

Environmental & Safety Solutions, Inc.

APPROVED ; Conditional By OCD District 1 at 1:52 pm, Jul 13, 2015

1. Pending BLM approval/concurrence.

**Electronic Correspondence** 

July 2, 2015

Kellie Jones State of New Mexico Oil Conservation Division 1625 N. French Dr. Hobbs, New Mexico 88240 kellie.jones@state.nm.us

Re: **Remediation and Closure Report** SOGO III, LLC, Wimberly 5,6,7 Battery – RP No.: 3666 **API No.:** 30-025-24482 Legal: Unit G - Sec 12 - T24S - R32E - 660 FSL, 660 FEL - Lea Co., NM GPS: 32.2376546. -103.6389687 Depth to Groundwater: 525 ft bgs Release Type: Crude Oil Contaminants of Concern (COC's) Threshold Limits Total Petroleum Hydrocarbons (TPH) 1000 mg/kg Benzene 10 mg/kg BTEX 10 mg/kg

Dear Kellie:

Etech Environmental & Safety Solutions, Inc. (Etech) is pleased to submit the following remediation and closure report on the aforementioned site for your review and approval.

#### Background

The release occurred due to a tank overflow. The release migrated northeast on the production pad, then migrated northeast off site and followed a lease road for approximately 600 feet, and impacting a pasture area 30 feet long by 8 feet wide. The impacted area of the production pad, caliche road and the pasture appeared to be surficial and limited to 6 inches. An immediate response was made in an effort to remove the standing fluids and minimize the depth of the impacted area. A copy of the C-141 is provided in Attachment A. An annotated aerial photograph showing the release area and TPH levels is provided In Attachment B. Photographs of the release area are provided in Attachment C. Analytical data is provided in Attachment D.

#### **Remediation Activity Summary**

The impacted soils above regulatory threshold levels were excavated from the spill area utilizing a backhoe. Impacted soils were transported off site for disposal. Once the impacted soils were removed to acceptable levels, the production pad, caliche road, and pasture areas were backfilled with like materials. The site was restored to "as near as possible" to its original state. Seeding will take place when the seasonal conditions are conducive to maximizing the potential for seed germination. The site will be seeded with a range mix approved by the land owner.

Actual seeding will be accomplished by broadcast or drilling, whichever is the most practical for the site. A review of the analytical data indicated the sample is within the Oil Conservation Division (OCD) regulatory threshold limits. Based upon this information, it has been determined that remediation of the site is complete.

### **Analytical Summary**

	Wimberly 5,6,7 Battery Analytical Results July 2, 2015												
Sampl	Sample Information TPH Results (mg/kg)				BTEX Results (mg/L)								
	Sample	Depth				Total							
Date	I.D.	(ft)	C6-C12	C12-C24	C24-C38	TPH	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylenes	Total Xylenes	Total BTEX
04/16/15	SP1	6"	47.7	59.6	30.4	138.0	ND	0.056	0.0794	0.194	0.111	0.305	0.400

Thank you for your assistance on this matter. Should you have any questions, require additional information, or have any additional stipulations for this site, please contact Mr. Bill Priebe at (432) 640-0040 (Office) or via email at <u>BPriebe@stanolind.com</u> or myself at (432) 563-2200 (office) or via email at <u>Kit@etechenv.com</u>.

Respectfully:

Kit Prichard – Project Manager Etech Environmental & Safety Solutions, Inc.

Attachment A Final C-141

#### 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 August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC

		,	Dala	sa ase Notific		, NM 875		etion					
			Kele	ase notific		OPERAT			l Report 🛛 Final Repor				
Name of Co	mpany: SC	OGO III LLO	C			Contact: Bil							
		Midland, Tx			1	Felephone N	o.: 432-640-00	40					
Facility Na	ne: Wimbe	erly 5, 6, 7		45	H	Facility Typ	e: Tank Battery						
Surface Ow	mer: State			Mineral C	wner: S	State		API No	.: 30-025-24482				
				LOCA	TION	OF REI	LEASE						
Unit Letter G	Section 12	Township 24	Range 32	Feet from the 660	North/	South Line NL	Feet from the 660	East/West Line EL	County Lea County				
			à)			5 Longitude OF REL	: -103.6389687 E <b>ASE</b>						
Type of Rele	ase: Oil		_			Volume of	Release: 78		Recovered: 5				
Source of Re	elease: Tank	Overflow				Date and H 03/26/2015	our of Occurrenc	ce: Date and 03/26/201	Hour of Discovery: 5				
Was Immedi	ate Notice (		Yes [	] No 🔲 Not R	equired	If YES, To Jeff Rober							
By Whom?						Date and H	lour: 03/26	/15 – 1600 hrs.					
Was a Water	course Read		Yes 🗵	No		If YES, Vo	lume Impacting	the Watercourse.					
				n Taken.*: Hole wils were stored o				was to remove free	e standing fluid from the surface				
Describe Art 12'X10'. E: for road area	xcavated soi	and Cleanup ils were transp	Action Ta oorted off-	ken.* : Release in site for disposal.	npacted ' Samplin	740' of calich g confirmed	e road approxima clearance for past	ately 6' wide, and i uure area at less tha	mpacting the pasture area n 500 mg/kg and less than 1,000				
regulations a public health should their or the enviro	all operators h or the envi- operations l onment. In	are required ironment. The have failed to	to report a e acceptan adequatel OCD acce	nd/or file certain ce of a C-141 rep y investigate and	release n ort by th remediat	otifications a e NMOCD n e contaminat	nd perform corre arked as "Final F ion that pose a th	ctive actions for rel Report" does not rel reat to ground wate	suant to NMOCD rules and leases which may endanger leve the operator of liability r, surface water, human health compliance with any other				
				al.			OIL CON	SERVATION	DIVISION				
Signature:	sey.	M. Rl				Annroved by	District Supervi	sor					
Printed Nan	ne: Billy M.	Priebe		я.		Approved by	District Supervi						
Title: Ex. V	P - Operatic	ons		27 (34)		Approval Da	te:	Expiration	Date:				
E-mail Add Date: 5/15/1		e@stanolind.c		2-690-0040		Conditions of	f Approval:		Attached				

\* Attach Additional Sheets If Necessary

ŝ.

## Attachment B Annotated Aerial Imagery



Attachment C Photograph Log

#### Project Name: Wimberly 5,6,&7 Project No: 584-6043-000





#### Project Name: Wimberly 5,6,&7 Project No: 584-6043-000





#### Project Name: Wimberly 5,6,&7 Project No: 584-6043-000





## Attachment D Analytical Results

# **Analytical Report 506690**

# for Etech Environmental & Safety Solution, Inc

**Project Manager: Kit Prichard** 

Wimbery 5,6,7 Battery

584-6043-000

### 01-MAY-15

Collected By: Client





### 12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054) New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD ( L10-135) Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

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





01-MAY-15

Project Manager: **Kit Prichard Etech Environmental & Safety Solution, Inc** P.O. Box 8469 Midland, TX 79708

Reference: XENCO Report No(s): **506690** Wimbery **5,6,7 Battery** Project Address: TX

### Kit Prichard:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 506690. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 506690 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

 Julian Martinez

 Project 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 - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



# Sample Cross Reference 506690



# Etech Environmental & Safety Solution, Inc, Midland, TX

Wimbery 5,6,7 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample Point 1	S	04-16-15 15:00	0 - 6 In	506690-001



## CASE NARRATIVE



Client Name: Etech Environmental & Safety Solution, Inc Project Name: Wimbery 5,6,7 Battery

 Project ID:
 584-6043-000

 Work Order Number(s):
 506690

 Report Date:
 01-MAY-15

 Date Received:
 04/24/2015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Project Id: 584-6043-000 Contact: Kit Prichard

Project Location: TX

Certificate of Analysis Summary 506690

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wimbery 5,6,7 Battery



Date Received in Lab: Fri Apr-24-15 11:18 am Report Date: 01-MAY-15

Project Manager: Kelsey Brooks

Foluene Ethylbenzene n,p-Xylenes	Lab Id:	506690-001			
Analysis Paguastad	Field Id:	Sample Point 1			
Analysis Kequestea	Depth:	0-6 In			
	Matrix:	SOIL			
	Sampled:	Apr-16-15 15:00			
BTEX by EPA 8021B	Extracted:	Apr-28-15 15:00			
	Analyzed:	Apr-28-15 21:32			
	Units/RL:	mg/kg RL			
Benzene		ND 0.00101			
Toluene		0.0156 0.00201			
Ethylbenzene		0.0794 0.00101			
m,p-Xylenes		0.194 0.00201			
o-Xylene		0.111 0.00101			
Total Xylenes		0.305 0.00101			
Total BTEX		0.400 0.00101			
Percent Moisture	Extracted:				
	Analyzed:	Apr-30-15 17:00			
	Units/RL:	% RL			
Percent Moisture		ND 1.00			
TPH By SW8015 Mod	Extracted:	Apr-24-15 13:00			
	Analyzed:	Apr-24-15 17:27			
	Units/RL:	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		47.7 14.9			
C12-C28 Diesel Range Hydrocarbons		59.6 14.9			
C28-C35 Oil Range Hydrocarbons		30.4 14.9			
Total TPH		138 14.9			

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

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



Julian Martinez Project Manager



# **Flagging Criteria**



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

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection
PQL Practical Quantitation Limit	MQL Method Quantitation Limit	LOQ Limit of Quantitation

- **DL** Method Detection Limit
- NC Non-Calculable
- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

### 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 - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4143 Greenbriar Dr, Stafford, TX 77477
9701 Harry Hines Blvd , Dallas, TX 75220
5332 Blackberry Drive, San Antonio TX 78238
2505 North Falkenburg Rd, Tampa, FL 33619
12600 West I-20 East, Odessa, TX 79765
6017 Financial Drive, Norcross, GA 30071
3725 E. Atlanta Ave, Phoenix, AZ 85040

(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Phone

Final 1.000



# Form 2 - Surrogate Recoveries

## Project Name: Wimbery 5,6,7 Battery

	rders : 50669 1#: 966750	0, Sample: 506690-001 / SMP	Bate		: 584-6043-0 : Soil	00	
Units:	mg/kg	Date Analyzed: 04/24/15 17:27	SU	RROGATE R	ECOVERY	STUDY	
	<b>TPH</b>	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]	STUDY         Control Limits %R         70-135         70-135         STUDY         Control Limits %R         80-120         80-120         STUDY         Control Limits %R         70-135         STUDY         Control Limits %R         80-120         80-120         STUDY         Control         STUDY	
1-Chlorooc	tane		92.0	99.6	92	70-135	
o-Terpheny	/1		42.8	49.8	86	70-135	
Lab Batch	#: 967064	Sample: 506690-001 / SMP	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 04/28/15 21:32	SU	RROGATE R	ECOVERY	STUDY	
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits	Flags
140.0	1	Analytes	0.00.00	0.0200		00.100	
1,4-Difluor			0.0262	0.0300	87	1	
	iorobenzene		0.0318	0.0300	106	80-120	
	#: 966750	Sample: 691704-1-BLK / B					
Units:	mg/kg	Date Analyzed: 04/24/15 09:42	SU	RROGATE R	ECOVERY	STUDY	
	TPH ]	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Limits	Flags
		Analytes			[D]		
1-Chlorooc	tane		99.6	100	100	70-135	
o-Terpheny	/1		51.0	50.0	102	70-135	
Lab Batch	#: 967064	Sample: 691904-1-BLK / B	LK Bate	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 04/28/15 17:57	SU	RROGATE R	ECOVERY	STUDY	
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits	Flags
1 4 Diffuor	ahangana	Anarytes	0.0201	0.0200		00.120	
1,4-Difluor	orobenzene		0.0291	0.0300	97		
	#: 966750	Sample: 691704-1-BKS / B	0.0309 KS Bate	0.0300 h: 1 Matrix	103	80-120	
Units:	mg/kg	<b>Date Analyzed:</b> 04/24/15 10:04					
omis.	ш <sub>б</sub> , к <u></u>	Date Analyzeu. 04/24/15 10.04	SU	RROGATE R	ECOVERY		
	TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits	Flags
1 Ch1	tono	Analytes	120	100		70.105	
1-Chlorooc			120	100	120		
o-Terpheny	/1		50.9	50.0	102	70-135	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

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



# Form 2 - Surrogate Recoveries

## Project Name: Wimbery 5,6,7 Battery

	r <b>ders :</b> 50669 #: 967064	0, Sample: 691904-1-BKS / Bl	KS Batc		: 584-6043-0 x: Solid	00	
Units:	mg/kg	Date Analyzed: 04/28/15 18:14	SU	RROGATE R	RECOVERY	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0317	0.0300	106	80-120	
4-Bromoflu	orobenzene		0.0295	0.0300	98	80-120	
Lab Batch	#: 966750	Sample: 691704-1-BSD / BS	SD Bate	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 04/24/15 10:26	SU	RROGATE R	RECOVERY	STUDY	
	TPH ]	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
		Analytes					
1-Chlorooc			122	100	122	70-135	
o-Terpheny		Sample: 691904-1-BSD / BS	51.3 SD Batc	50.0 h: 1 Matrix	103	70-135	
Lab Batch	: Solid						
Units:	mg/kg	Date Analyzed: 04/28/15 18:31	SU	RROGATE R	RECOVERY	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0323	0.0300	108	80-120	
4-Bromoflu	orobenzene		0.0297	0.0300	99	80-120	
Lab Batch	<b>#:</b> 966750	Sample: 506633-001 S / MS	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 04/24/15 11:10	SU	RROGATE R	RECOVERY	STUDY	
	<b>TPH</b>	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooc	tane		119	99.8	119	70-135	
o-Terpheny	1		51.3	49.9	103	70-135	
Lab Batch	<b>#:</b> 967064	Sample: 506834-002 S / MS	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 04/28/15 18:47	SU	RROGATE R	RECOVERY	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0325	0.0300	108	80-120	
4-Bromoflu	orobenzene		0.0315	0.0300	105	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

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



# Form 2 - Surrogate Recoveries

## Project Name: Wimbery 5,6,7 Battery

Work Or Lab Batch	<b>ders :</b> 50669 #: 966750	0, Sample: 506633-001 SD / M	Project ID:         584-6043-000           D / MSD         Batch:         1         Matrix:         Soil								
Units:	mg/kg	Date Analyzed: 04/24/15 11:33	SU	RROGATE R	ECOVERY S	STUDY					
	TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooct	ane	Analytes	113	99.9	113	70-135					
o-Terphenyl	1		48.5	50.0	97	70-135					
Lab Batch	<b>#:</b> 967064	Sample: 506834-002 SD / M	ASD Batel	h: 1 Matrix:	Soil	11					
Units:	mg/kg	Date Analyzed: 04/28/15 19:04	SU	RROGATE RI	ECOVERY S	STUDY					
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1,4-Difluoro	obenzene	Aniary wo	0.0333	0.0300	111	80-120					
4-Bromoflu	orobenzene		0.0309	0.0300	103	80-120					

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B

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



## **BS / BSD Recoveries**



### **Project Name:** Wimbery 5,6,7 Battery

<b>Work Order #: </b> 506690							Proj	ect ID:	584-6043-0	00	
Analyst: ARM	Da	ate Prepar	red: 04/28/20	15			Date A	nalyzed: (	04/28/2015		
Lab Batch ID: 967064         Sample: 691904-1-E	KS	Batc	<b>h #:</b> 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	< 0.00100	0.100	0.0969	97	0.100	0.0972	97	0	70-130	35	
Toluene	< 0.00200	0.100	0.100	100	0.100	0.100	100	0	70-130	35	
Ethylbenzene	< 0.00100	0.100	0.105	105	0.100	0.106	106	1	71-129	35	
m,p-Xylenes	< 0.00200	0.200	0.211	106	0.200	0.212	106	0	70-135	35	
o-Xylene	< 0.00100	0.100	0.104	104	0.100	0.105	105	1	71-133	35	
Analyst: ARM	Da	ate Prepar	red: 04/24/20	15			Date A	nalyzed: (	04/24/2015		
Lab Batch ID: 966750 Sample: 691704-1-E	KS	Batc	<b>h #:</b> 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	962	96	1000	978	98	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1000	100	1000	1030	103	3	70-135	35	

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



## Form 3 - MS / MSD Recoveries

### Project Name: Wimbery 5,6,7 Battery



Work Order # :	506690						Project II	<b>):</b> 584-60	043-000				
Lab Batch ID:	967064	QC- Sample ID:	506834	-002 S	Ba	tch #:	1 Matrix	: Soil					
Date Analyzed:	<b>Date Analyzed:</b> 04/28/2015			<b>Date Prepared:</b> 04/28/2015			Analyst: ARM						
<b>Reporting Units:</b>	mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
]	BTEX by EPA 8021B	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	
	Analytes	[A]	[B]	[C]	/0K [D]	[E]	Kesun [F]	76K [G]	/0	70K	70KI D		
Benzene		0.00131	0.112	0.102	90	0.112	0.101	89	1	70-130	35		
Toluene		< 0.00224	0.112	0.101	90	0.112	0.0993	89	2	70-130	35		
Ethylbenzene		<0.00112	0.112	0.100	89	0.112	0.0985	88	2	71-129	35		
m,p-Xylenes		<0.00224	0.224	0.201	90	0.224	0.196	88	3	70-135	35		
o-Xylene		<0.00112	0.112	0.100	89	0.112	0.0984	88	2	71-133	35		
Lab Batch ID:	966750	QC- Sample ID:	506633	-001 S	Ba	tch #:	1 Matrix	: Soil					
Date Analyzed:	04/24/2015	Date Prepared:	04/24/2	015	An	alyst: A	ARM						
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA'	TE REC	OVERY	STUDY			
]	ГРН By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag	
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD		

<17.4

<17.4

1160

1160

1160

1220

100

105

1160

1160

1120

1150

97

99

4

6

70-135

70-135

35 35

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

C6-C12 Gasoline Range Hydrocarbons

C12-C28 Diesel Range Hydrocarbons

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





## Project Name: Wimbery 5,6,7 Battery

Work Order #: 506690

Lab Batch #: 967265 Date Analyzed: 04/30/2015 17:00 QC- Sample ID: 507000-024 D	Date Prepar Batch	ed:04/30/2015	Anal	Project ID: 584-6043-000 Analyst:WRU Matrix: Soil							
<b>Reporting Units:</b> %		SAMPLE	SAMPLE	DUPLIC	ATE REC	TE RECOVERY					
Percent Moisture Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag					
Percent Moisture		14.2	14.4	1	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

	Relinquished by:	Relinguished by:	Special Instructions:			and a subsection of the subsec						LAB # (lab use only)	ORDER #:	(lab use only)								The Env	Xei
	by: Droch	3-27									sample of	FIELD	# WWW	2		Sampler Signature	Toloshow M	Citv/State/Zin:	Company Address:	Company Name	Project Manager:	01	Xenco I ahor
	A-J2/1S Date	5 PEVER 1 Date	Please CC:Britney@etechenv.com								UNTI	FIELD CODE	0			432-2200	INIDIATIO IX 79708		PO Box 8469	Etech Environmental	Kit Pronarce	arones	ahoratorios
	Time	Time	chenv								0	Beginning Depth									1		
-	-	-	.com								e	Ending Depth											
	Received by:	Received by:									4-110-15	Date Sampled											
		$\left( \right)$						-		CD I	2101	Time Sampled			e-mail: K.Y	Fax No:							
												No. of Containers			KIT	432-2213							
												HNO <sub>3</sub>	Pre		20	213					Ode	126	
										][		HCI	Preservation & # of		DEtection						Odessa, Texas 79765	12600 West I-20	
· · · · ·			F								-	H <sub>2</sub> SO <sub>4</sub>	ion & #		4						Теха	est l	
		1	Ľ									NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>			APR -						ıs 79	-20 E	
	H.								E			None	Containers		1.COM						765	East	
Date	Date										-	Other ( Specify)	2		M								
	5									C	-	W=Drinking Water SL=Sludge W = Groundwater S=Soil/Solid	M				18 1		1	J		0	
Time												P=Non-Potable Specify Other	Matrix			Report Format:				τ	3	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST	
ne	ie S					H				K	-	PH: 418 1 8015M 1005 100	06	Π	1	t For		Project Loc:	P	Project Name:		N OF	
Ten	Custody seals on container(s Custody seals on cooler(s) Sample Hand Delivered by Sampler/Client Rep. ? by Courier? UPS D	San				늼					-	ations (Ca, Mg, Na, K)	-			mat:	PC	əct L	Project #:	it Na	•	CU	
Temperature Upon Receipt:	Custody seals on container(s) Custody seals on cooler(s) Sample Hand Delivered by Sampler/Client Rep. ? by Courier? UPS DH	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace?									1	ions (CI, SO4, CO3, HCO3) R / ESP / CEC	TOTAL:				PO #	°::	#	me:		STC	
iture	sea Hand ampl	Con ree o									-	tals: As Ag Ba Cd Cr Pb Hg Se		2					U			YQC	
Upo	ls on ls on d Del er/Cli	Com taine of He										latiles		ŧ,		Standard		SS	04	Wim		RE	
n Re	contai cooler livered ent Rep UPS	inen irs In adsp	H	H								mivolatiles		Analyze		dard		NGOIN	5	RA	Fax	So So	
ceipt	taine ler(s) ed Rep. 1	Its: tact?	F		늼		╣	님		KJ	-	EX 8021B/5030 or BTEX 8260						[1]	CON	F	, c : 43 d	RD /	
	r(s) DHL	~ ~					=				RC	J.R.M.		3		TRRP		-	5	J.	2-56	ND	
							Ē				-					۲P			and	5	Fax: 432-563-1713	ECORD AND ANAL	
0.5	FedEx × × ×																			1	13	ALY	
5														11		NPDES				B	i.	SIS	
റ്	Lones	zz									E.	011 24 2				DES				4		REC	
	Star						╡┼╴		4			SH TAT (Pre-Schedule) 24, 48	8, 72 hrs							l`		QUE	
		2.200	_		 [ '			l		5	ord											ST	

Page 13 of 14

Final 1.000



Client: Etech Environmental & Safety Solution, I

### **XENCO** Laboratories Prelogin/Nonconformance Report- Sample Log-In

10.5

Yes

Yes

N/A

N/A

N/A

Yes

Yes

No

Yes

Yes

Yes

Yes

Comments



Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 04/24/2015 11:18:00 AM **Temperature Measuring device used :** Work Order #: 506690 Sample Receipt Checklist #1 \*Temperature of cooler(s)? #2 \*Shipping container in good condition? #3 \*Samples received on ice? #4 \*Custody Seals intact on shipping container/ cooler? #5 Custody Seals intact on sample bottles? #6 \*Custody Seals Signed and dated? #7 \*Chain of Custody present? #8 Sample instructions complete on Chain of Custody? #9 Any missing/extra samples? #10 Chain of Custody signed when relinquished/ received? #11 Chain of Custody agrees with sample label(s)? #12 Container label(s) legible and intact?

#13 Sample matrix/ properties agree with Chain of Custody?

#14 Samples in proper container/ bottle? Yes #15 Samples properly preserved? Yes #16 Sample container(s) intact? Yes #17 Sufficient sample amount for indicated test(s)? Yes #18 All samples received within hold time? Yes #19 Subcontract of sample(s)? No #20 VOC samples have zero headspace (less than 1/4 inch bubble)? N/A #21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for N/A samples for the analysis of HEM or HEM-SGT which are verified by the analysts. #22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH? N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Mmg Moah Kelsey Brooks

Date: 04/24/2015

Checklist reviewed by:

Julian Martinez

Date: 04/24/2015