ 2'	S	Apr-29-10 08:00		371873-019
T-2 Sample 3 @ 5'	S	Apr-29-10 08:30		371873-020
T-3 Sample 1 @ 2'	S	Apr-29-10 09:00		371873-021
T-3 Sample 1 @ 5'	S	Apr-29-10 09:20		371873-022
T-3 Sample 1 @ 7'	S	Apr-29-10 09:40		371873-023
T-3 Sample 2 @ 5'	S	Apr-29-10 10:00		371873-024
T-3 Sample 3 @ 5'	S	Apr-29-10 11:00		371873-025
T-3 Sample 4 @ 2'	S	Apr-29-10 12:00		371873-026
T-3 Sample 4 @ 5'	S	Apr-29-10 12:20		371873-027
T-4 Sample 1 @ 1.5'	S	Apr-29-10 13:00		371873-028
T-4 Sample 2 @ 1.5'	S	Apr-29-10 13:30		371873-029
T-4 Sample 3 @ 2'	S	Apr-29-10 14:00		371873-030
T-4 Sample 3 @ 3'	S	Apr-29-10 14:20		371873-031
T-5 Sample 1 @ 2'	S	Apr-29-10 14:40		371873-032
T-5 Sample 1 @ 3.5'	S	Apr-29-10 15:00		371873-033
T-5 Sample 2 @ 2'	S	Apr-29-10 15:30		371873-034

CASE NARRATIVE



Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Work Order Number: 371873 Report Date: 14-MAY-10 Date Received: 05/06/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None Analytical Non Conformances and Comments: Batch: LBA-805736 TPH By SW8015 Mod None

Batch: LBA-805744 Percent Moisture None

Batch: LBA-805751 Percent Moisture None

Batch: LBA-805752 TPH By SW8015 Mod SW8015MOD_NM

Batch 805752, C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike Duplicate. Samples affected are: 371873-025, -030, -032, -026, -028, -033, -021, -023, -024, -027, -029, -034, -031, -022. The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons is within laboratory Control Limits



Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Work Order Number: 371873 Report Date: 14-MAY-10 Date Received: 05/06/2010

Batch: LBA-805828 BTEX by EPA 8021B SW8021BM

Batch 805828, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene, Ethylbenzene, Toluene, m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate.

Samples affected are: 371873-007, -015, -002, -016, -004, -008, -011, -017, -018, -013, -001, - 003, -010, -014, -020, -006, -009, -012, -005, -019.

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

SW8021BM

Batch 805828, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 371873-012,371873-011.

CASE NARRATIVE



Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Work Order Number: 371873 Report Date: 14-MAY-10 Date Received: 05/06/2010

Batch: LBA-805963 BTEX by EPA 8021B SW8021BM

Batch 805963, 1,4-Difluorobenzene recovered above QC limits . Matrix interferences is suspected; QC data not confirmed by re-analysis Samples affected are: 371873-021 S.

SW8021BM

Batch 805963, Benzene, Ethylbenzene, Toluene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate.

Samples affected are: 371873-025, -030, -032, -026, -028, -033, -021, -023, -024, -027, -029, - 034, -031, -022.

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

SW8021BM

Batch 805963, o-Xylene RPD was outside QC limits. Samples affected are: 371873-025, -030, -032, -026, -028, -033, -021, -023, -024, -027, -029, -034, -031, -022

Batch: LBA-806338 Inorganic Anions by EPA 300 None

Batch: LBA-806340 Inorganic Anions by EPA 300 None



Project Id:

Certificate of Analysis Summary 371873 Basin Environmental Consulting, LLC, Lovington, NM Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu May-06-10 05:08 pm

						an france arrange	
	Lab Id:	371873-001	371873-002	371873-003	371873-004	371873-005	371873-006
Protocol and	Field Id:	T-1 Sample 1 @ 2'	T-1 Sample 1 @ 7'	T-1 Sample 1 @ 15'	T-1 Sample 1 @ 17'	T-1 Sample 2 @ 2'	T-1 Sample 2 @ 5'
naisanhay sistinuy	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-28-10 08:00	Apr-28-10 08:20	Apr-28-10 08:40	Apr-28-10 09:00	Apr-28-10 09:40	Apr-28-10 10:00
Anions by E300	Extracted:						
	Analyzed:	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg
Chloride		1180 19.3	976 49.5	317 9.48	144 4.70	530 9.55	387
BTEX by EPA 8021B	Extracted:	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30
	Analyzed:	May-08-10 18:01	May-08-10 18:24	May-08-10 18:46	May-08-10 19:08	May-08-10 19:31	May-08-10 19:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg
Benzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Toluene		ND 0.0023	ND 0.0024	ND 0.0022	ND 0.0022	ND 0.0023	Ð
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
m,p-Xylenes		ND 0.0023	ND 0.0024	ND 0.0022	ND 0.0022	ND 0.0023	ND 0.0023
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Percent Moisture	Extracted:						
	Analyzed:	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	%
Percent Moisture		13.0 1.00	15.1 1.00	11.4 1.00	10.6 1.00	12.0 1.00	12.3
TPH By SW8015 Mod	Extracted:	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15
	Analyzed:	May-07-10 18:14	May-07-10 18:41	May-07-10 19:08	May-07-10 19:35	May-07-10 20:02	May-07-10 20:29
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg
C6-C12 Gasoline Range Hydrocarbons		ND 17.3	ND 17.7	ND 17.0	ND 16.7	ND 17.1	ND
C12-C28 Diesel Range Hydrocarbons		ND 17.3	ND 17.7	ND 17.0	ND 16.7	ND 17.1	ND
C28-C35 Oil Range Hydrocarbons		ND 17.3	ND 17.7	ND 17.0	ND 16.7	ND 17.1	DN
Total TPH		ND 173	TTI UN	NTD 170	ND 167	171 CIN	CIN

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager

Brent Barron, II



Project Id:

Basin Environmental Consulting, LLC, Lovington, NM Certificate of Analysis Summary 371873 Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu May-06-10 05:08 pm

-
-10
×
AA
4-N
14
.:
ate
9
T
ď
R

					0		
	Lab Id:	371873-007	371873-008	371873-009	371873-010	371873-011	371873-012
Determine Determined	Field Id:	T-1 Sample 3 @ 2'	T-1 Sample 3 @ 5'	T-1 Sample 4 @ 2'	T-1 Sample 4 @ 5'	T-1 Sample 5 @ 2'	T-1 Sample 5 @ 3'
naisanhay sistinuy	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-28-10 10:40	Apr-28-10 11:00	Apr-28-10 11:20	Apr-28-10 11:40	Apr-30-10 11:00	Apr-30-10 11:30
Anions by E300	Extracted:						
	Analyzed:	May-12-10 10:32					
	Units/RL:	mg/kg RL					
Chloride	-	218 9.71	428 10.3	23.2 4.49	1460 23.6	14.1 4.77	8.95 4.71
BTEX by EPA 8021B	Extracted:	May-08-10 11:30					
	Analyzed:	May-08-10 20:16	May-08-10 20:38	May-08-10 21:01	May-08-10 21:23	May-08-10 22:30	May-08-10 22:53
	Units/RL:	mg/kg RL					
Benzene	-	ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Toluene		ND 0.0023	ND 0.0025	ND 0.0022	ND 0.0023	ND 0.0023	ND 0.0022
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
m,p-Xylenes		ND 0.0023	ND 0.0025	ND 0.0022	ND 0.0023	ND 0.0023	ND 0.0022
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Percent Moisture	Extracted:						
	Analyzed:	May-07-10 17:00					
	Units/RL:	% RL					
Percent Moisture	-	13.5 1.00	18.2 1.00	6.43 1.00	11.1 1.00	12.0 1.00	10.9 1.00
TPH By SW8015 Mod	Extracted:	May-07-10 13:15					
	Analyzed:	May-07-10 20:56	May-07-10 21:23	May-07-10 21:50	May-07-10 22:16	May-07-10 23:11	May-07-10 23:38
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		ND 17.4	ND 18.3	ND 16.0	ND 16.8	ND 17.0	ND 16.8
C12-C28 Diesel Range Hydrocarbons		ND 17.4	ND 18.3	ND 16.0	ND 16.8	88.1 17.0	129 16.8
C28-C35 Oil Range Hydrocarbons		ND 17.4	ND 18.3	ND 16.0	ND 16.8	25.4 17.0	51.6 16.8
Total TPH		ND 174	ND 183	0.01 CIN	ND 16.8	113 5 170	181 168

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Final Ver. 1.000

Odessa Laboratory Manager

Brent Barron, II



Project Id:

Certificate of Analysis Summary 371873 Basin Environmental Consulting, LLC, Lovington, NM Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu May-06-10 05:08 pm Report Date: 14-MAY-10

						Rent Rarron	
					. 125	JICHT DAILOH, II	
	Lab Id:	371873-013	371873-014	371873-015	371873-016	371873-017	371873-018
	Field Id:	T-2 Sample 1 @ 2'	T-2 Sample 1 @ 7	T-2 Sample 1 @ 12'	T-2 Sample 1 @ 13'	T-2 Sample 2 @ 2'	T-2 Sample 2 @ 5'
Analysis kequested	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-28-10 12:00	Apr-28-10 12:30	Apr-28-10 13:00	Apr-28-10 13:20	Apr-28-10 14:20	Apr-28-10 14:40
Anions by E300	Extracted:						
	Analyzed:	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32	May-12-10 10:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		837 19.5	818 20.2	250 9.08	228 9.04	820 20.5	553 52.8
BTEX by EPA 8021B	Extracted:	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30	May-08-10 11:30
	Analyzed:	May-08-10 23:15	May-08-10 23:38	May-09-10 00:00	May-09-10 00:22	May-09-10 00:44	May-09-10 01:06
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0013
Toluene		ND 0.0023	ND 0.0024	ND 0.0021	ND 0.0021	ND 0.0025	ND 0.0025
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0013
m,p-Xylenes		ND 0.0023	ND 0.0024	ND 0.0021	ND 0.0021	ND 0.0025	ND 0.0025
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0013
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0013
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0013
Percent Moisture	Extracted:						
	Analyzed:	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		13.8 1.00	17.0 1.00	7.46 1.00	7.12 1.00	18.2 1.00	20.5 1.00
TPH By SW8015 Mod	Extracted:	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15
	Analyzed:	May-08-10 00:05	May-08-10 00:32	May-08-10 00:59	May-08-10 01:26	May-08-10 01:53	May-08-10 02:20
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 17.3	ND 18.2	ND 16.1	ND 16.1	ND 18.3	ND 18.9
C12-C28 Diesel Range Hydrocarbons		ND 17.3	ND 18.2	ND 16.1	ND 16.1	ND 18.3	ND 18.9
C28-C35 Oil Range Hydrocarbons		ND 17.3	ND 18.2	ND 16.1	ND 16.1	ND 18.3	ND 18.9
Total TDU		ND 173	ND 18.2	1 JI UN	1 yr UN	ND 183	ND 180

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager Brent Barron, II



Project Id:

Certificate of Analysis Summary 371873 Basin Environmental Consulting, LLC, Lovington, NM Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Thu May-06-10 05:08 pm Report Date: 14-MAY-10

					LTUJECI MIAIIAGEL: 1	Brent Barron, 11	
	Lab Id:	371873-019	371873-020	371873-021	371873-022	371873-023	371873-024
Australia Damantal	Field Id:	T-2 Sample 3 @ 2'	T-2 Sample 3 @ 5'	T-3 Sample 1 @ 2'	T-3 Sample 1 @ 5'	T-3 Sample 1 @ 7	T-3 Sample 2 @ 5'
Anarysis nequested	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-29-10 08:00	Apr-29-10 08:30	Apr-29-10 09:00	Apr-29-10 09:20	Apr-29-10 09:40	Apr-29-10 10:00
Anions by E300	Extracted:						
	Analyzed:	May-12-10 10:32	May-12-10 10:32	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		184 9.22	66.3 5.08	497 9.44	135 9.52	117 9.70	784 20.0
BTEX by EPA 8021B	Extracted:	May-08-10 11:30	May-08-10 11:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30
	Analyzed:	May-09-10 01:28	May-09-10 01:51	May-10-10 15:23	May-10-10 15:44	May-10-10 16:04	May-10-10 16:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0011	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0012
Toluene		ND 0.0022	ND 0.0024	ND 0.0022	ND 0.0023	ND 0.0023	ND 0.0024
Ethylbenzene		ND 0.0011	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0012
m,p-Xylenes		ND 0.0022	ND 0.0024	ND 0.0022	ND 0.0023	ND 0.0023	ND 0.0024
o-Xylene		ND 0.0011	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0012
Total Xylenes		ND 0.0011	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0012
Total BTEX		ND 0.0011	ND 0.0012	ND 0.0011	ND 0.0011	ND 0.0012	ND 0.0012
Percent Moisture	Extracted:		-				
	Analyzed:	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		8.85 1.00	17.4 1.00	11.0 1.00	11.8 1.00	13.4 1.00	15.8 1.00
TPH By SW8015 Mod	Extracted:	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15
	Analyzed:	May-08-10 02:48	May-08-10 03:15	May-07-10 22:16	May-07-10 22:46	May-07-10 23:15	May-07-10 23:44
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 16.4	ND 18.2	ND 16.9	ND 17.0	ND 17.4	ND 17.8
C12-C28 Diesel Range Hydrocarbons		ND 16.4	ND 18.2	ND 16.9	ND 17.0	ND 17.4	ND 17.8
C28-C35 Oil Range Hydrocarbons		ND 16.4	ND 18.2	ND 16.9	ND 17.0	ND 17.4	ND 17.8
Total TPH		ND 164	ND 18.2	ND 169	NTD 17.0	ND 174	ND 178

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager Brent Barron, II



Project Id:

Basin Environmental Consulting, LLC, Lovington, NM Certificate of Analysis Summary 371873 Project Name: LR Chamberlain Tank Battery



00	
-10 05:08 pr	
-06-10	
Thu May-0	
Thu	
Lab:	
E.	1
pa	
Receiv	-
Date	

					Project Manager: H	Brent Barron, II	
	Lab Id:	371873-025	371873-026	371873-027	371873-028	371873-029	371873-030
Auchicic Documented	Field Id:	T-3 Sample 3 @ 5'	T-3 Sample 4 @ 2'	T-3 Sample 4 @ 5'	T-4 Sample 1 @ 1.5'	T-4 Sample 2 @ 1.5'	T-4 Sample 3 @ 2'
Anuiysis Nequesieu	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-29-10 11:00	Apr-29-10 12:00	Apr-29-10 12:20	Apr-29-10 13:00	Apr-29-10 13:30	Apr-29-10 14:00
Anions by E300	Extracted:						
	Analyzed:	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		981 47.5	71.6 4.58	84.3 4.48	669 17.8	885 18.4	67.6 9.61
BTEX by EPA 8021B	Extracted:	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30
	Analyzed:	May-10-10 16:45	May-10-10 17:06	May-10-10 17:27	May-10-10 17:47	May-10-10 18:08	May-10-10 18:29
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Toluene		ND 0.0023	ND 0.0022	ND 0.0021	ND 0.0021	ND 0.0022	ND 0.0023
Ethylbenzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
m,p-Xylenes		ND 0.0023	ND 0.0022	ND 0.0021	ND 0.0021	ND 0.0022	ND 0.0023
o-Xylene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total Xylenes		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Total BTEX		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0011
Percent Moisture	Extracted:						
	Analyzed:	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		11.5 1.00	8.31 1.00	6.17 1.00	5.74 1.00	8.62 1.00	12.6 1.00
TPH By SW8015 Mod	Extracted:	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15
	Analyzed:	May-08-10 00:15	May-08-10 00:46	May-08-10 01:18	May-08-10 01:50	May-08-10 02:22	May-08-10 02:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 16.9	ND 16.4	ND 16.0	ND 15.8	ND 16.4	ND 17.1
C12-C28 Diesel Range Hydrocarbons		ND 16.9	ND 16.4	ND 16.0	ND 15.8	ND 16.4	ND 17.1
C28-C35 Oil Range Hydrocarbons		ND 16.9	ND 16.4	ND 16.0	ND 15.8	ND 16.4	ND 17.1
Total TDH		ND 160	NTO 16.4	NTO 160	NTO 15.8	NTO 164	171 CIN

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Final Ver. 1.000

Odessa Laboratory Manager

Brent Barron, II

-	
0	3
	.F
F	ō
	ğ
	9

Project Id:

Basin Environmental Consulting, LLC, Lovington, NM Certificate of Analysis Summary 371873 Project Name: LR Chamberlain Tank Battery



Froject Location: Lea Coulity, Min						01-14741-41
					Project Manager: Brent Barron, II	in, II
	Lab Id:	371873-031	371873-032	371873-033	371873-034	
	Field Id:	T-4 Sample 3 @ 3'	T-5 Sample 1 @ 2'	T-5 Sample 1 @ 3.5'	T-5 Sample 2 (a) 2'	
Analysis Kequesiea	Depth:					
	Matrix:	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Apr-29-10 14:20	Apr-29-10 14:40	Apr-29-10 15:00	Apr-29-10 15:30	
Anions by E300	Extracted:					
	Analyzed:	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	May-12-10 19:30	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		123 10.1	2870 50.6	1550 23.2	66.4 4.94	
BTEX by EPA 8021B	Extracted:	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	May-10-10 14:30	
	Analyzed:	May-10-10 19:31	May-10-10 19:52	May-10-10 20:12	May-10-10 20:33	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0012	
Toluene		ND 0.0024	ND 0.0024	ND 0.0022	ND 0.0024	
Ethylbenzene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0012	
m,p-Xylenes		ND 0.0024	ND 0.0024	ND 0.0022	ND 0.0024	
o-Xylene		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0012	
Total Xylenes		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0012	
Total BTEX		ND 0.0012	ND 0.0012	ND 0.0011	ND 0.0012	
Percent Moisture	Extracted:					
	Analyzed:	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	May-07-10 17:00	
	Units/RL:	% RL	% RL	% RL	% RL	
Percent Moisture		16.9 1.00	17.0 1.00	9.31 1.00	14.9 1.00	
TPH By SW8015 Mod	Extracted:	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	May-07-10 13:15	
	Analyzed:	May-08-10 03:54	May-08-10 04:25	May-08-10 04:56	May-08-10 05:29	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
C6-C12 Gasoline Range Hydrocarbons		ND 18.0	ND 18.1	ND 16.6	ND 17.5	
C12-C28 Diesel Range Hydrocarbons		ND 18.0	ND 18.1	ND 16.6	ND 17.5	
C28-C35 Oil Range Hydrocarbons		ND 18.0	ND 18.1	ND 16.6	ND 17.5	
Total TPH		ND 180	ND 181	ND 166	ND 175	

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager

Brent Barron, II





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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and OUALITY

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



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805828	Sample: 562820-1-BKS / BB	CS Bate	ch: 1 Matri	x: Solid		
Units: mg/kg	Date Analyzed: 05/08/10 16:10	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0295	0.0300	98	80-120	
4-Bromofluorobenzene		0.0300	0.0300	100	80-120	
Lab Batch #: 805828	Sample: 562820-1-BSD / BS			x:Solid		
Units: mg/kg	Date Analyzed: 05/08/10 16:33	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
14 D:0	Analytes	0.0000	0.0000			
1,4-Difluorobenzene 4-Bromofluorobenzene		0.0300	0.0300	100	80-120	
		0.0293	0.0300	98	80-120	
Lab Batch #: 805828	Sample: 562820-1-BLK / BI			k: Solid		
Units: mg/kg	Date Analyzed: 05/08/10 17:39	SU	RROGATE R	ECOVERY S	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0243	0.0300	81	80-120	
4-Bromofluorobenzene		0.0294	0.0300	98	80-120	
Lab Batch #: 805828	Sample: 371873-001 / SMP	Bate	h: 1 Matrix	r: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 18:01		RROGATE R		STUDY	
	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0243	0.0300	81	80-120	
4-Bromofluorobenzene		0.0300	0.0300	100	80-120	
Lab Batch #: 805828	Sample: 371873-002 / SMP	Bate	h: 1 Matrix	x:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 18:24	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0244	0.0300	81	80-120	
4-Bromofluorobenzene		0.0297	0.0300	99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873, Lab Batch #: 805828	Sample: 371873-003 / SMP	Batc	Project I h: 1 Matrix			
Units: mg/kg	Date Analyzed: 05/08/10 18:46	SU	RROGATE R	ECOVERY	STUDY	
	A by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Anaryus	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0242	0.0300	96	80-120	
Lab Batch #: 805828	Sample: 371873-004 / SMP	Batc	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 19:08		RROGATE R	ECOVERY S	STUDY	
	Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0239	0.0300	80	80-120	
4-Bromofluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 805828 Units: mg/kg	Sample: 371873-005 / SMP Date Analyzed: 05/08/10 19:31	Batc SU	h: ¹ Matrix RROGATE R		STUDY	
	Aby EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0243	0.0300	81	80-120	
4-Bromofluorobenzene		0.0291	0.0300	97	80-120	
Lab Batch #: 805828 Units: mg/kg	Sample: 371873-006 / SMP Date Analyzed: 05/08/10 19:53	Bate SU	h: 1 Matrix RROGATE R		STUDY	
	Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0.0286	0.0300	95	80-120	
Lab Batch #: 805828	Sample: 371873-007 / SMP	Bate	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 20:16	SU	RROGATE R	ECOVERY S	STUDY	1.5
	Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	1
4-Bromofluorobenzene		0.0284	0.0300	95	80-120	S. 196

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805828	Sample: 371873-008 / SMP	Bate	Project I h: 1 Matri			
Units: mg/kg	Date Analyzed: 05/08/10 20:38	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0239	0.0300	80	80-120	
4-Bromofluorobenzene		0.0282	0.0300	94	80-120	
Lab Batch #: 805828	Sample: 371873-009 / SMP	Batc	h: 1 Matrix	x: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 21:01	SU	RROGATE R	ECOVERY	STUDY	
BTE	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	Analytes	0.0247	0.0300	82	80-120	_
4-Bromofluorobenzene		0.0305	0.0300	102	80-120	
ab Batch #: 805828	Sample: 371873-010 / SMP				00 120	
Units: mg/kg	Date Analyzed: 05/08/10 21:23	Bate	h: 1 Matrix		STUDY	
			1	1		-
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	7 kinary (CS	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene		0.0303	0.0300	101	80-120	
Lab Batch #: 805828	Sample: 371873-011 / SMP	Batc	h: 1 Matrix	r: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 22:30		RROGATE R		STUDY	
	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0238	0.0300	79	80-120	.*
4-Bromofluorobenzene		0.0273	0.0300	91	80-120	
ab Batch #: 805828	Sample: 371873-012 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 22:53		RROGATE R	ECOVERY S	STUDY	
втех	A by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0235	0.0300	78	80-120	*
4-Bromofluorobenzene		0.0273	0.0300	91		

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805828	Sample: 371873-013 / SMP	Bato	h: 1 Matrix	k: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 23:15	SU	RROGATE R	ECOVERY	STUDY	
	by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	nalytes			[D]		
1,4-Difluorobenzene		0.0244	0.0300	81	80-120	-
4-Bromofluorobenzene		0.0291	0.0300	97	80-120	
Lab Batch #: 805828	Sample: 371873-014 / SMP	Bate				
Units: mg/kg	Date Analyzed: 05/08/10 23:38	SU	RROGATE R	ECOVERY S	STUDY	
	by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	liarytes	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0242	0.0300	97	80-120	
and the second se	271972.016 / SMD				00-120	
Lab Batch #: 805828	Sample: 371873-015 / SMP	Bate	h: 1 Matrix		TUDY	
Units: mg/kg	Date Analyzed: 05/09/10 00:00	50	KRUGATE R	ECOVERY	STUDY	-
	by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0243	0.0300	81	80-120	
4-Bromofluorobenzene		0.0302	0.0300	101	80-120	
Lab Batch #: 805828	Sample: 371873-016 / SMP	Batc	h: 1 Matrix	e: Soil	24.2	
Units: mg/kg	Date Analyzed: 05/09/10 00:22		RROGATE R		STUDY	-
BTEX	by EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1,4-Difluorobenzene		0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0291	0.0300	97 .	80-120	
Lab Batch #: 805828	Sample: 371873-017 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/09/10 00:44		RROGATE R	ECOVERY S	STUDY	
	oy EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0245	0.0300	82	80-120	
4-Bromofluorobenzene		0.0296	0.0300	99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805828	Sample: 371873-018 / SMP	Batc	h: 1 Matri	x:Soil		
Units: mg/kg	Date Analyzed: 05/09/10 01:06	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 805828	Sample: 371873-019 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/09/10 01:28	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	Timity to 5	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene		0.0287	0.0300	96	80-120	
Lab Batch #: 805828	Sample: 371873-020 / SMP	Batc	h: 1 Matrix	r: Soil		
	Date Analyzed: 05/09/10 01:51		RROGATE R		STUDY	
Units: mg/kg			1			
BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0244	0.0300	81	80-120	
4-Bromofluorobenzene		0.0302	0.0300	101	80-120	
Lab Batch #: 805828	Sample: 371873-020 S / MS	Bate	h: 1 Matrix	x: Soil		
Units: mg/kg	Date Analyzed: 05/09/10 02:13		RROGATE R		STUDY	
	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0287	0.0300	96	80-120	
4-Bromofluorobenzene		0.0296	0.0300	99	80-120	
Lab Batch #: 805828	Sample: 371873-020 SD / MS	SD Bate	h: 1 Matrix	x:Soil		
Units: mg/kg	Date Analyzed: 05/09/10 02:36		RROGATE R	ECOVERY	STUDY	1.1
	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0284	0.0300	95	80-120	
4-Bromofluorobenzene		0.0292	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



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805963 Sa	mple: 562918-1-BKS / BK			:Solid		
Units: mg/kg Date Ana	lyzed: 05/10/10 09:12	SU	RROGATE R	ECOVERY S	STUDY	
BTEX by EPA 80)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene 4-Bromofluorobenzene		0.0301	0.0300	100	80-120	
the second second second second second		0.0300	0.0300	100	80-120	
Lab Batch #: 805963 Sa	mple: 562918-1-BSD / BS					
Units: mg/kg Date Ana	lyzed: 05/10/10 09:33	st	RROGATE R	ECOVERYS	STUDY	200
BTEX by EPA 80 Analytes	021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0304	0.0300	101	80-120	
4-Bromofluorobenzene		0.0304	0.0300	100	80-120	-
Lab Batch #: 805963 Sa	mple: 562918-1-BLK / BL					
	lyzed: 05/10/10 10:35		h: 1 Matrix		STUDY	
	-		1	1		1
BTEX by EPA 80 Analytes)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0273	0.0300	91	80-120	
4-Bromofluorobenzene		0.0296	0.0300	99	80-120	
Lab Batch #: 805963 Sa	mple: 371873-021 / SMP	Bate	h: 1 Matrix	: Soil		
	lyzed: 05/10/10 15:23		RROGATE R		STUDY	
BTEX by EPA 80 Analytes		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0277	0.0300	92	80-120	1.2
4-Bromofluorobenzene		0.0278	0.0300	93	80-120	10
Lab Batch #: 805963 Sa	mple: 371873-022 / SMP	Bate	h: 1 Matrix	:Soil	1	
	lyzed: 05/10/10 15:44		RROGATE R	ECOVERY S	STUDY	
BTEX by EPA 80 Analytes)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0269	0.0300	90	80-120	- 13
4-Bromofluorobenzene		0.0306	0.0300	102	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



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805963	, Sample: 371873-023 / SMP	Bate	Project I h: 1 Matri			
Units: mg/kg	Date Analyzed: 05/10/10 16:04	SU	RROGATE R	ECOVERY	STUDY	
BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0273	0.0300	91	80-120	
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	
Lab Batch #: 805963	Sample: 371873-024 / SMP	Bate	h: 1 Matri	x: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 16:25	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	Anaryus	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene		0.0300	0.0300	100	80-120	
Lab Batch #: 805963	Sample: 371873-025 / SMP	Batc	h: 1 Matrix	soil		
Units: mg/kg	Date Analyzed: 05/10/10 16:45		RROGATE R		STUDY	
		Amount	True		Control	
BIE2	Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flag
1,4-Difluorobenzene		0.0279	0.0300	93	80-120	
4-Bromofluorobenzene		0.0292	0.0300	97	80-120	-
Lab Batch #: 805963	Sample: 371873-026 / SMP	Bate	h: 1 Matrix	x:Soil	1.9.9	
Units: mg/kg	Date Analyzed: 05/10/10 17:06	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0276	0.0300	92	80-120	
4-Bromofluorobenzene		0.0270	0.0300	90	80-120	
Lab Batch #: 805963	Sample: 371873-027 / SMP	Batel	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 17:27	SU	RROGATE R	ECOVERY	STUDY	100
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0274	0.0300	91	80-120	2.7 -
4-Bromofluorobenzene		0.0330	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805963	Sample: 371873-028 / SMP	Bate	Project I th: 1 Matrix			
Units: mg/kg	Date Analyzed: 05/10/10 17:47		RROGATE R		STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0268	0.0300	89	80-120	
4-Bromofluorobenzene		0.0272	0.0300	91	80-120	
Lab Batch #: 805963	Sample: 371873-029 / SMP	Bate	ch: 1 Matrix	k: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 18:08	SU	RROGATE R	ECOVERY S	STUDY	
BTE	X by EPA 8021B	Amounť Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1,4-Difluorobenzene		0.0272	0.0300	91	80-120	
4-Bromofluorobenzene		0.0285	0.0300	95	80-120	
Lab Batch #: 805963	Sample: 371873-030 / SMP	Bato				
Units: mg/kg	Date Analyzed: 05/10/10 18:29	SU	RROGATE R	ECOVERY S	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	
4-Bromofluorobenzene		0.0303	0.0300	101	80-120	
Lab Batch #: 805963	Sample: 371873-031 / SMP	Bato	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 19:31	SU	RROGATE R	ECOVERY S	STUDY	
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1,4-Difluorobenzene		0.0279	0.0300	93	80-120	
4-Bromofluorobenzene		0.0285	0.0300	95	80-120	
Lab Batch #: 805963	Sample: 371873-032 / SMP	Bato	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 19:52	SU	RROGATE R	ECOVERY S	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromofluorobenzene		0.0294	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805963	Sample: 371873-033 / SMP	Bato	Project I h: 1 Matrix			
Units: mg/kg	Date Analyzed: 05/10/10 20:12	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0275	0.0300	92	80-120	
4-Bromofluorobenzene		0.0285	0.0300	95	80-120	
Lab Batch #: 805963	Sample: 371873-034 / SMP	Bato	ch: 1 Matrix	k:Soil		
Units: mg/kg	Date Analyzed: 05/10/10 20:33	SU	RROGATE R	ECOVERY	STUDY	3
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
14 Diffuenchamana	Analytes	0.02(0	0.0200		80.120	
1,4-Difluorobenzene 4-Bromofluorobenzene		0.0269	0.0300	90	80-120 80-120	
and the second second					80-120	
Lab Batch #: 805963	Sample: 371873-021 S / MS	Bato				
Units: mg/kg	Date Analyzed: 05/10/10 21:56	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene		0.0362	0.0300	121	80-120	*
4-Bromofluorobenzene		0.0313	0.0300	104	80-120	100
Lab Batch #: 805963	Sample: 371873-021 SD / M	SD Bate	h: 1 Matrix	r: Soil		
Units: mg/kg	Date Analyzed: 05/10/10 22:17		RROGATE R		STUDY	12
	X by EPA 8021B 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		0.0338	0.0300	113	80-120	
Lab Batch #: 805736	Sample: 562786-1-BKS / BK	S Bato	h: 1 Matri	:Solid	1.1.1	
Units: mg/kg	Date Analyzed: 05/07/10 16:54		RROGATE R	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1-Chlorooctane		113	100	113	70-135	1. I.S.
				-		

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873, Lab Batch #: 805736	Sample: 562786-1-BSD / BS	D Bate	Project I h: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 05/07/10 17:20	SU	RROGATE R	ECOVERY	STUDY	
	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	alytes			[D]		
1-Chlorooctane		113	100	113	70-135	
o-Terphenyl		44.0	50.2	88	70-135	
Lab Batch #: 805736	Sample: 562786-1-BLK / BI Date Analyzed: 05/07/10 17:47		h: ¹ Matrix RROGATE R		STUDY	
				1		
	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane	arytes	96.2	99.6	97	70-135	
o-Terphenyl		48.1	49.8	97	70-135	
Lab Batch #: 805736	Sample: 371873-001 / SMP	Bate	h: 1 Matrix	ri Soil		
	Date Analyzed: 05/07/10 18:14		RROGATE R		STUDY	
TPH By S	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		98.5	100	99	70-135	
o-Terphenyl		49.0	50.2	98	70-135	13.8
Lab Batch #: 805736	Sample: 371873-002 / SMP	Bate	h: 1 Matrix	s:Soil		
Units: mg/kg	Date Analyzed: 05/07/10 18:41	SU	RROGATE R	ECOVERY	STUDY	
	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		96.0	100	96	70-135	1.1
o-Terphenyl		48.0	50.2	96	70-135	
Lab Batch #: 805736	Sample: 371873-003 / SMP	Batc	h: 1 Matrix	k:Soil		1.12
Units: mg/kg	Date Analyzed: 05/07/10 19:08	SU	RROGATE R	ECOVERY	STUDY	
	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		98.2	100	98	70-135	
o-Terphenyl		48.8	50.2	97	70-135	- 11E

* 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



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805736	Sample: 371873-004 / SMP	Bato	Project I			
Units: mg/kg	Date Analyzed: 05/07/10 19:35		RROGATE R		STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
	Analytes			[D]		
1-Chlorooctane		93.8	99.8	94	70-135	
o-Terphenyl		46.3	49.9	93	70-135	
Lab Batch #: 805736	Sample: 371873-005 / SMP	Bate	ch: 1 Matrix	c:Soil	1	
Units: mg/kg	Date Analyzed: 05/07/10 20:02	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
	Analytes					
1-Chlorooctane		94.7	100	95	70-135	
o-Terphenyl		46.3	50.1	92	70-135	
Lab Batch #: 805736	Sample: 371873-006 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/07/10 20:29	SU	RROGATE R	ECOVERY	STUDY	
TPHI	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1.011	Analytes					
1-Chlorooctane		95.5	100	96	70-135	-
o-Terphenyl		47.1	50.0	94	70-135	
Lab Batch #: 805736	Sample: 371873-007 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/07/10 20:56	SU	RROGATE R	ECOVERY	STUDY	
TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		94.8	100	95	70-135	
o-Terphenyl		47.9	50.2	95	70-135	
Lab Batch #: 805736	Sample: 371873-008 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/07/10 21:23		RROGATE R	ECOVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		95.5	99.8	96	70-135	
		47.9		96	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805736	Sample: 371873-009 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/07/10 21:50	SU	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		94.3	100	94	70-135	
o-Terphenyl		46.8	50.1	93	70-135	
Lab Batch #: 805736	Sample: 371873-010 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/07/10 22:16	SU	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane	Analytes	95.5	99.8	96	70-135	
o-Terphenyl		47.5	49.9	95	70-135	
Lab Batch #: 805736	Sample: 371873-011 / SMP	Batc	h: 1 Matrix	ri Soil		_
Units: mg/kg	Date Analyzed: 05/07/10 23:11		RROGATE R		STUDY	
		Amount	True	1	Control	
1PH	By SW8015 Mod Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flag
1-Chlorooctane		95.3	99.8	95	70-135	
o-Terphenyl		47.5	49.9	95	70-135	
Lab Batch #: 805736	Sample: 371873-012 / SMP	Bate	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/07/10 23:38	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		94.3	99.8	94	70-135	
o-Terphenyl		47.3	49.9	95	70-135	18
Lab Batch #: 805736	Sample: 371873-013 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 00:05		RROGATE R	ECOVERY	STUDY	
	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		94.8	99.5	95	70-135	
o-Terphenyl		47.3	49.8	95	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



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805736	Sample: 371873-014 / SMP	Batc				
Units: mg/kg	Date Analyzed: 05/08/10 00:32	SU	RROGATE R	ECOVERY S	STUDY	
	SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Ar	alytes			[D]		
1-Chlorooctane		95.0	101	94	70-135	1
o-Terphenyl		47.5	50.3	94	70-135	1
Lab Batch #: 805736	Sample: 371873-015 / SMP	Bate		-	Sec.	1
Units: mg/kg	Date Analyzed: 05/08/10 00:59	SU	RROGATE R	ECOVERY S	STUDY	
	SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	larytes	96.3	99.5	97	70-135	
o-Terphenyl		47.9	49.8	96	70-135	
	Sample: 371873-016 / SMP	Batc		Soil		
Lab Batch #: 805736 Units: mg/kg	Date Analyzed: 05/08/10 01:26		RROGATE R		STUDY	-
TPH By S	SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		92.9	99.5	93	70-135	
o-Terphenyl		46.1	49.8	93	70-135	
Lab Batch #: 805736	Sample: 371873-017 / SMP	Batc	h: 1 Matrix	s: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 01:53	SU	RROGATE R	ECOVERY S	STUDY	
	SW8015 Mod aalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1-Chlorooctane		90.5	100	91	70-135	
o-Terphenyl		46.3	50.0	93	70-135	
Lab Batch #: 805736	Sample: 371873-018 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 02:20	SU	RROGATE R	ECOVERY S	STUDY	
	SW8015 Mod aalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		94.0	100	94	70-135	55 B.

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805736	Sample: 371873-019 / SMP	Bato				
Units: mg/kg	Date Analyzed: 05/08/10 02:48	SU	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		98.2	99.5	99	70-135	
o-Terphenyl		48.6	49.8	98	70-135	
Lab Batch #: 805736	Sample: 371873-020 / SMP	Bato			in a second	
Units: mg/kg	Date Analyzed: 05/08/10 03:15	SU	RROGATE R	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	94.8	100	95	70-135	
o-Terphenyl		47.1	50.0	95	70-135	
	271972 020 5 / 145				70-155	
Lab Batch #: 805736	Sample: 371873-020 S / MS	Bato	h: 1 Matrix		TUDY	_
Units: mg/kg	Date Analyzed: 05/08/10 03:42	SU	RROGATE R	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Anaryus	123	100	123	70-135	
o-Terphenyl		48.2	50.1	96	70-135	
Lab Batch #: 805736	Sample: 371873-020 SD / M			u Soil		
			RROGATE R		STUDY	-
Units: mg/kg	Date Analyzed: 05/08/10 04:09	50	KROGATE K	T	STUDI	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		119	99.5	120	70-135	
o-Terphenyl		47.2	49.8	95	70-135	
Lab Batch #: 805752	Sample: 562796-1-BKS / BK	IS Bate	ch: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 05/07/10 20:43	SU	RROGATE R	ECOVERY	STUDY	Ser.
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		98.2	100	98	70-135	1
o-Terphenyl		45.0	50.2	90	70-135	1

* 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



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873 Lab Batch #: 805752	Sample: 562796-1-BLK / BL	K Bate	Project I ch: 1 Matrix	:Solid		
Units: mg/kg	Date Analyzed: 05/07/10 21:46	st	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		84.6	99.6	85	70-135	
o-Terphenyl		46.9	49.8	94	70-135	
Lab Batch #: 805752	Sample: 371873-021 / SMP	Bate	ch: 1 Matrix	s:Soil	1.1.1.	
Units: mg/kg	Date Analyzed: 05/07/10 22:16	st	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		82.0	100	82	70-135	-
o-Terphenyl		44.6	50.1	89	70-135	
Lab Batch #: 805752	Sample: 371873-022 / SMP	Bate	ch: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/07/10 22:46		RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		81.3	99.9	81	70-135	-
o-Terphenyl		44.3	50.0	89	70-135	
Lab Batch #: 805752	Sample: 371873-023 / SMP	Bate	ch: 1 Matri	x: Soil		
Units: mg/kg	Date Analyzed: 05/07/10 23:15	CUBBOCATE DECOVERY		STUDY	Con.	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		105	100	105	70-135	
o-Terphenyl		57.9	50.2	115	70-135	
Lab Batch #: 805752	Sample: 371873-024 / SMP	Bate	ch: 1 Matri	x:Soil	1	
Units: mg/kg	Date Analyzed: 05/07/10 23:44	SU	RROGATE R	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		104	100	104	70-135	-
		57.3	50.0	115	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 805752	Sample: 371873-025 / SMP	Bato				
Units: mg/kg	Date Analyzed: 05/08/10 00:15	st	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		87.9	99.5	88	70-135	
o-Terphenyl		48.0	49.8	96	70-135	
Lab Batch #: 805752	Sample: 371873-026 / SMP	Bato	h: 1 Matrix	s:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 00:46	SU	RROGATE R	ECOVERY	STUDY	1
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	97.0	100	97	70-135	
o-Terphenyl		53.2	50.0	106	70-135	
Lab Batch #: 805752	Sample: 371873-027 / SMP	Bato	h: 1 Matrix	Soil		
Units: mg/kg	Date Analyzed: 05/08/10 01:18		RROGATE R		STUDY	
		Amount	True	1	Control	
ТРН	By SW8015 Mod Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
1-Chlorooctane		101	100	101	70-135	
o-Terphenyl		55.2	50.0	110	70-135	1.5
Lab Batch #: 805752	Sample: 371873-028 / SMP	Bato	h: 1 Matrix	: Soil	1.1	
Units: mg/kg	Date Analyzed: 05/08/10 01:50	CURROCHTE RECOVERY		STUDY		
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		93.7	99.5	94	70-135	
o-Terphenyl		50.8	49.8	102	70-135	
Lab Batch #: 805752	Sample: 371873-029 / SMP	Bato	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 05/08/10 02:22	SU	RROGATE R	ECOVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		95.0	100	95	70-135	1.5

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: LR Chamberlain Tank Battery

ork Orders : 371873, Lab Batch #: 805752	Sample: 371873-030 / SMP	Batch	Project I h: 1 Matrix			
Units: mg/kg	Date Analyzed: 05/08/10 02:53		RROGATE R		STUDY	
ТРН Н	3y SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		95.9	99.6	96	70-135	
o-Terphenyl		52.0	49.8	104	70-135	
Lab Batch #: 805752	Sample: 371873-031 / SMP	Batch			100	
Units: mg/kg	Date Analyzed: 05/08/10 03:54	SU	RROGATE R	ECOVERY S	STUDY	
трн і	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	7 Andry CO	87.8	99.8	88	70-135	
o-Terphenyl		48.2	49.9	97	70-135	
Lab Batch #: 805752	Sample: 371873-032 / SMP	Batch	h: 1 Matrix	u Soil		
Units: mg/kg	Date Analyzed: 05/08/10 04:25		RROGATE R		STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		83.0	100	83	70-135	
o-Terphenyl		45.5	50.1	91	70-135	1
Lab Batch #: 805752	Sample: 371873-033 / SMP	Batcl	h: 1 Matrix	r: Soil	1.1	1. 1. 1.
Units: mg/kg	Date Analyzed: 05/08/10 04:56		RROGATE R		STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		101	100	101	70-135	
o-Terphenyl		55.5	50.1	111	70-135	
Lab Batch #: 805752	Sample: 371873-034 / SMP	Batel	h: 1 Matri	s:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 05:29	SU	RROGATE R	ECOVERY	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		90.1	99.5	91	70-135	
o-Terphenyl		49.5	49.8	99	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: LR Chamberlain Tank Battery

/ork Orders : 371873 Lab Batch #: 805752 Units: mg/kg	, Sample: 371873-034 S / MS Date Analyzed: 05/08/10 08:09	Batel	Project II n: ¹ Matrix RROGATE RI	:Soil	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		93.2	99.6	94	70-135	
o-Terphenyl		42.7	49.8	86	70-135	
Lab Batch #: 805752	Sample: 371873-034 SD / M	SD Batcl	n: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 05/08/10 08:42	SU	RROGATE RI	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		97.9	100	98	70-135	
o-Terphenyl		44.8	50.2	89	70-135	
Lab Batch #: 805752	Sample: 562796-1-BSD / BS	D Batel	h: 1 Matrix	Solid		
Units: mg/kg	Date Analyzed: 05/10/10 11:00	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		118	100	118	70-135	
o-Terphenyl		53.6	50.2	107	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.

The second second	- warden
	÷
	0
	6
	ä
	6
La	-

BS / BSD Recoveries



Project Name: LR Chamberlain Tank Battery

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Date Analyzed: 05/08/2010

Project ID:

Matrix: Solid

Work Order #: 371873 Analyst: ASA Lab Batch ID: 805828 Sample: 562820-1-BKS Units: mg/kg

Date Prepared: 05/08/2010

Batch #:

Flag Limits %RPD Control 35 35 35 35 35 Date Analyzed: 05/10/2010 Control Limits %R 70-130 70-130 71-133 71-129 70-135 Matrix: Solid RPD % -_ 0 0 0 Blk. Spk Dup. %R [G] 102 106 101 106 57 Duplicate Result [F] 0.2032 0.1056 0.1013 Blank Spike 0.1055 0.0973 Spike Added 0.2 0.1 Ξ 0.1 0.1 0.1 Blank Spike %R [D] 104 101 105 101 16 Date Prepared: 05/10/2010 Blank Spike Result [C] 0.1042 0.1006 0.2026 0.0970 0.1051 Batch #: 1 0.1000 0.2000 0.1000 0.1000 Spike 0.1000 B Blank Sample Result [Y] Ð Ð Ð Ð Ð Sample: 562918-1-BKS BTEX by EPA 8021B Lab Batch ID: 805963 Analyst: ASA Analytes Ethylbenzene m,p-Xylenes o-Xylene Benzene Toluene

Flag Control Limits %RPD 35 35 35 35 35 Control Limits %R 70-130 71-129 70-135 71-133 70-130 RPD % 0 _ _ _ -Blk. Spk Dup. %R [G] 68 87 57 86 8 Spike Duplicate Result [F] 0.0857 0.0867 0.0959 Blank 0.0891 0.1938 Spike Added 0.1 0.1 0.2 0.1 E 0.1 Blank Spike %R [D] 6 87 52 96 86 Blank Spike Result 0.0896 0.0872 0.1948 0.0964 0.0861 C 0.1000 0.1000 0.1000 0.1000 0.2000 Spike B Sample Result Blank Ð Ð Ð Ð Ð BTEX by EPA 8021B Analytes Ethylbenzene m,p-Xylenes o-Xylene Toluene Benzene

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Units: mg/kg

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

-	-
0	
	T
-	ž
T	5
	9
	-

BS / BSD Recoveries



Flag

Control Limits %RPD

20

Flag

Limits %RPD

20

Control

Flag

Limits %RPD

35

70-135 70-135

1 5

111 LL

1110 774

1000 1000

112

1120

1000 1000

Ð R

C6-C12 Gasoline Range Hydrocarbons C12-C28 Diesel Range Hydrocarbons

Analytes

72

724

35

Control

1 P . E . . 3 -. -. 1

	Pr	Project Name:		Chambe	rlain 1	LR Chamberlain I ank Battery	À.			
Work Order #: 371873 Analyst: LATCOR	Da	tte Prepar	Date Prepared: 05/12/2010	10			Pro Date A	Project ID: te Analyzed: (Project ID: Date Analyzed: 05/12/2010	
Lab Batch ID: 806338 Sample: 806338-1-BKS	BKS	Batch	Batch #: 1					Matrix: Solid	solid	
Units: mg/kg		BLAN	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE	SPIKE / B	S YNK S	PIKE DUPI		RECOVI	RECOVERY STUDY	
Anions by E300	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	-
Analytes	[A]	[B]	[C]	[D]	[E]	Dupucate Result [F]	[6]	0/	N0%	
Chloride	Q	10.0	9.94	66	10	9.82	86	1	75-125	
Analyst: LATCOR	Da	te Prepar	Date Prepared: 05/12/2010	10			Date A	nalyzed: (Date Analyzed: 05/12/2010	
Lab Batch ID: 806340 Sample: 806340-1-BKS		Batch	Batch #: 1					Matrix: Solid	solid	
Units: mg/kg		BLAN	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE	SPIKE / B	S YNK S	PIKE DUPI	ICATE	RECOVI	RECOVERY STUDY	
Anions by E300	Blank Sample Result	Spike Added	Blank Spike Poente	Blank Spike	Spike Added	Blank Spike Duniteste	Blk. Spk Dup.	RPD %	Control Limits	-
Analytes	۲.	[B]	[C]	[D]	[E]	Result [F]	[6]	R	NO/	
Chloride	QN	10.0	10.4	104	10	96.60	66	5	75-125	
Analyst: BEV	Da	te Prepar	Date Prepared: 05/07/2010	10		4	Date A	nalyzed: (Date Analyzed: 05/07/2010	
Lab Batch ID: 805736 Sample: 562786-1-BKS	BKS	Batch #:	h#: 1					Matrix: Solid	solid	
Units: mg/kg		BLAN	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE	SPIKE / B	S YNK S	PIKE DUPI	ICATE	RECOVI	RECOVERY STUDY	
TPH By SW8015 Mod	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	-
Analytes	[A]	[B]	[C]	% K	[E]	Duplicate Result [F]	%K	%	No%	

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: LR Chamberlain Tank Battery

Work Order #: 371873 Analyst: BEV Lab Batch ID: 805752 Sample: 562796-1-BKS Units: mg/kg

Date Prepared: 05/07/2010

Batch #: 1

Project ID: Date Analyzed: 05/07/2010 Matrix: Solid BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

			A NUMBER OF TAXABLE PARTY.								
TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[6]				
C6-C12 Gasoline Range Hydrocarbons	QN	1000	1050	105	1000	1220	122	15	70-135	35	
C12-C28 Diesel Range Hydrocarbons	QN	1000	813	81	1000	891	89	6	70-135	35	
					,						

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



Work Order #: 371873

Form 3 - MS Recoveries



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 806338 Date Analyzed: 05/12/2010 QC- Sample ID: 371873-001 S Reporting Units: mg/kg	Date Prepared: 05/12 Batch #: 1 MATE		А	nalyst: L Matrix: S RECO	ATCOR	DY
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1180	460	1680	109	75-125	
Lab Batch #: 806340 Date Analyzed: 05/12/2010 QC- Sample ID: 371873-021 S	Date Prepared: 05/12 Batch #: 1	2/2010		nalyst: L Matrix: S		
Reporting Units: mg/kg		RIX / MA	TRIX SPIKE			DY
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
				84	75-125	

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: LR Chamberlain Tank Battery

Project ID:

QC- Sample ID: 371873-020 S Date Prepared: 05/08/2010

Date Analyzed: 05/09/2010 Lab Batch ID: 805828 Work Order #: 371873

Matrix: Soil -Analyst: ASA Batch #:

Reporting Units: mg/kg	12	M	ATRIX SPIKI	E / MAT	RIX SPI	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	FE RECO	OVERY S	STUDY		
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	QN	0.1213	0.0905	75	0.1208	0.0778	64	15	70-130	35	X
Toluene	ND	0.1213	0.0875	72	0.1208	0.0763	63	14	70-130	35	х
Ethylbenzene	QN	0.1213	0.0884	73	0.1208	0.0780	65	13	71-129	35	X
m,p-Xylenes	QN	0.2426	0.1700	70	0.2416	0.1521	63	11	70-135	35	х
o-Xylene	ND	0.1213	0.0830	68	0.1208	0.0734	61	12	71-133	35	х
Lab Batch ID: 805963 Date Analyzed: 05/10/2010	QC- Sample ID: 371873-021 S Date Prepared: 05/10/2010	371873. 05/10/2	-021 S 010	Ba	Batch #: Analyst:	1 Matrix: Soil ASA	:: Soil				

Reporting Units: mg/kg		M	ATRIX SPIKI	TAM / 3	RIX SPI	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	FE RECO	DVERY S	TUDY		
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	QN	0.1130	0.0752	67	0.1135	0.0732	64	3	70-130	35	Х
Toluene	QN	0.1130	0.0654	58	0.1135	0.0644	57	2	70-130	35	X
Ethylbenzene	QN	0.1130	0.0765	68	0.1135	0.0678	60	12	71-129	35	X
m,p-Xylenes	QN	0.2261	0.1703	75	0.2270	0.1470	65	15	70-135	35	Х
o-Xylene	QN	0.1130	0.1278	113	0.1135	0.0832	73	42	71-133	35	н

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

1		_
	0	
	Ŭ	j.
	-	Pra
	2	abe
		-

Form 3 - MS / MSD Recoveries



Project Name: LR Chamberlain Tank Battery

Work Order #: 371873 Lab Batch ID: 805736 Date Analyzed: 05/08/2010

 QC-Sample ID:
 371873-020 S
 Batch #:
 1
 Ma

 Date Prepared:
 05/07/2010
 Analyst:
 BEV

1 Matrix: Soil

Project ID:

Reporting Units: mg/kg		M	ATRIX SPIK	E / MATI	RIX SPI	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	TE REC	OVERY S	STUDY		
TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	QN	1210	1430	118	1200	1390	116	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	QN	1210	1130	93	1200	606	76	22	70-135	35	
Lab Batch ID: 805752 Date Analyzed: 05/08/2010	QC- Sample ID: 371873-034 S Date Prepared: 05/07/2010	371873-05/07/2	-034 S 010	Bai Ana	Batch #: Analyst:	l Matrix BEV	Matrix: Soil				
Reporting Units: mg/kg		M	ATRIX SPIK	E / MATI	RIX SPI	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	TE REC	DVERY 5	STUDY		
TPH By SW8015 Mod	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag

		TAT		T TATE A		I TO IS INTLOOT THE TOT TO THE DOLLAR WE CONTRACT TO THE			10010		
TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Spike Result Samp [C] [D]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1170	1160	66	1180	1260	107	8	70-135	35	
C12-C28 Diesel Range Hydrocarbons	DN	1170	895	76	1180	839	71	9	70-135	35	

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

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

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

Final Ver. 1.000

Page 37 of 43







Project Name: LR Chamberlain Tank Battery

Work Order #: 371873						
Lab Batch #: 806338				Project I	D:	
Date Analyzed: 05/12/2010	Date Prepare	d:05/12/2010	Ana	lyst:LATC	OR	
QC- Sample ID: 371873-001 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg	[SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte	1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride		1180	1170	1	20	
Lab Batch #: 806340						
Date Analyzed: 05/12/2010	Date Prepare	d: 05/12/2010	Ana	lyst:LATC	OR	
QC- Sample ID: 371873-021 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg	[SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte	1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride		497	487	2	20	
Lab Batch #: 805744						
Date Analyzed: 05/07/2010	Date Prepare	d: 05/07/2010	Ana	lyst:JLG		
OC- Sample ID: 371873-001 D	Batch			trix: Soil		
Reporting Units: %]		SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		13.0	13.7	6	20	
Lab Batch #: 805751			111			
Date Analyzed: 05/07/2010	Date Prepare	d: 05/07/2010		lyst:JLG		
QC- Sample ID: 371873-021 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: %	[SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	1	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		11.0	9.94	10	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

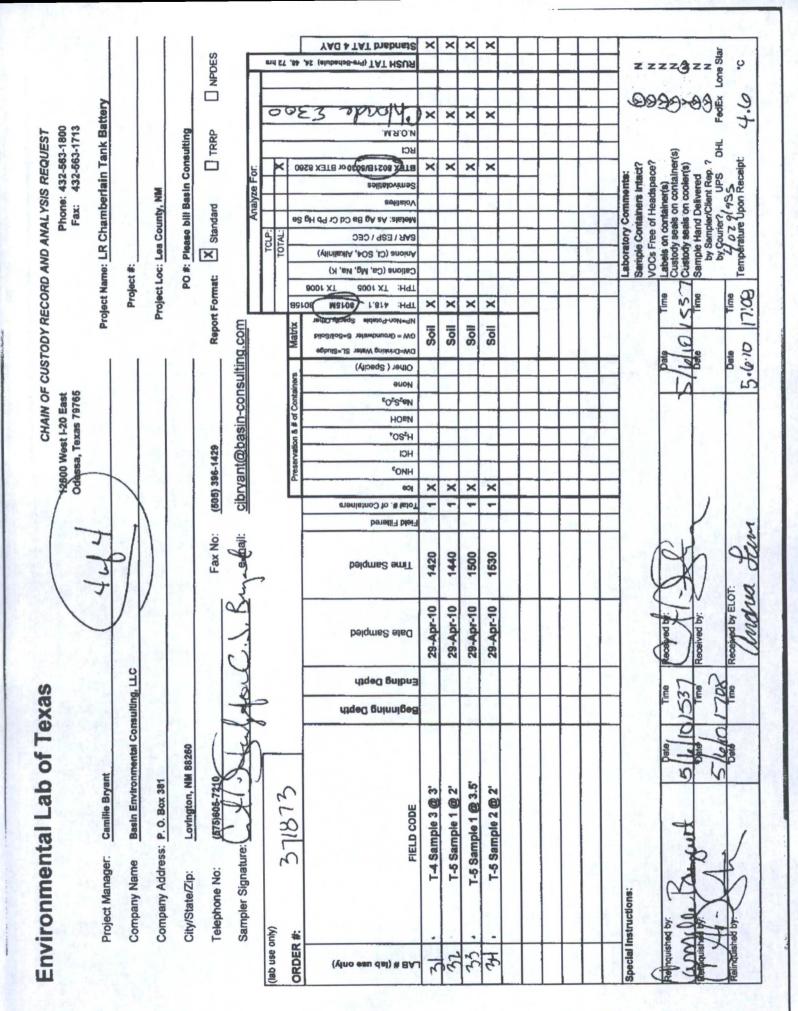
				F	હાય	48, 72	,AE (eluberta®-ard) TAT H&US) YAO & TAT bisbristS	×	×	×	×	×	× >	< ×	×	×	Lone Star Z
0 3 attery					K	35	קרוסניקרי ב קרוסניקרי ב	×	×	×	×	×	× >	< ×	×	×	9990×092
t I-20 East Phone: 432-563-1713 xas 79765 Project Name: LR Chamberlain Tank Battery Project #:		PO #: Please bill Basin Consulting	TRRP	-		< 0	GCI	×	×	×	×	×	× >	< ×	×	×	s: act? acc? are? sr(s) br(s) br(s) br(s) brL S DHL
Phone: 43 Fax: 43	unty, NM	bill Basin	Standard	Anahra Eor		_	Metals: As Ag Ba Cd Cr Pb Hg Volatiles Semivolatiles	_								_	Laboratory Comments: Sample Containers Intract Sample Containers Intract VOCs Free of Headspace Labels on container(s) Custody seals on contain Custody seals on contain Custody seals on contain Sample Hand Delivered by SamplerClient Rep by SamplerClient Rep D 2-4 (035
- LR -	Project Loc: Lea County, NM	#: Please	×		TCLP:	TOTAL:	Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC		_		-						Laboratory Comments: Sample Containers Intract? VOCs Free of Headspace? Labels on container(s) Custody seals on container(s) Custody seals on container(s) Sample Hand Delivered by Sampler/Client Rep. 7 by Sampler/Client Rep. 7 by Counter?
Project Name: Project #:	Project L	P	Report Format:			-	NP-Non-Potable Spaces (1006 TPH: 418.1 (8015M 001 TPH: 118.1 (8015M 001	×	×	×	+	×		< ×		×	Lime 1937 Lime
-	I	1	Rep	cibryant@basin-consulting.com		Matrix	Other (Specify) OW=Drinking Weiter SL=Skudge GW = Groundweier S=SolitSolid	Soil	Soil	Soil	Soil	Soil	Soll	Soil	Soll	Soil	Sileito Date
East 19765				-consult		Containers	Nore Nore	_			-	-					N N
12600 West I-20 East Odessa, Texas 79765			429	@basin		Preservation & # of Containers	NªOH H ³ 20° HCI			-							
12600 J			(505) 396-1429	cibryant		Prese	HNO ₃ Ioaa #, of Confisiners	1 X	1 X	T X	1 X	1 X	-	1 X	1 X	1 X	
			9	Сų			Field Filtered			-	+	+	-	-			
-			Fax No:	a finail:			beiqms2 eml7	0800	0820	0840	0060	0940	1000	1040	1120	1140	
E				- Bu	-		Date Sampled	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	Received by: H
LLC				J			Ending Depth				1	1	1	+			
unsulting,				4	0		diqeQ gainnigeB										1700 1700
Project Manager: Canlile Bryant Company Name Basin Environmental Consulting, LLC	lox 381	Lovington, NM 88260	(575)605-7210	40.5		2		@ 2'	@7	@ 15'	@ 17	@ 2'	@ 5'	10 Z.	@ 2'	@ 2i	5 610 Stallo
ger: Camilk ne Basin t	Company Address: P. D. Box 381			J		271873	FIELD CODE	T-1 Sample 1	T-1 Sample 1 @ 7	T-1 Sample 1 (T-1 Sample 1 (T-1 Sample 2 @ 2'	T-1 Sample 2 @ 5'	T-1 Sample 3 @ 2' T-1 Sample 3 @ 5'	T-1 Sample 4 @ 2'	T-1 Sample 4 @ 5'	fullent
Project Manager: Company Name	ompany Add	City/State/Zip:	Telephone No:	Sampler Signature:	A			T	T	Ļ	T	F	F				Special Instructions:
- 0 D	0	Q	F	S	(lab use only)	ORDER #:			-	•	-	-	ofe	104	50	··	ectal Ins

fl

Page 39 of 43

		NPDES	F	444	75° 15	AS (eluberto-2-ord) TAT HSUR YAO & TAT brachingte	×	×	×	×	×	××	×	×	X	N N N N N N N N N N N N N N N N N N N	ç
00 13 Battery		-		c	σĘ	CALOGIDE E	×	×	×	×	×	××	×	×	×	9990 vo 9	4.10
t I-20 East Phone: 432-563-1700 txas 79765 Project Name: LR Chamberlain Tank Ba Project #:	t Loc: Lea County, NM PO #- Please bill Basin Consulting	TRRP	171		< 0	BCE 2031810300 BLEX 856	×	×	×	×	×	××	×	×	×	ents: Intact? Ispace? (s) ontainar(s) conter(s) ered vr Rep. ? UPS DHL.	eceipt:
Phone: 4: Fax: 4:	ounty, NM	Standard	Analiza Extr		_	Semivolatiles Volatiles Semivolatiles		_								Annual Head	Temperature Upon Receipt:
	Project Loc: Lea County, NM PO #: Please bill Basi	St.		TCLP:	TOTAL:	Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC										Laboratory C Sample Conta VOCs Free of Labels on cont Labels on cont Labels on cont Labels on cont Labels on conta Labels on conta Custody seals Sampler Nacourter Scumpler	Temperature U
Phone: 432-563-1800 Fax: 432-563-1713 Project Name: <u>LR Chamberlain Tank Battery</u> Project #:	Project L	Report Format:	E			NB=100-Printing Specify Other 19:05 13:05 13:006 17:006 13:006 10	×	×	×	-	+	××		×	×	Time Time	Time
-	1	ه ا	ting.cor		Matrix	Other (Specify) DW=Drinking Witer 8L=6ludge GW = Groundwiter 8=Soil/Soild	Soil	Soil	Soil	Soil	Soi	Soil	Soil	Soil	Soli	Date	Date
79765			-consul		of Containers	enon 202526N										<u>c</u>	0
12600 West I-20 East Odessa, Texas 79765		429	@basin		Preservation & # of Containers	И®ОН Н ³ 20 ⁴											
12600 Odess		(505) 396-1429	cibryant@basin-consulting.com		Prese	HNO ² Ice Ice	1 X	1 X	1 X	-	-	4 T	-	1 X	1 X	sp	
(m)						Field Fillered			-	1	+	-				1 Sh	
5		Fax No:	Kype-uplik	4		belqma& emiT	1100	1130	1200	1230	1300	1320	1440	0800	0830	8	4
			CJR			belqmis2 ets0	30-Apr-10	30-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	28-Apr-10	29-Apr-10	29-Apr-10	Received by:	Received by ELOT:
FL			2	2		chiqeQ galad				1	1					N-	
onsulting			2	0		diqeQ ពួករកកម្លេទB				1	1						Time
Camille Bryant Basin Environmental Consulting, LLC	P. O. Box 381	7210	Z				2'	3'	2	7	12'	@ 13'	n in	2'	ō	S lel	Date
	ress:	5			371973	FIELD CODE	T-1 Sample 5 @	T-1 Sample 5 @	T-2 Sample 1 @	T-2 Sample 1 @ 7'	T-2 Sample 1 @ 12'	T-2 Sample 1 @ 13 T 2 Sample 2 @ 2'	T-2 Sample 2 @	T-2 Sample 3 @ 2'	T-2 Sample 3 @ 5'	tant	1
Project Manager: Company Name	Company Add	Telephone No:	Sampler Signature:	0			Ļ	T.	T.	Ľ	1.	2 F	ľ	T.	1	Eduna:	D
άů	ŏĈ	5 P	S	(lab use only)	ORDER #:	(tino seu dai) # 8A.	-	. 2	5	-	5	25	- 5	. 5	3	Special Instruction	Reinquished

						ſ	-	W4 21	.88,	x (eluberto erg) TAT HRUS YAG A TAT brabriest	×	×	×	×	×	×	×	×	×	×	ZZ	zzg	N N N	ç
2.et	Lien				ž		ł	Ð	Σ	Chloride E	×	×	×	×	×	×	×	×	×	×	ÐI	ר×	BO	4.6
-1713 -1713				ulting	TRRP		F			N.O.R.M. RCI		-	-		-	-	-		_	_		(8	HO	-
t I-20 East Phone: 432-563-1800 Ixas 79765 Fax: 432-563-1713				PO #: Please bill Basin Consulting	Ċ		B For:	×	09	Semivolatiles BTEX ap21 Bread or BTEX 82	×	×	×	×	×	×	×	×	×	×	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace?	Labels on container(s) Custody seals on container(s) Custody seals on cooler(s)	Rep. 2	b
Fax:			Project Loc: Lea County, NM	II Bas	ard		Analyze For:			səlfisioV			_			_	-			_	Comments: Mainers intac of Headspac	Labels on container(s) Custody seals on conta Custody seals on coold	Sample Hand Delivered by Sampler/Client Rep.	al as
H H H			Cour	ld es	Standard			i ii	42	SAR / ESP / CEC	-	-	+	+	+	-+	+	-		-	Continue of	n cor seals	Hand	102 Intre
			E Ba	Plea	X		TCID	TOTAL:		Anions (CI, SO4, Alkalinity)			-+	+		-+	+	-		-	Laboratory Sample Cor VOCs Free	tody tody	by Sa	Lead
-	2 1		ö	-		.				Cations (Ca, Mg, Na, K)				-							VOC Sam	See	Sam	Tem
	In al	Linkers.	ct L	8	mat					8001 XT 2001 XT :H4T											212	1	-	
		Ē	2		For				891	TPH: 4161 8015M 80	×	×	×	×	×	×	×	×	×	X	1.1	S.3	Time	Time CV.C
2	2		٥.		Report Format:	cjbryant@basin-consulting.com			Matrix	DM=Drinking Water SL=Sludge GW = Groundwater S=Sol/Solid NP=Non-Potable Specify Other	Soll	Soil	Soil	Soll	Soll	Soil	Soil	Soll	Soil	Soil		10		-
	1	1	1	1	1	<u>S</u>			H	Other (Specify)			+		-	+	-	-	-		1.57	Date	Date	Date
						Suff			S	evol			-	+		-	+	-	-			5	ł	U
ast 765						S			ontal	COZSZEN					-							-		
19 1						4			Š	HOBN										6	1			
tt I-2 exas	1					asi			a u	*OS ^z H														
12600 West I-20 East Odessa, Texas 79765					429	ð			pervation & # of Containers	HCI														
889					96-1	ant			Pres	^c ONH				_						10				
20	N				605) 396-1429	Ŋ			Ц	ICB	×	×	×	×	×	×	×	×	×	×			b	
	T1				(50	:01				Total #. of Containers		-	-	-	-	-	+	-	-	-		3	1~	1.2
1	TI									Field Filtered			-	-	_		_	-						1
n l	V				Fax No:	in offmail:	~			belqms2 emiT	0060	0920	0940	1000	1100	1200	1220	1300	1330	1400		X	p	D H
)						.1.Bu				balqms2 atsQ	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10	29-Apr-10		Received by:	Received by:	Received by ELOT
		"TC				0				diqeG gribn3										-				Pe
		uninusu				010	0	•		Beginning Depth												Time 1534	-	3F
		nental Co		88260		Fred	م ا															5 la l	atte	Date
	Camille Bryant	Basin Environmental Consulting, LLC	Company Address: P. O. Box 381	Lovington, NM 88260	575)805-7210			5	371815	HELD CODE	ole 1 @ 2'	ole 1 @ 5'	T-3 Sample 1 @ 7'	T-3 Sample 2 @ 5'	T-3 Sample 3 @ 5'	T-3 Sample 4 @ 2'	ole 4 @ 5'	T-4 Sample 1 @ 1.5'	T-4 Sample 2 @ 1.5'	ble 3 @ 2'				
>			Address: P			ture	9		12	HELD	T-3 Sample 1	T-3 Sample 1	T-3 Sam	T-3 Sam	T-3 Sam	T-3 Sam	T-3 Sample 4 @	T-4 Samp	T-4 Samp	T-4 Sample 3 @		The start	10	h
	Project Manager:	Company Name	ompany	City/State/Zip:	Telephone No:	Sampler Signature		(Å)	#												Special Instructions:	() . ()	C.	Pike paul
	L 1	0	0	0	F	0		(lab use only)	ORDER #:	(yino seu dai) # 8A.	12	12.	12.	12	3	32	5	32	5	30	pecial In	Reinquished by:	Binguist	elinquishe



Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In Basin Enu. 5.6.10 17.09 371873

C	lie	nt:

Date/ Time:

Lab ID # :

Initials:

Sample Receipt Checklist

AL

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

Variance Documentation

Contact:	Contacted by:	Date/ Time:	
Regarding:			4
Corrective Action Taken:			
Check all that Apply:	See attached e-mail/ fax		

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

Analytical Report 379583

for

Basin Environmental Consulting, LLC

Project Manager: Camille Bryant

LR Chamberlain Tank Battery

02-JUL-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-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: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)





02-JUL-10

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

Reference: XENCO Report No: 379583 LR Chamberlain Tank Battery Project Address: Lea County, NM

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 379583. 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. 379583 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,

BATH

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



Sample Cross Reference 379583



Basin Environmental Consulting, LLC, Lovington, NM

LR Chamberlain Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @ 5'	S	Jun-29-10 09:00		379583-001
SB-1 @ 10'	S	Jun-29-10 09:20		379583-002
SB-1 @ 15'	S	Jun-29-10 09:40		379583-003
SB-1 @ 20'	S	Jun-29-10 10:00		379583-004
SB-1 @ 25'	S	Jun-29-10 10:20		379583-005
SB-1 @ 30'	S	Jun-29-10 10:40		379583-006

CASE NARRATIVE



Client Name: Basin Environmental Consulting, LLC Project Name: LR Chamberlain Tank Battery



Project ID: Work Order Number: 379583 Report Date: 02-JUL-10 Date Received: 06/30/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-812913 Percent Moisture None

Batch: LBA-812925 Inorganic Anions by EPA 300 None

Batch: LBA-812933 BTEX by EPA 8021B SW8021BM

Batch 812933, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 379583-004, -001, -003, -005, -002, -006. The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

Batch: LBA-813037 TPH By SW8015 Mod None



Contact: Camille Bryant

Project Id:

Certificate of Analysis Summary 379583 Basin Environmental Consulting, LLC, Lovington, NM Project Name: LR Chamberlain Tank Battery



Date Received in Lab: Wed Jun-30-10 11:44 am Report Date: 02-JUL-10

					I LOBOCI MAINAGEL I	DIGILI DALIOII, II	
	Lab Id:	379583-001	379583-002	379583-003	379583-004	379583-005	379583-006
Distance Distance	Field Id:	SB-1 @ 5'	SB-1 @ 10'	SB-1 @ 15'	SB-1 @ 20'	SB-1 @ 25'	SB-1 @ 30'
Anaiysis Nequested	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jun-29-10 09:00	Jun-29-10 09:20	Jun-29-10 09:40	Jun-29-10 10:00	Jun-29-10 10:20	Jun-29-10 10:40
Anions by E300	Extracted:						
	Analyzed:	Jun-30-10 16:16	Jun-30-10 16:33	Jun-30-10 16:50	Jun-30-10 17:07	Jun-30-10 17:24	Jun-30-10 17:41
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2170 48.1	1250 23.6	778 18.7	169 8.82	72.7 4.52	103 4.46
BTEX by EPA 8021B	Extracted:	Jun-30-10 13:45	Jun-30-10 13:45	Jun-30-10 13:45	Jun-30-10 13:45	Jun-30-10 13:45	Jun-30-10 13:45
	Analyzed:	Jun-30-10 17:02	Jun-30-10 18:31	Jun-30-10 18:53	Jun-30-10 19:16	Jun-30-10 19:38	Jun-30-10 20:01
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	ND 0.0011	ND 0.0011
Toluene		ND 0.0023	ND 0.0023	ND 0.0022	ND 0.0021	ND 0.0022	ND 0.0021
Ethylbenzene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	ND 0.0011	ND 0.0011
m,p-Xylenes		ND 0.0023	ND 0.0023	ND 0.0022	ND 0.0021	ND 0.0022	ND 0.0021
o-Xylene		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	ND 0.0011	ND 0.0011
Total Xylenes		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	ND 0.0011	ND 0.0011
Total BTEX		ND 0.0011	ND 0.0011	ND 0.0011	ND 0.0010	ND 0.0011	ND 0.0011
Percent Moisture	Extracted:						
	Analyzed:	Jul-01-10 08:34	Jul-01-10 08:34	Jul-01-10 08:34	Jul-01-10 08:34	Jul-01-10 08:34	Jul-01-10 08:34
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		12.7 1.00	11.1 1.00	9.96 1.00	4.72 1.00	7.16 1.00	5.73 1.00
TPH By SW8015 Mod	Extracted:	Jun-30-10 13:10	Jun-30-10 13:10	Jun-30-10 13:10	Jun-30-10 13:10	Jun-30-10 13:10	Jun-30-10 13:10
	Analyzed:	Jun-30-10 19:19	Jun-30-10 19:48	Jun-30-10 20:18	Jun-30-10 20:47	Jun-30-10 21:17	Jun-30-10 21:48
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 17.2	ND 16.8	ND 16.7	ND 15.8	ND 16.1	ND 15.8
C12-C28 Diesel Range Hydrocarbons		51.9 17.2	ND 16.8	ND 16.7	ND 15.8	ND 16.1	26.3 15.8
C28-C35 Oil Range Hydrocarbons		ND 17.2	ND 16.8	ND 16.7	ND 15.8	ND 16.1	ND 15.8
Total TPH		51.9 17.2	ND 168	167 UN	ND 15.8	1A1 CIN	76.2 15.9

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

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager Brent Barron, II

Final 1.000



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.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

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

Final 1.000



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 812933	Sample: 567101-1-BKS / BK			k:Solid		
Units: mg/kg	Date Analyzed: 06/30/10 15:08	SU	RROGATE R	ECOVERY	STUDY	
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0306	0.0300	102	80-120	
4-Bromofluorobenzene		0.0287	0.0300	96	80-120	
Lab Batch #: 812933	Sample: 567101-1-BSD / BS	D Bate	h: 1 Matrix	s:Solid		1000
Units: mg/kg	Date Analyzed: 06/30/10 15:31	SU	RROGATE R	ECOVERY	STUDY	1. 22
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Analytes	0.0200	0.0200		80.120	-
4-Bromofluorobenzene		0.0309	0.0300	103	80-120 80-120	
					80-120	- 6-
Lab Batch #: 812933	Sample: 567101-1-BLK / BI		h: 1 Matrix	Solid	STUDY	-
Units: mg/kg	Date Analyzed: 06/30/10 16:39	30	KROGATE K	LUVERI		1
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0256	0.0300	85	80-120	-
4-Bromofluorobenzene		0.0297	0.0300	99	80-120	12
Lab Batch #: 812933	Sample: 379583-001 / SMP	Bate	h: 1 Matrix	r: Soil		
Units: mg/kg	Date Analyzed: 06/30/10 17:02		RROGATE R		STUDY	-
	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0257	0.0300	86	80-120	
4-Bromofluorobenzene		0.0290	0.0300	97	80-120	
Lab Batch #: 812933	Sample: 379583-001 S / MS	Bate	h: 1 Matrix	x:Soil	a series	199
Units: mg/kg	Date Analyzed: 06/30/10 17:23	SU	RROGATE R	ECOVERY	STUDY	1
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0287	0.0300	96	80-120	10
4-Bromofluorobenzene		0.0286	0.0300	95	80-120	57 6

* 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.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 812933	Sample: 379583-001 SD / MS					
Units: mg/kg	Date Analyzed: 06/30/10 17:46	SU	RROGATE R	ECOVERY	STUDY	
	y EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	nalytes			[D]		
1,4-Difluorobenzene		0.0292	0.0300	97	80-120	
4-Bromofluorobenzene		0.0289	0.0300	96	80-120	1
Lab Batch #: 812933	Sample: 379583-002 / SMP	Batc				
Units: mg/kg	Date Analyzed: 06/30/10 18:31	SU	RROGATE R	ECOVERY S	STUDY	
1.1	y EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0260	0.0300	87	80-120	
4-Bromofluorobenzene		0.0318	0.0300	106	80-120	
Lab Batch #: 812933	Sample: 379583-003 / SMP	Batc	h: 1 Matrix	Soil		-
Units: mg/kg	Date Analyzed: 06/30/10 18:53		RROGATE R		STUDY	17 A. 14
	y EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1,4-Difluorobenzene		0.0257	0.0300	86	80-120	
4-Bromofluorobenzene		0.0306	0.0300	102	80-120	
Lab Batch #: 812933	Sample: 379583-004 / SMP	Bate	h: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 06/30/10 19:16		RROGATE R		STUDY	112
	y EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0256	0.0300	85	80-120	
4-Bromofluorobenzene		0.0294	0.0300	98	80-120	1.7-1
Lab Batch #: 812933	Sample: 379583-005 / SMP	Bate	h: 1 Matrix	:Soil	1.1.1.1	
Units: mg/kg	Date Analyzed: 06/30/10 19:38		RROGATE R	ECOVERY	STUDY	122
	y EPA 8021B nalytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0257	0.0300	86	80-120	
4-Bromofluorobenzene		0.0306	0.0300	102	80-120	1.19.7.7

* 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.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 812933	Sample: 379583-006 / SMP	Batc	Project I h: 1 Matrix			
Units: mg/kg	Date Analyzed: 06/30/10 20:01	SU	RROGATE R	ECOVERY S	STUDY	
	by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Analytes	0.0255	0.0200		80.120	100
4-Bromofluorobenzene		0.0255	0.0300	85	80-120 80-120	
	2				80-120	
Lab Batch #: 813037 Units: mg/kg	Sample: 567144-1-BKS / BK Date Analyzed: 06/30/10 17:49		h: 1 Matrix RROGATE R		STUDY	
	y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	120	00.0		70.125	1
o-Terphenyl		63.2	99.9 50.0	120	70-135 70-135	
					70-133	
Lab Batch #: 813037	Sample: 567144-1-BSD / BS					1913
Units: mg/kg	Date Analyzed: 06/30/10 18:19	SU	RROGATE R	ECOVERY	STUDY	1.1
	y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		110	99.6	110	70-135	
o-Terphenyl		53.7	49.8	108	70-135	Sec.
Lab Batch #: 813037	Sample: 567144-1-BLK / BL	K Batc	h: 1 Matrix	e Solid		1.1
	Date Analyzed: 06/30/10 18:49		RROGATE R		STUDY	
Units: mg/kg	Date Analyzed: 00/30/10 18.49					10
	y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		98.4	99.8	99	70-135	10
o-Terphenyl	in the second	57.4	49.9	115	70-135	50.0
Lab Batch #: 813037	Sample: 379583-001 / SMP	Batc	h: 1 Matrix	:Soil	- Aline -	
Units: mg/kg	Date Analyzed: 06/30/10 19:19		RROGATE R		STUDY	NER
	y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane		101	100	101	70-135	2.3
				117		

* 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.



Project Name: LR Chamberlain Tank Battery

Lab Batch #: 813037	Sample: 379583-002 / SMP	Bate				
Units: mg/kg	Date Analyzed: 06/30/10 19:48	SU	RROGATE R	ECOVERY	STUDY	
TPHI	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1-Chlorooctane		87.7	99.5	88	70-135	
o-Terphenyl		50.5	49.8	101	70-135	
Lab Batch #: 813037	Sample: 379583-003 / SMP	Batc	h: 1 Matrix	s:Soil		
Units: mg/kg	Date Analyzed: 06/30/10 20:18	SU	RROGATE R	ECOVERY	STUDY	1
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	90.7	101	90	70-135	
o-Terphenyl		52.2	50.3	104	70-135	-
	270592 004 / SMD				10-155	
Lab Batch #: 813037	Sample: 379583-004 / SMP	Bate	h: 1 Matrix RROGATE R		TUDY	
Units: mg/kg	Date Analyzed: 06/30/10 20:47	30	RROGATE R	ECOVERIS	STUDI	-
TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		89.5	100	90	70-135	
o-Terphenyl		50.9	50.2	101	70-135	
Lab Batch #: 813037	Sample: 379583-005 / SMP	Batc	h: 1 Matrix	:Soil		
Units: mg/kg	Date Analyzed: 06/30/10 21:17		RROGATE R	ECOVERY S	STUDY	1
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		99.2	99.5	100	70-135	1.54
o-Terphenyl	The second	57.3	49.8	115	70-135	1.54
Lab Batch #: 813037	Sample: 379583-006 / SMP	Batc	h: 1 Matrix	s:Soil	1.1.1	14
Units: mg/kg	Date Analyzed: 06/30/10 21:48	SU	RROGATE R	ECOVERY S	STUDY	2.5
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		93.6	99.5	94	70-135	1714
o-Terphenyl		53.4	49.8	107	70-135	10.53

* 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.



Project Name: LR Chamberlain Tank Battery

Vork Orders: 379583	,		Project I	D:		
Lab Batch #: 813037	Sample: 379583-002 S / MS	Batc	h: 1 Matrix	k: Soil		
Units: mg/kg	Date Analyzed: 07/01/10 13:40	SU	RROGATE R	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	112	100	112	70-135	
o-Terphenyl		54.7	50.2	109	70-135	154.1
Lab Batch #: 813037	Sample: 379583-002 SD / N	ISD Bate	h: 1 Matrix	s:Soil	1.11	1
Units: mg/kg	Date Analyzed: 07/01/10 14:09	SU	RROGATE R	ECOVERY	STUDY	100
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		112	100	112	70-135	1
o-Terphenyl		53.4	50.2	106	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: LR Chamberlain Tank Battery

Sample: 567101-1-BKS Work Order #: 379583 Lab Batch ID: 812933 Analyst: ASA

Date Prepared: 06/30/2010 Batch #: 1

Date Analyzed: 06/30/2010 Matrix: Solid Project ID:

Units: mg/kg		BLAN	K /BLANK	SPIKE / E	S YNK S	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	ICATE 1	RECOVE	RY STUD	Y	
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	Q	0.1000	0.1096	110	0.1	0.1150	115	5	70-130	35	
Toluene	QN	0.1000	0.1006	101	0.1	0.1058	106	5	70-130	35	
Ethylbenzene	QN	0.1000	0.1054	105	0.1	0.1113	111	5	71-129	35	
m,p-Xylenes	Q	0.2000	0.2136	107	0.2	0.2253	113	5	70-135	35	
o-Xylene	Q	0.1000	0.1042	104	0.1	0.1108	111	6	71-133	35	
Analyst: LATCOR	Da	te Prepar	Date Prepared: 06/30/2010	0			Date AI	Date Analyzed: 06/30/2010	6/30/2010		
Lab Batch ID: 812925 Sample: 812925-1-BKS	BKS	Batch	Batch #: 1					Matrix: Solid	olid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	STANK S	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY	ICATE 1	RECOVE	RY STUD	Y	
Anions by E300	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	[B]	[C]	(D]	[E]	Duplicate Result [F]	% K	0%	No%	%ekt D	

Analytes Chloride

E 11

20

75-125

0

103

11.3

103

11.3

11.0 B

QN

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

Final 1.000



BS / BSD Recoveries



Project Name: LR Chamberlain Tank Battery

BLANK /BLANK SPI	BLANK			Units: mg/kg	Units:
1	Batch #:	I-BKS	Sample: 567144-1-BKS	: 813037	Lab Batch ID: 813037
06/30/2010	Date Prepared: 06/30/2010			BEV	Analyst: BEV
				·#: 379583	Work Order #: 379583

STUDY
RECOVERY
E / BLANK SPIKE DUPLICATE RECOVERY STUDY
SPIKE
BLANK
SPIKE /
WK/BLANK SPIKE
IK

Project ID: Date Analyzed: 06/30/2010 Matrix: Solid

TPH By SW8015 Mod	Blank Sample Result A [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	Ð	666	1200	120	966	666	100	18	70-135	35	
C12-C28 Diesel Range Hydrocarbons	QN	666	858	86	966	813	82	5	70-135	35	

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



- 0.0

Form 3 - MS Recoveries



Project Name: LR Chamberlain Tank Battery

Work Order #: 379583						
Lab Batch #: 812925			Pro	ject ID:		
Date Analyzed: 06/30/2010	Date Prepared: 06/30/2	010	A	nalyst: L	ATCOR	
QC- Sample ID: 379564-001 S	Batch #: 1		M	latrix: S	oil	
Reporting Units: mg/kg	MATRIX	K / MAT	FRIX SPIKE	RECO	VERY STU	DY
Inorganic Anions by EPA 300		Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes	[A]	[B]			· · · ·	
Chloride	6.53	116	122	100	75-125	1.1.

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: LR Chamberlain Tank Battery

Work Order #: 379583

Date Analyzed: 06/30/2010 Lab Batch ID: 812933

Date Prepared: 06/30/2010

QC- Sample ID: 379583-001 S

Matrix: Soil ASA Analyst:

1

Batch #:

Project ID:

Reporting Units: mg/kg		M	ATRIX SPIKI	E / MATI	RIX SPI	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	E RECO	VERY S	TUDY		
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	Q	0.1150	0.0468	41	0.1145	0.0588	51	23	70-130	35	x
Toluene	QN	0.1150	0.0382	33	0.1145	0.0440	38	14	70-130	35	x
Ethylbenzene	Q	0.1150	0.0325	28	0.1145	0.0335	29	3	71-129	35	x
m,p-Xylenes	Q	0.2300	0.0660	29	0.2291	0.0670	29	2	70-135	35	х
o-Xylene	QN	0.1150	0.0299	26	0.1145	0.0304	27	2	71-133	35	Х
Lab Batch ID: 813037	QC-Sample ID: 379583-002 S	379583-	-002 S	Ba	Batch #:	1 Matrix: Soil	Soil				

Date Analyzed: 07/01/2010

Date Prepared: 06/30/2010

Analyst: BEV

Domonting I inite. ma/ba			A TIME OF CONTENT		THE CHART	A DATA TATA		TATALA A	VITT TTAL		I
We put the state of the second s		M	A I KIX SPIKI	TAMAI	KLA SPIL	AE DUPLICALE RECOVERS	IE RECO	JV EKY	X STUDY		
TPH By SW8015 Mod	Parent		Spiked Sample Spike	Spiked	Culling	Duplicate		nad	Control	Control	-
	Result	Added	ICI	%R	Added	Result [F]		%	%R	%RPD	4
Analytes	[Y]			[ŋ]	[E]		[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	1130	1130	100	1130	1120	66	1	70-135	35	

Flag

35

70-135

00

85

964

1130

92

1040

1130

Q

C12-C28 Diesel Range Hydrocarbons

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

Final 1.000

Page 15 of 18



Sample Duplicate Recovery



Project Name: LR Chamberlain Tank Battery

Work Order #: 379583

Lab Batch #: 812925				Project I	D:	
Date Analyzed: 06/30/2010	Date Prepare	ed: 06/30/2010	Ana	lyst:LATC	COR	
QC- Sample ID: 379564-001 D	Batch	#: 1	Mat	rix: Soil		
Reporting Units: mg/kg		SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride		6.53	ND	NC	20	
Lab Batch #: 812913						
Date Analyzed: 07/01/2010	Date Prepare	ed: 07/01/2010	Ana	lyst:JLG		
QC- Sample ID: 379564-001 D	Batch	#: 1	Mat	rix: Soil		
Reporting Units: %		SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		13.5	13.5	0	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

						F	and 5	21 '89	AC (Aluberto B-erg) TAT HRUS YAG & TAT brisbrist	×	×	×	×	< >		z	zzzz	ore Star
ST 800 713	k Battery			ling	TRRP 🗍 N			Q	N PRICES 30	×	×	×	×	× ,	<		B B	2.6
CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST :-20 East Phone: 432-563-1800 xss 79765 Fax: 432-583-1713	Project Name: LR Chamberlain Tank Battery		MM	PO #: Please bill Basin Consulting	TTR .	Analiza Ear		× 09	BELEX 605-18/2030 C BLEX 85 26minorealine	×	×	×	×	× ,			contrainer(s)	M-55 pon Receipt:
VD ANAL YSI Phone: Fax:	LR Chamb		Project Loc: Les County, NM	Please bill B	X Standard	And		TOTAL:	Volstiles SAR / ESP / CEC SAR / ESP / CEC							Laboratory Com	國家業早日	Temperature Upon
ECORD AN	oject Name:	Project #:	Project Loc:	#Od	Report Format:			89	TPH: 418.1 (8015M) 801 TPH: TX 1005 TX 1006 Callons (Ca, Mg, Na, K)	×	×	×	×	× ,	<		Time Custody 7, 30 Gustody Time Sample i by Si	11:44 Tem
NAGOTSU	ě.	I	-	1	Report	ting.com		Irs Matrix	Nb~Kou-bosspie Sbeck Quu CM - Cronudwater S-Soliton DM-Duluiguð Mater S-Sindð	Soll	Soil	Soil	Soll	Sol	100	_	Date -30-/0 S	Date Date 0-30-10 11
AIN UF UI 20 East 5 79765						in-consul		of Containe	HOBN 60.50.50.0 HORN								0	6
CHAIN OF 12600 West I-20 East Odessa, Texas 79765					(505) 396-1429	cjbryant@basin-consulting.com		Preservation & # of Containers	н ³ 80' НСІ НИО ³									
6 B								Υ.	Field Filtered Total # of Containers Ice		1 X	1 X	-	-	< 		12/01	Lul.
					Fax No:	e-mail:			belgms2 emiT	0060	0820	0940	1000	1020	1040		by Rey	a de
						t			beiqms2 eisQ	29-Jun-10	29-Jun-10	29-Jun-10	29-Jun-10	29-Jun-10	0L-unr-62		Received by:	Regeled by ELOT
0		TIC				4	0		rided Depth								0	44
EYa		Consulting.				X			dîqaQ gaînnîgeê	-			-					HO 11:44
Environmentai Lab of Lexas	Camille Bryant	Basin Environmental Consulting, LLC	::	Lovington, NM 88260	(93(5)805-7210)	319583		SB-1@5'	SB-1 @ 10'	SB-1 @ 15'	SB-1 @ 20'	SB-1 @ 25'	SB-1 @ 30'		Just 6-20-10	C Pate Date
lironmei	Project Manager:	Company Name	Company Addre	City/State/Zip:	Telephone No:	Sampler Signature										Special Instructions:	ned by:	Relinquished bu
2							(lab use only)	ORDER #:	(Vino seu dai) # 84	10	20	03	-	S.	20	-	and distance	duis

行行などの時代である

Sec. Sec.

Page 17 of 18



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: B	asin tru.	
Date/Time:	6.30.10 11:44	
Lab ID # :	379583	
Initials:	AL	

Sample Receipt Checklist

1. Samples on ice?		Blue	Water	No	1 - 2 to -
2. Shipping container in good condition?		Yes	No	None	Se had
3. Custody seals intact on shipping container (cooler) and bottles?		Yes	No	N/A	14-12
4. Chain of Custody present?		Yes	No		
5. Sample Instructions complete on chain of custody?		Yes	No	4	
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		1279
9. Container labels legible and intact?	K	Yes	No		
10. Sample matrix / properties agree with chain of custody?		Tes	No		A 19
11. Samples in proper container / bottle?		(Yes)	No		Star Way
12. Samples properly preserved?		Yes	No	N/A	1. 16
13. Sample container intact?		Yes	No		
14. Sufficient sample amount for indicated test(s)?		Yes	No		163
15. All samples received within sufficient hold time?		Yes	No	1	10.0
16. Subcontract of sample(s)?		Yes	No	(N/A)	An Rep
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.	Sec.
Ibs 7.6°C Ibs °C Ibs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

□ Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis



Photograph (looking East) of Initial Release at LR Chamberlain Tank Battery.



Photograph (looking Southeast) of delineation activities at the LR Chamberlain Tank Battery.



Photograph (looking South) of Delineation Trench at the LR Chamberlain Tank Battery.



Photograph (looking North) of advancement of Soil Boring SB-1 at the LR Chamberlain Tank Battery.



Photograph (looking West) of excavation in the Northeast Corner at the LR Chamberlain Tank Battery.



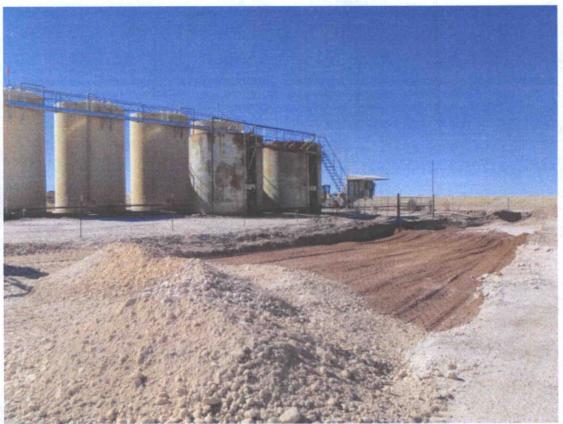
Photograph (looking North) of excavation at the West end of the LR Chamberlain Tank Battery.



Photograph (looking West) of Clay Cap installation at the LR Chamberlain Tank Battery.



Photograph (looking Southeast) of the Clay Cap at the LR Chamberlain Tank Battery.



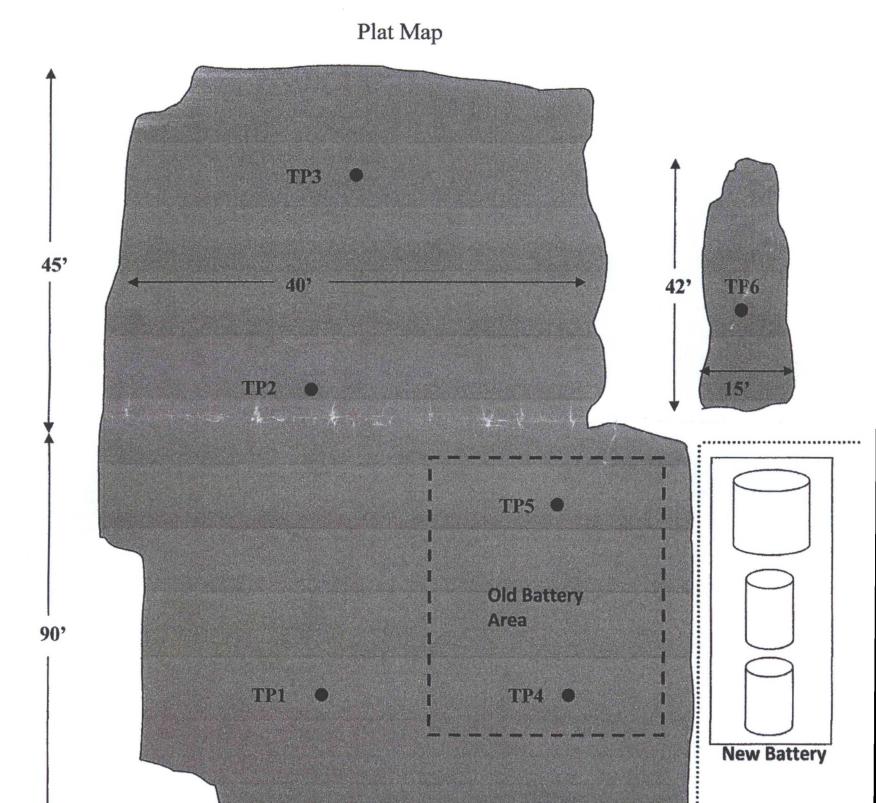
Photograph (looking Southeast) of Caliche being installed over Clay Cap at the LR Chamberlain Tank Battery.



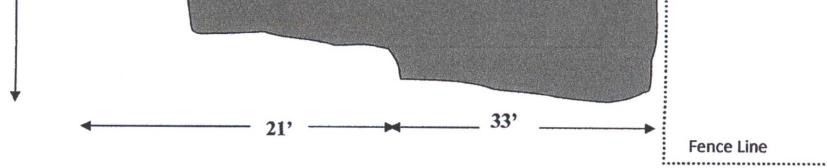
Photograph (looking East) of the newly installed caliche and completed remediation activities at the LR Chamberlain Tank Battery.

Linn Energy

Scharb 9 #2 UL 'F' Sec. 9 T19S R35E Lea County, NM



N



Rio Services

P O Box 69139 Odessa, TX 79769 Phone (432) 530-2803 Fax (432) 530-2890

Field Analytical Report Form

lient Linn Energy

Analyst Logan Anderson / Bobby Steadham

ite Scharb 9 #2

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	10-14-10	1'		5,878		
TP1	11-18-10	1' 6"		767		
TP1	11-18-10	2'		678		
TP1	11-19-10	3'		532		
TP1	11-19-10	10'		457		
TP1	12-16-10	16'		451		
TP1	12-16-10	18'		208		
TP1	11-19-10	20'		240		
TP1	11-19-10	20'		187		
TP2	10-14-10	1'		4,937		
TP2	11-18-10	2'		349		
TP2	11-19-10	5'		547		
TP2	11-19-10	6'		488		
TP2	12-15-10	9'		1,219		
TP2	12-15-10	12'		668		
TP2	12-15-10	14'		644		

nalyst Notes

Rio Services

P O Box 69139 Odessa, TX 79769 Phone (432) 530-2803 Fax (432) 530-2890

Field Analytical Report Form

lient Linn Energy

Analyst Logan Anderson

ite Scharb 9 #2

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP2	12-15-10	16'		642		
TP2	12-15-10	18'		184		
TP3	10-14-10	1'		540		
TP3	11-19-10	2'		513		
TP3	11-19-10	3'		586		
TP3	11-19-10	4'		651		
TP3	11-19-10	5'		284		
TP3	12-14-10	6'		509		
TP3	12-14-10	8'		460		
TP3	12-14-10	10'		111		
TP4	10-14-10	1'		730		
TP4	11-18-10	2'		270		
TP4	12-14-10	6.5'		438		
TP4	12-14-10	7.5'		326		
TP4	12-14-10	8.5'		376		

nalyst Notes_

Rio Services

P O Box 69139 Odessa, TX 79769 Phone (432) 530-2803 Fax (432) 530-2890

Field Analytical Report Form

lient Linn Energy

Analyst Logan Anderson

ite Scharb 9 #2

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP4	12-14-10	9.5'		509		
TP4	12-14-10	10.5'		460		
TP4	12-14-10	11.5'		111		
TP5	10-14-10	1'		690		
TP5	11-18-10	2'		834		
TP5	11-18-10	3'		526		
TP5	12-15-10	6'		577		
TP5	12-15-10	8'		459		
TP5	12-15-10	10'		241		
TP6	10-14-10	1'		285		
TP6	11-19-10	2'		149		
Background	10-14-10	Surface		146		
Background	11-19-10	2'		139		

nalyst Notes_