# **Remediation Plan**

1. A. A. A.



Prepared for Oxy USA

# US 13 Fed #1Y Flowline Leak **Eddy County, NM**

RP# <u>667</u>

Prepared by . Elke Environmental, Inc. P.O. Box 14167 Odessa, TX 79768

Phone (432) 366-0043 Fax (432) 366-0884 State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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

### **Release Notification and Corrective Action**

	OPERATOR	Initial Report	Final Report
Name of Company - OXY USA	Contact - Kelton Beaird		
Address - 1502 W. Commerce	Telephone No (O) 575-628-4	121 C) 575-390-1903	
Facility Name – US 13 Fed #1Y	Facility Type - Well with Gath	ering Lines	

Surface Owner	BLM		

#### Mineral Owner

### Lease No. 30-015-24193

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Е	<u>1</u> 3	228	24E					Eddy

#### Latitude <u>32° 23.614' N</u> Longitude <u>104° 27.402' W</u>

#### NATURE OF RELEASE

Type of Release - Produced Water	Volume of Release – 100 bbls	Volume Recovered - 0 bbls
Source of Release - Flowline from US 13 Fed #2	Date and Hour of Occurrence	Date and Hour of Discovery
		10-28-09 @ 3:00pm
Was Immediate Notice Given?	If YES, To Whom?	
🛛 Yes 🔲 No 🗌 Not Required	Mike Bratcher (NMOCD) left mess	age
By Whom? Kelton Beaird (Oxy HES)	Date and Hour See above	
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	ercourse.
🗋 Yes 🖾 No		
Watercourse was Impacted, Describe Fully.*	1	

Describe Cause of Problem and Remedial Action Taken.\* The flowline from the US 13 Fed #2 ruptured next to the US 13 Fed #1Y location. All water soaked into before a vac-truck could be called. The site was delineated with a hand auger. The ranking criteria for this site is as follows: Surface Body of Water – 0 points; Wellhead Protection Area – 0 points; Groundwater Depth – 0 points ( $GW > 100^{\circ}$ ). The total ranking for the site is 0 points. RAL's for the site are Chloride – 250 ppm, TPH – 5,000 ppm and BTEX – 100 ppm (using field vapor headspace measurement).

#### Attached are a plat map, field analytical and lab confirmations. TP1 could only be delineated to 6" bgs due to very hard rock.

Describe Area Affected and Cleanup Action Taken.\* Oxy USA proposes to excavate 6" at TP1 and dispose at an OCD approved disposal. The rest of the spill area is below NMOCD Standards. Clean native soil will be backfilled into the excavation and re-seeded with an approved BLM Seed Mixture.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

	<u>OIL CO</u>	OIL CONSERVATION DIVISION					
Signature:							
Printed Name: Kelton Beaird	Approved by District Supe	rvisor:					
3: HES Specialist	Approval Date:	Expiration Date:					
D-mail Address: kelton_beaird@oxy.com	Conditions of Approval:	Attached					
Date: 3-24-10							

\* Attach Additional Sheets If Necessary



# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

# **Field Analytical Report Form**

Client Oxy USA

Analyst Bobby Steadham

Site US 13 Fed #1Y Flowline Leak

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	12-8-09	Surface		812	15.6	32° 23.614' N 104° 27.402' W
TP1	12-8-09	6"	31	887	12.3	32° 23.614' N 104° 27.402' W
TP2	12-8-09	Surface	28	262	10.6	32° 23.628' N 104° 27.390' W
TP3	12-8-09	Surface	16	178	4.1	32° 23.643' N 104° 27.379' W
TP4	12-8-09	Surface	21	235	0.6	32° 23.652' N 104° 27.355' W
TP5	12-9-09	Surface	8	208	0.5	32° 23.651' N 104° 27.324' W
North Wall	12-9-09	Surface	12	179	1.7	32° 23.655' N 104° 27.370' W
East Wall	12-9-09	Surface	22	239	0.3	32° 23.651' N 104° 27.309' W
South Wall	12-9-09	Surface	9	212	2.6	32° 23.613' N 104° 27.402' W
West Wall	12-9-09	Surface	15	209	1.9	32° 23.637' N 104° 27.386' W

\_\_\_\_

**Analyst Notes** 

# Analytical Report 355460

## for

# Elke Environmental, Inc.

### **Project Manager: Logan Anderson**

## Oxy USA

### US 13 Fed # 1 Y Flow Line

### 16-DEC-09





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

Xenco-Houston (EPA Lab code: TX00122):

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

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

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240), South Carolina(96031001), Louisiana(04154), Georgia(917)



16-DEC-09



Project Manager: Logan Anderson Elke Environmental, Inc. P.O. Box 14167 Odessa, TX 79768

Reference: XENCO Report No: **355460** Oxy USA Project Address: US 13 Fed # 1 Y Flow Line

#### Logan Anderson:

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 355460. 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. 355460 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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## Sample Cross Reference 355460



## Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
TP 1 @ 6"	S	Dec-08-09 16:00	6 In	355460-001
TP 2 @ 0"	S	Dec-08-09 16:30	0 In	355460-002
TP 3 @ 0"	S	Dec-08-09 16:45	0 In	355460-003
TP 4 @ 0"	S	Dec-08-09 17:40	0 In	355460-004
TP 5 @ 0"	S	Dec-09-09 09:45	0 In	355460-005

### CASE NARRATIVE



Client Name: Elke Environmental, Inc. Project Name: Oxy USA

Project ID: US 13 Fed # 1 Y Flow Line Work Order Number: 355460 Report Date: 16-DEC-09 Date Received: 12/14/2009

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

#### Analytical Non Conformances and Comments:

Batch: LBA-785673 Percent Moisture None

Batch: LBA-785866 Inorganic Anions by EPA 300 None

Batch: LBA-785889 TPH By SW8015 Mod None



Certificate of Analy Jummary 355460

Elke Environmental, Inc., Odessa, TX Project Name: Oxy USA



Project Id: US 13 Fed # 1 Y Flow Line
Contact: Logan Anderson

Project Location: US 13 Fed # 1 Y Flow Line

Date Received in Lab: Mon Dec-14-09 09:00 am

Report Date: 16-DEC-09

								Project Ma	nager:	Brent Barron,	II	
	Lab Id:	355460-0	001	355460-0	02	355460-0	03	355460-0	04	355460-0	05	
Anglusis Beguasted	Field Id:	TP 1 @	6"	TP 2 @	0"	TP 3 @ 0	0"	TP 4 @	0"	TP 5 @ 0	)"	
Analysis Kequesteu	Depth:	6 In		0 In		0 In	:	0 In		0 In		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Dec-08-09	16:00	Dcc-08-09	16:30	Dec-08-09	16:45	Dec-08-09	17:40	Dec-09-09 (	9:45	
Anions by E300	Extracted:											
	Analyzed:	Dec-14-09	12:35	Dec-14-09	12:35	Dec-14-09	12:35	Dec-14-09	12:35	Dec-14-09	2:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		888	24.7	58.3	10.1	12.1	5.00	22.8	5.13	6.42	4.89	· · · · · · · · · · · · · · · · · · ·
Percent Moisture	Extracted:											
	Analyzed:	Dec-14-09	17:00	Dec-14-09	17:00	Dec-14-09 1	17:00	Dec-14-09	17:00	Dec-14-09	7:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	
Percent Moisture		14.9	1.00	17.1	1.00	16.0	1.00	18.2	1.00	14.1	1.00	
TPH By SW8015 Mod	Extracted:	Dec-14-09	11:00	Dec-14-09	11:00	Dec-14-09	11:00	Dec-14-09	11:00	Dec-14-09	1:00	
	Analyzed:	Dec-15-09	16:55	Dec-15-09	17:22	Dec-15-09	17:49	Dec-15-09	18:16	Dec-15-09 2	23:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
C6-C12 Gasoline Range Hydrocarbons		18.2	17.6	21.9	18.1	83.8	17.9	138	18.3	17.7	17.5	
C12-C28 Diesel Range Hydrocarbons		70.2	17.6	94.7	18.1	144	17.9	19.9	18.3	ND	17.5	
C28-C35 Oil Range Hydrocarbons		79.5	17.6	ND	18.1	133	17.9	182	18.3	ND	17.5	
Total TPH		167.9	17.6	116.6	18.1	361	17.9	340	18.3	17.7	17.5	

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

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Brent Barron, II

Odessa Laboratory Manager





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

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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



# Form 2 - Surrogate Recoveries

Project Name: Oxy USA

<b>Work Orders :</b> 355460	, Sample: 545596-1-BKS/B	KS Bate	Project II	D:US 13 Fed	l#1YFlov	v Line				
Units: mg/kg	Date Analyzed: 12/15/09 06:40	SURROGATE RECOVERY STUDY								
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane		121	99.9	121	70-135					
o-Terphenyl		52.3	50.0	105	70-135					
Lab Batch #: 785889	Sample: 545596-1-BSD / B	SD Bate	h: 1 Matrix	Solid						
Units: mg/kg	Date Analyzed: 12/15/09 07:07	SU	RROGATE RI	ECOVERY S	STUDY					
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctanc		121	99.9	121	70-135					
o-Terphenyl		52.3	50.0	105	70-135					
Lab Batch #: 785889	Sample: 545596-1-BLK / B	LK Bate	h:   Matrix	Solid	<u> </u>					
Units: mg/kg	Date Analyzed: 12/15/09 07:33	SU	RROGATE RI	ECOVERY	STUDY					
ТРН І	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
		100	00.0		70.125					
1-Chiorooctane		55.3	49.9	106	70-135					
	G 1 2554(0.001/SMI			<u></u>	,0-155					
Lab Batch #: 783889	Sample: 355460-001 / SMP	Bate SU	n: I Matrix	COVERY	STUDY					
TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane		107	100	107	70-135					
o-Terphenyl		55.2	50.0	110	70-135					
Lab Batch #: 785889	Sample: 355460-002 / SMF	Batc	h: <sup>1</sup> Matrix	:Soil	_					
Units: mg/kg	Date Analyzed: 12/15/09 17:22	SU	RROGATE R	ECOVERY	STUDY					
Трн і	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctane		107	100	107	70-135					
o-Tcrphenyl		55.4	50.0	111	70-135					

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



# Form 2 - Surrogate Recoveries

Project Name: Oxy USA

<b>Work Orders :</b> 355460 Lab Batch #: 785889	, Sample: 355460-003 / SMP	Batch	Project II	D: US 13 Fed	#1YFlow	v Line			
Units: mg/kg	Date Analyzed: 12/15/09 17:49	SURROGATE RECOVERY STUDY							
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount {B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctane		109	100	109	70-135				
o-Terphenyl		56.7	50.0	113	70-135				
Lab Batch #: 785889	Sample: 355460-004 / SMP	Batcl	h: 1 Matrix	:Soil					
Units: mg/kg	Date Analyzed: 12/15/09 18:16	SU	RROGATE RI	ECOVERY	STUDY				
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctanc		107	100	107	70-135				
o-Terphenyl		55.7	50.0	111	70-135				
Lab Batch #: 785889	Sample: 355211-001 S / MS	B Batel	h: <sup>1</sup> Matrix	:Soil					
Units: mg/kg	Date Analyzed: 12/15/09 18:43	SU	RROGATE RI	ECOVERY	STUDY				
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctanc		115	99.7	115	70-135				
o-Terphenyl		51.7	49.9	104	70-135				
Lab Batch #: 785889	Sample: 355211-001 SD / N	ASD Batc	h: <sup>1</sup> Matrix	:Soil		·			
Units: mg/kg	Date Analyzed: 12/15/09 19:10	SU	RROGATE RI	ECOVERY	STUDY				
ТРН	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1 Chloroostana	Analytes	119	00.5	121	70.125				
o-Terphenyl		51.7	49.8	119	70-135				
Lab Datab # 795990	Security 255460 005 / SMD		L I Medulia	l ioi	10100	I			
Lab Batch #: 763669	Sample: 555400-0057 SWF	SU	RROGATE RI	ECOVERY	STUDY				
	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chlorooctane		103	100	103	70-135				
o-Terphenyl		53.9	50.0	108	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 / BAll results are based on MDL and validated for QC purposes.





# Project Name: Oxy USA

Work Order #: 355460

Project ID: US 13 Fed # 1 Y Flow Line

Lab Batch #: Date Analyzed:	785866 12/14/2009	5866         Sample: 785866-1-BKS         Matrix: Solid           //14/2009         Date Prepared: 12/14/2009         Analyst: LATC				ł	
<b>Reporting Units:</b>	mg/kg	Batch #: 1 BLANK /BLANK SPIKE RECOVERY					STUDY
	Anions by E300	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
	Analytes	[A]	B	[C]	%R [D]	%K	
Chloride		ND	10.0	10.9	109	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: Oxy USA

Work Order #: 355460 Analyst: BEV Lab Batch ID: 785889	Sample: 545596-1-BKS	Date Preparo Batch	ed: 12/14/200	09		Project ID: US 13 Fed # 1 Y Flow Line Date Analyzed: 12/15/2009 Matrix: Solid									
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	PIKE DUPI	LICATE I	RECOVE	ERY STUD	Y					
TPH By SW8015 Analytes	Mod Blank Sample Resul [A]	Spike t 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 Hydrocarbo	ons ND	999	944	94	999	957	96	1	70-135	35					
C12-C28 Diesel Range Hydrocarbon	ns ND	999	735	74	999	735	74	0	70-135	35					

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



## Form 3 - MS Recoveries

Project Name: Oxy USA



"ork Order #: 355460 Project ID: US 13 Fed # 1 Y Flow Line Lab Batch #: 785866 Date Prepared: 12/14/2009 Analyst: LATCOR Date Analyzed: 12/14/2009 QC- Sample ID: 355458-001 S Batch #: 1 Matrix: Soil Reporting Units: mg/kg MATRIX / MATRIX SPIKE RECOVERY STUDY Spiked Sample Parent **Inorganic Anions by EPA 300** Control Sample Spike Result %R Limits Flag Result Added [C] [D] %R [A] **[B]** Analytes · 102 383 Chloride 251 112 75-125

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

BRL - Below Reporting Limit



## Form 3 - N MSD Recoveries

#### Project Name: Oxy USA



Work Order # : 355460	<b>Project ID:</b> US 13 Fed # 1 Y Flow Line													
Lab Batch ID: 785889 Date Analyzed: 12/15/2009 Reporting Units: mg/kg	QC- Sample ID: Date Prepared:	355211 12/14/2	-001 S 009	Ba An	tch #: alyst:	1 Matrix BEV	K: Soil	OVENV	CTUDY					
	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY													
TPH By SW8015 Mod	Parent Sample Bowelt	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]	%a	~₀ <b>K</b>	%RPD				
C6-C12 Gasoline Range Hydrocarbons	30.4	1130	963	83	1130	993	85	3	70-135	35				
C12-C28 Diesel Range Hydrocarbons	46.0	1130	921	77	1130	942	79	2	70-135	35				

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

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

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



Work Order #: 355460

**Sample Duplicate Recovery** 



Project Name: Oxy USA

Project ID: US 13 Fed # 1 Y Flow Line Lab Batch #: 785866 Date Analyzed: 12/14/2009 Date Prepared: 12/14/2009 Analyst: LATCOR Matrix: Soil QC- Sample ID: 355458-001 D Batch #: 1 SAMPLE / SAMPLE DUPLICATE RECOVERY Reporting Units: mg/kg Parent Sample Anions by E300 Sample Control . Duplicate RPD Limits Result Flag %RPD Result [A] **[B]** Analyte 102 108 20 Chloride 6 Lab Batch #: 785673 Date Prepared: 12/14/2009 Analyst: WRU Date Analyzed: 12/14/2009 Batch #: 1 Matrix: Soil QC- Sample ID: 355458-001 D SAMPLE / SAMPLE DUPLICATE RECOVERY **Reporting Units: %** Sample Control Parent Sample **Percent Moisture** Duplicate RPD Result Limits Flag Result %RPD [A] [B] Analyte Percent Moisture 12.5 13.2 6 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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LAB \$ (beb une only)	Fie	LD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Fillered	Total 8. of Containans	Kon H	HCI	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Mons	Other ( Specify)	DW-Othidag Water SL-Shudge GW = Grounderster S-SothSotid	NP-Non-Potable Specify Other TDM: (418) Bhirthy O	TPH: TX 1005 TX 1001	Cettoris (Ca. Mg. Na. K)	Anions COSO4, Aleannay	SAR / ESP / CEC	Metala: As Ag Be Cd Cr Pb H Votatiles	Semivolatikes	BTEX BO218/5030 or BTEX 8	RC	N.O.R.M.			RUSH TAT (Pre-Bondue) 1	Standard TAT
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### Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In

lient:	Elke Environmental
late/ Time:	12/14/09 9:00
ab ID #:	355460
nitials:	AS

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#### Sample Receipt Checklist

	·			Client Ir	itials
1	Temperature of container/ cooler?	Yes	No	0.1 °C	
:2	Shipping container in good condition?	(Yes)	No		
:3	Custody Seals intact on shipping container/ cooler?	Mores	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	'Yes)	No	Not Present	
45	Chain of Custody present?	Tes	No		
46	Sample Instructions complete of Chain of Custody?	(Yés)	No		
17	Chain of Custody signed when relinquished/ received?	Yes	No		
ŧ8	Chain of Custody agrees with sample label(s)?	(Yes)	No	iD written on Cont / Lid	
19	Container label(s) legible and intact?	Yes	No	Not Applicable	}
10	Sample matrix/ properties agree with Chain of Custody?	Tes	No		
111	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
¢13	Samples properly preserved?	Yes	No	See Below	
ŧ14	Sample bottles intact?	(Yes)	No		
	Preservations documented on Chain of Custody?	Yes	No		
FT6	Containers documented on Chain of Custody?	(Yes-)	No		
<i>‡</i> 17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
<i>‡</i> 18	All samples received within sufficient hold time?	(Yes)	No	See Below	
<i>‡</i> 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:

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Regarding:

Corrective Action Taken:

Sheck all that Apply:

See attached e-mail/ fax

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

Final Ver. 1.000

Page 1 of 1

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#### Andrea Lam

From:	"Logan Anderson" <la_elkeenv@yahoo.com></la_elkeenv@yahoo.com>
To:	"Andrea Lam" <andrea.lam@xenco.com></andrea.lam@xenco.com>
Sent:	Monday, December 14, 2009 10:28 AM
Subject:	Re: WO 355458, 355460, 355462, 355463, 355465

Andrea,

Correct. Test for TPH 8015M not TPH 418.1

Thanks, Logan Anderson

Project Manager Elke Environmental, Inc. off 432-366-0043 cell 432-664-1269 fax 432-366-0884

--- On Mon, 12/14/09, Andrea Lam <andrea.lam@xenco.com> wrote:

From: Andrea Lam <andrea.lam@xenco.com> Subject: WO 355458, 355460, 355462, 355463, 355465 To: "Logan Anderson" <la\_elkeenv@yahoo.com> Date: Monday, December 14, 2009, 10:17 AM

Logan,

I would like to confirm our conversation that these five work orders are to be tested for 8015M not 418.1.

Thank You, Andrea Lam Sample Receiving / Project Assistant

Environmental Lab of Texas A Xenco Company 12600 W I-20 E Odessa, TX 79765 432-563-1800

#### Bratcher, Mike, EMNRD

From: Sent: To: Subject: Bratcher, Mike, EMNRD Tuesday, April 20, 2010 7:23 AM 'Kelton\_Beaird@oxy.com' RE: Open Spill Update

Kelton,

These remediation proposals have not been reviewed yet.

Mike Bratcher NMOCD DISTRICT 2 1301 W. GRAND AVE. ARTESIA. NM 88210 575-748-1283 EXT.108 mike.bratcher@state.nm.us

From: Kelton\_Beaird@oxy.com [mailto:Kelton\_Beaird@oxy.com] Sent: Monday, April 19, 2010 2:18 PM To: Bratcher, Mike, EMNRD Subject: Open Spill Update Importance: High

Mike;

Recently Elke Environmental delivered some work plans for open spills that occurred. I was wanting to know if you have had a chance to look the plans over and make a decision if they are approved. The list is as follows:

US federal 13-1Y Indian Hills # 9 Winston Gas Com Battery Righthand Canyon 34-5 Jones Canyon 4-1 Nagooltee Peak 5-3 US federal 13-2

Thanks,

Kelton Beaird HES Specialist MidCon Southwest Carlsbad, NM Office: 575-628-4121 Cell: 575-390-1903 Fax: 575-628-4125