

APPROVED; Conditional By OCD District 1 at 1:53 pm, Jul 13, 2015

1. Pending BLM approval/ concurrence.

Electronic Correspondence

May 14, 2015

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

Re: **Assessment Corrective Action Plan** 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 corrective action plan 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.

Scope of Work

The scope of this project is for the remediation of a hydrocarbon impact on the production pad. Completion of remediation will involve the following actions:

- 1. Placement of a one-call for utility location.
- Excavation of impacted soils as far as practicable, or until hydrocarbon levels of less than 1000 mg/kg are reached. Preliminary assessment data indicated the hydrocarbon *P.O. Box 8469 Midland • TX • 79708-8469 • Tel: 432-563-2200 • Fax: 432-563-2213*

levels were below regulatory threshold levels at a depth of 0-6 inches. Please note: The delineation data was collected from the lowest point in the impacted area where it was evident liquids had pooled. The assessment map includes the delineation data and the sampling points (SP's) that will be used to determine that the excavation has reached remediation objectives.

- Once the remediation objectives have been reached, confirmation samples will be collected from the bottom and the sidewalls of the excavation to confirm that remediation goals have been reached.
- 4. If the results of analysis determine that the hydrocarbon levels are above regulatory threshold levels, additional excavation will be performed until the remediation objectives are met.
- 5. Backfilling of the excavated area(s) will be achieved by placing clean fill similar to the existing material from the site.
- 6. Where pad areas are excavated, they will be backfilled to within 6 inches of surface then backfilled to grade with compacted caliche. Any firewalls or containment berms removed during remediation will be reinstalled.
- 7. The site will be seeded with a range mix approved by the landowner. Seeding will take place when the seasonal conditions are conducive to maximizing the potential for seed germination. Actual seeding will be accomplished by broadcast or drilling; whichever is the most practical for the site.

Notifications and Special Conditions

- 1. The OCD will be notified prior to the commencement of on-site operations.
- 2. The OCD will be notified prior to each sampling event to allow the opportunity to witness the sampling events. Splits will be made available if requested.
- 3. The OCD will be notified when the site is closed for final inspection prior to seeding.
- 4. A final report documenting the closure of the site will be submitted along with a final C-141.

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 Initial 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

220 S. St. Fran	cis Dr., Santa	i Fe, NM 87505		Sa	anta Fe	, NM 875	05					
			Rele	ease Notific	cation	and Co	rrective A	ction				
						OPERA	FOR	🛛 Initia	l Report		Final Repor	
Name of Co	mpany: SO	DGO III LLO	2			Contact: Bill Priebe						
Address: PC) Box 210	Midland, Tx	79702		· ·	Telephone N	No.: 432-640-00	40				
Facility Nar	ne: Wimbe	erly 5, 6, 7				Facility Typ	e: Tank Battery					
Surface Ow	ner: State			Mineral C	Owner: S	State		API No	.: 30-025-	24482		
				LOCA	ATION	N OF REI	LEASE					
Unit Letter G	Section 12	Township 24	Range 32	Feet from the 660	North/South Line Feet from the East/West Line County Lea C				Lea Co	unty		
				Latitude: 32.2	2376546	6 Longitud	e: -103.6389687	1	÷			
				NAT	URE	OF REL	EASE					
Type of Rele	ase: Oil				- UTIL	Volume of	Release: 78	Volume I	Recovered:	5		
Source of Re	lease: Tank	Overflow				Date and H	lour of Occurrenc	ce: Date and	Hour of Di	scovery	:	
Was Immedi	ate Notice (Given?				If YES, To	Whom?	03/20/20				
			Yes 🗌] No 🗌 Not R	equired	Jeff Rober	tson					
By Whom?	8					Date and Hour: 03/26/15 – 1600 hrs.						
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.						
						8.						
Describe Cau to prevent fu	ise of Probl rther vertica	em and Reme al migration. I	dial Actio	n Taken.*: Hole coils were stored o	in tank fi on locatio	rom corrosion on for dispos	n. Initial response al.	was to remove free	e standing f	luid froi	m the surface	
Describe Are 12'X10'.	a Affected	and Cleanup	Action Ta	ken.* : Release ir	npacted	740' of calicl	ne road approxima	ately 6' wide, and i	mpacting th	ne pastur	re area	
I hereby cert regulations a public health should their or the enviro federal, state	ify that the ll operators or the envi operations h nment. In a , or local la	information g are required ronment. The nave failed to addition, NMC ws and/or reg	iven abov o report a acceptan adequatel DCD acce ulations.	e is true and com nd/or file certain ce of a C-141 rep y investigate and ptance of a C-141	plete to t release r oort by th remediat report c	he best of my notifications a le NMOCD n te contaminat loes not relie	howledge and und perform corre narked as "Final F ion that pose a th ve the operator of	understand that pur ctive actions for re Report" does not re reat to ground wate `responsibility for o	suant to NM leases whic lieve the op er, surface v compliance	AOCD r h may en erator o vater, hu with an	ules and ndanger f liability man health y other	
							OIL CON	SERVATION	DIVISI	ON		
Signature:	Bily !	4. Pil		1								
Printed Nam	e: Billy M.	Priebe				Approved by	District Supervi	sor:				
Title: Ex. VI	• - Operatio	ns		_		Approval Da	ate:	Expiration	Date:			
E-mail Add	ace bariah	Octanalind a	om			Conditions	Approval.		A 44 a -1			
Date: 5/6/15	ess. opriede		Phone: 43	2-690-0040		Conditions (n Approval:		Attache	a 🗌		

* Attach Additional Sheets If Necessary

Attachment B Annotated Aerial Imagery



Attachment C Photograph Log





27/2015



















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

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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

	Lab Id:	506690-001			
Analysis Requested	Field Id:	Sample Point 1			
Analysis Requested	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

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12600 West I-20 East, Odessa, TX 79765
6017 Financial Drive, Norcross, GA 30071
3725 E. Atlanta Ave, Phoenix, AZ 85040

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(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

Work O	rders : 50669	90, G L 506600 001 (SLB		Project ID	: 584-6043-0	00				
Lab Batch	#: 966/50	Sample: 506690-001 / SMP	Batch:	1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 04/24/15 17:27	SUR	ROGATE R	ECOVERY	STUDY				
	TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
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	P Batch: 1 Matrix: Soil							
Units:	mg/kg	Date Analyzed: 04/28/15 21:32	SUR	SURROGATE RECOVERY STUDY						
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1 4-Difluor	obenzene	1 mary tes	0.0262	0.0300	87	80.120				
4-Bromoflu	orobenzene		0.0202	0.0300	106	80-120				
Lab Batch	#: 966750	Sample: 691704-1-BLK / BI	LK Batch:	1 Matrix	: Solid	00-120				
Units:	mg/kg	Date Analyzed: 04/24/15 09:42	SURROGATE RECOVERY STUDY							
TPH By SW8015 Mod			Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	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 / Bl	LK Batch:	1 Matrix	: Solid					
Units:	mg/kg	Date Analyzed: 04/28/15 17:57	SUR	ROGATE R	ECOVERY	STUDY				
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluor	obenzene		0.0291	0.0300	97	80-120				
4-Bromoflu	orobenzene		0.0309	0.0300	103	80-120				
Lab Batch	#: 966750	Sample: 691704-1-BKS / BI	KS Batch:	1 Matrix	: Solid	1				
Units:	mg/kg	Date Analyzed: 04/24/15 10:04	SUR	ROGATE R	ECOVERY	STUDY				
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooc	tane		120	100	120	70-135				
o-Ternhenv	c 1		50.9	50.0	102	70-135				
pitely			50.9	50.0	102	, , , , , , , , , , , , , , , , , , , ,				

* 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 Oı Lab Batch	ders : 50669	00, Sample: 691904-1-BKS / B)	KS Batch	Project ID:	: 584-6043-0 : Solid	00		
Units:	mg/kg	Date Analyzed: 04/28/15 18:14	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-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 / B	SD Batch	: 1 Matrix:	: Solid	1	I	
Units:	mg/kg	Date Analyzed: 04/24/15 10:26	SUI	RROGATE R	ECOVERY S	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane		122	100	122	70-135		
o-Terpheny	1		51.3	50.0	103	70-135		
Lab Batch	#: 967064	Sample: 691904-1-BSD / B	SD Batch	: 1 Matrix:	: Solid	10 155		
Units:	mg/kg	Date Analyzed: 04/28/15 18:31	SURROGATE RECOVERY STUDY					
BTEX 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	#: 966750	Sample: 506633-001 S / MS	Batch	: 1 Matrix:	: Soil			
Units:	mg/kg	Date Analyzed: 04/24/15 11:10	SUI	RROGATE R	ECOVERY S	STUDY		
	TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		119	99.8	119	70-135		
o-Terpheny	1		51.3	49.9	103	70-135		
Lab Batch	#: 967064	Sample: 506834-002 S / MS	Batch	: 1 Matrix:	: Soil			
Units:	mg/kg	Date Analyzed: 04/28/15 18:47	SUI	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-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 O	rders : 50669	0,		Project ID:	584-6043-0	00		
Lab Batch	n #: 966750	Sample: 506633-001 SD / M	ASD Batcl	h: 1 Matrix:	Soil			
Units:	mg/kg	Date Analyzed: 04/24/15 11:33	SURROGATE RECOVERY STUDY					
	TPH]	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooc	ctane		113	99.9	113	70-135		
o-Terpheny	yl		48.5	50.0	97	70-135		
Lab Batch	n #: 967064	Sample: 506834-002 SD / N	ASD Batcl	h: 1 Matrix:	Soil			
Units:	mg/kg	Date Analyzed: 04/28/15 19:04	SU	RROGATE RE	ECOVERY S	STUDY		
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluor	robenzene		0.0333	0.0300	111	80-120		
4-Bromoflu	uorobenzene		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

Work Order #: 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 Batch #: 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	h #: 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 ID: 584-6043-000										
Lab Batch ID:	967064	QC- Sample ID:	506834	-002 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	04/28/2015	Date Prepared:	04/28/2	015	An	alyst: A	ARM					
Reporting Units:	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	BTEX by EPA 8021B	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	[B]	[C]	⁷ 6K [D]	E]	Kesun [r]	56K [G]	70	70K	70KPD	
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					
Reporting Units:	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
ŗ	TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	[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	Project ID: 584-6043- te Prepared: 04/30/2015 Analyst: WRU Batch #: 1 Matrix: 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		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

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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