

RECEIVED  
APR - 1 2010  
NMOCD ARTESIA

# Remediation Plan

Prepared for  
Oxy USA

**Indian Basin Station #133**  
**Eddy County, NM**

RP# 727

Prepared by  
***Elke Environmental, Inc.***

P.O. Box 14167 Odessa, TX 79768  
Phone (432) 366-0043 Fax (432) 366-0884

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1701 W. Grand Avenue, Artesia, NM 88210  
District III  
10 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.  
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**

**OPERATOR**  Initial Report  Final Report

Name of Company - OXY USA	Contact - Kelton Beard
Address - 1502 W. Commerce	Telephone No. - (O) 575-628-4121 C) 575-390-1903
Facility Name - Indian Basin Station #133	Facility Type - Production Facility

Surface Owner BLM	Mineral Owner	Lease No. 30-015-28813
-------------------	---------------	------------------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	33	21S	24E					Eddy

Latitude 32° 26.250' N Longitude 104° 30.372' W

**NATURE OF RELEASE**

Type of Release - Produced Water	Volume of Release - 15 bbls	Volume Recovered - 4 bbls
Source of Release - 6" Tubing Line	Date and Hour of Occurrence	Date and Hour of Discovery 11-22-09 @ 10:00am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour See above	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* 6" tubing line rusted causing the line to split. A vac-truck was called to pickup all standing fluid remaining on location. 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'). 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.

Describe Area Affected and Cleanup Action Taken.\* Oxy USA proposes to leave all soil in place since all soil is below NMOCD Standards.

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.

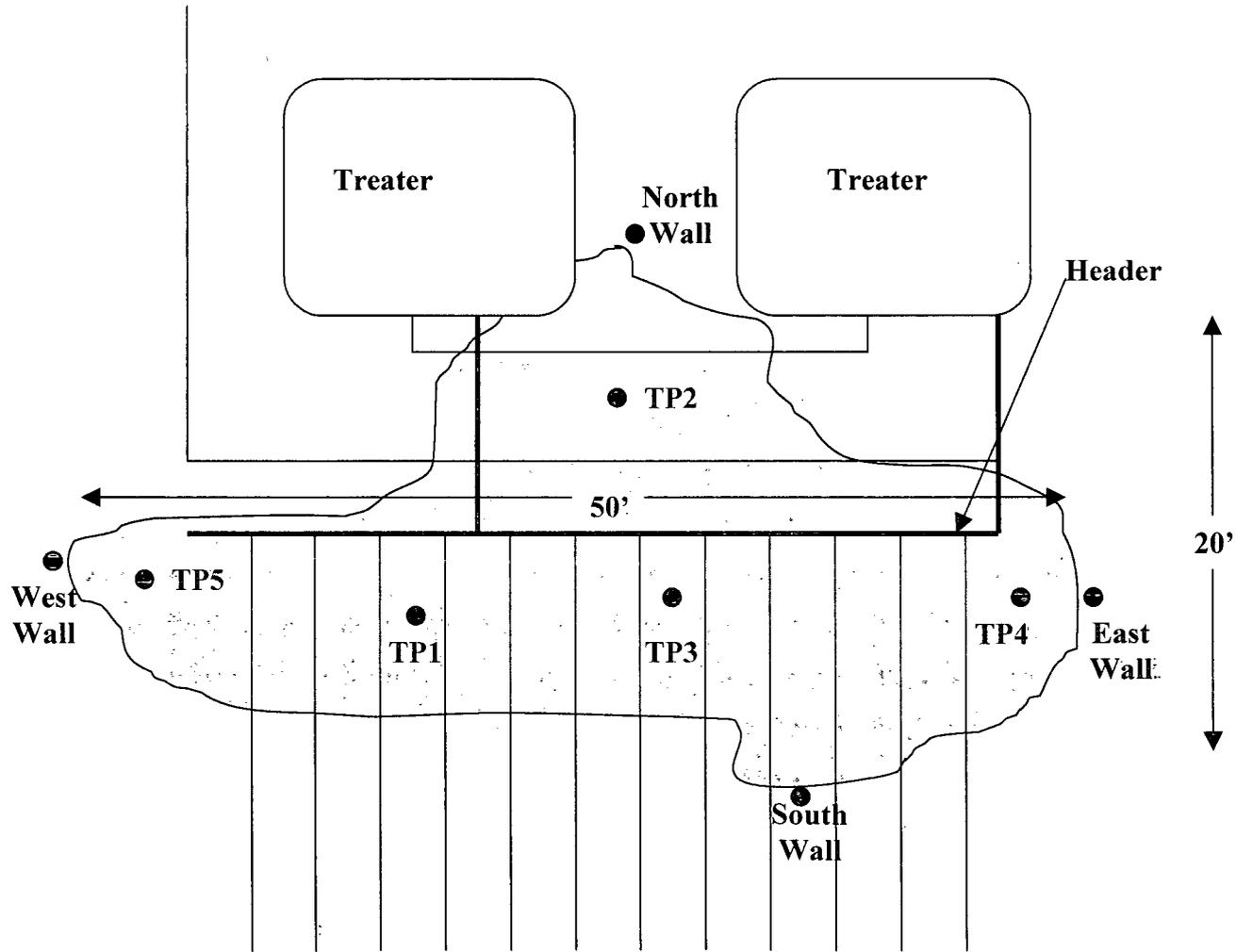
**OIL CONSERVATION DIVISION**

Signature:	Approved by District Supervisor:		
Printed Name: Kelton Beard	Approval Date:	Expiration Date:	
Title: HES Specialist	Conditions of Approval:		
Mail Address: kelton_beard@oxy.com			Attached <input type="checkbox"/>
Date: 3-24-10	Phone: 575-628-4121		

\* Attach Additional Sheets If Necessary

**Oxy USA**  
Indian Basin Station #133

Plat Map



# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

## Field Analytical Report Form

**Client** Oxy USA **Analyst** Bobby Steadham

**Site** Indian Basin Station #133

Sample ID	Date	Depth	418.1 TPH / PPM	CI / PPM	PID / PPM	GPS
TP1	12-8-09	Surface	28 <sup>19.1</sup>	209 <sup>83</sup>	11.7	32° 26.250' N 104° 30.372' W
TP2	12-8-09	Surface	6 <sup>6.1</sup>	212 <sup>0</sup>	22.4	32° 26.246' N 104° 30.367' W
TP3	12-8-09	Surface	5 <sup>4.7</sup>	157 <sup>13</sup>	15.6	32° 26.247' N 104° 30.369' W
TP4	12-8-09	Surface	18 <sup>14.3</sup>	118 <sup>104</sup>	21.9	32° 26.248' N 104° 30.367' W
TP5	12-8-09	Surface	12 <sup>2.6</sup>	150 <sup>35</sup>	31.7	32° 26.252' N 104° 30.373' W
North Wall	12-8-09	Surface	27	121	11.7	32° 26.253' N 104° 30.365' W
East Wall	12-8-09	Surface	15	179	14.9	32° 26.246' N 104° 30.366' W
South Wall	12-8-09	Surface	12	117	21.1	32° 26.252' N 104° 30.373' W
West Wall	12-8-09	Surface	8	149	13.1	32° 26.248' N 104° 30.371' W

*Handwritten notes:*  
 12/8/09  
 from job  
 by Bobby Steadham

**Analyst Notes** \_\_\_\_\_

# Analytical Report 355462

for

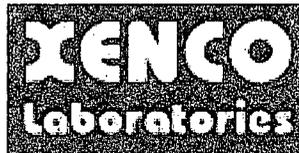
**Elke Environmental, Inc.**

**Project Manager: Logan Anderson**

**Oxy USA**

**Indian Basin Station # 133**

**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: **355462**  
**Oxy USA**  
Project Address: Indian Basin Station # 133

**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 355462. 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. 355462 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

*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 355462**



**Elke Environmental, Inc., Odessa, TX**  
Oxy USA

<b>Sample Id</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Sample Depth</b>	<b>Lab Sample Id</b>
TP 1 @ 0"	S	Dec-08-09 13:00	0 In	355462-001
TP 2 @ 0"	S	Dec-08-09 13:30	0 In	355462-002
TP 3 @ 0"	S	Dec-08-09 14:10	0 In	355462-003
TP 4 @ 0"	S	Dec-08-09 14:45	0 In	355462-004
TP 5 @ 0"	S	Dec-08-09 15:00	0 In	355462-005



## CASE NARRATIVE

*Client Name: Elke Environmental, Inc.*

*Project Name: Oxy USA*

*Project ID: Indian Basin Station # 133*  
*Work Order Number: 355462*

*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-785893 TPH By SW8015 Mod

None



# Certificate of Analysis Summary 355462

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA



Project Id: Indian Basin Station # 133

Contact: Logan Anderson

Project Location: Indian Basin Station # 133

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

Report Date: 16-DEC-09

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	355462-001	355462-002	355462-003	355462-004	355462-005	
	<i>Field Id:</i>	TP 1 @ 0"	TP 2 @ 0"	TP 3 @ 0"	TP 4 @ 0"	TP 5 @ 0"	
	<i>Depth:</i>	0 In					
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Dec-08-09 13:00	Dec-08-09 13:30	Dec-08-09 14:10	Dec-08-09 14:45	Dec-08-09 15:00	
	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-14-09 12:35					
	<i>Units/RL:</i>	mg/kg RL					
<b>Anions by E300</b>							
Chloride		83.8 9.50	ND 4.43	120 9.33	30.1 4.77	35.5 4.38	
	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-14-09 17:00					
	<i>Units/RL:</i>	% RL					
<b>Percent Moisture</b>							
Percent Moisture		11.6 1.00	5.19 1.00	9.94 1.00	11.9 1.00	4.16 1.00	
	<i>Extracted:</i>						
	<i>Analyzed:</i>	Dec-14-09 11:00					
	<i>Units/RL:</i>	mg/kg RL					
	<i>Analyzed:</i>	Dec-15-09 23:38	Dec-16-09 00:05	Dec-16-09 00:32	Dec-16-09 00:59	Dec-16-09 01:26	
<b>TPH By SW8015 Mod</b>							
C6-C12 Gasoline Range Hydrocarbons		ND 16.9	16.1 15.8	ND 16.6	17.8 17.0	ND 15.7	
C12-C28 Diesel Range Hydrocarbons		19.1 16.9	ND 15.8	ND 16.6	ND 17.0	21.6 15.7	
C28-C35 Oil Range Hydrocarbons		ND 16.9	ND 15.8	ND 16.6	ND 17.0	ND 15.7	
Total TPH		19.1 16.9	16.1 15.8	ND 16.6	17.8 17.0	21.6 15.7	

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.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

  
 Brent Barron, II  
 Odessa Laboratory 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 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 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



# Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 355462,

Project ID: Indian Basin Station # 133

Lab Batch #: 785893

Sample: 545602-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg		Date Analyzed: 12/15/09 21:51		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		118	99.7	118	70-135	
o-Terphenyl		51.3	49.9	103	70-135	

Lab Batch #: 785893

Sample: 545602-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg		Date Analyzed: 12/15/09 22:18		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		121	100	121	70-135	
o-Terphenyl		52.5	50.0	105	70-135	

Lab Batch #: 785893

Sample: 545602-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg		Date Analyzed: 12/15/09 22:45		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		108	99.6	108	70-135	
o-Terphenyl		56.0	49.8	112	70-135	

Lab Batch #: 785893

Sample: 355462-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/15/09 23:38		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		103	99.8	103	70-135	
o-Terphenyl		53.6	49.9	107	70-135	

Lab Batch #: 785893

Sample: 355462-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg		Date Analyzed: 12/16/09 00:05		SURROGATE RECOVERY STUDY		
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		102	99.6	102	70-135	
o-Terphenyl		52.5	49.8	105	70-135	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



# Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 355462,

Project ID: Indian Basin Station # 133

Lab Batch #: 785893

Sample: 355462-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/16/09 00:32

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.5	107	70-135	
o-Terphenyl	54.6	49.8	110	70-135	

Lab Batch #: 785893

Sample: 355462-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/16/09 00:59

### SURROGATE RECOVERY STUDY

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

Lab Batch #: 785893

Sample: 355462-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/16/09 01:26

### SURROGATE RECOVERY STUDY

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	54.2	50.0	108	70-135	

Lab Batch #: 785893

Sample: 355462-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/16/09 06:45

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.6	114	70-135	
o-Terphenyl	49.4	49.8	99	70-135	

Lab Batch #: 785893

Sample: 355462-002 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 12/16/09 07:12

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.7	118	70-135	
o-Terphenyl	51.2	49.9	103	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.



# Blank Spike Recovery



Project Name: Oxy USA

Work Order #: 355462

Project ID: Indian Basin Station # 133

Lab Batch #: 785866

Sample: 785866-1-BKS

Matrix: Solid

Date Analyzed: 12/14/2009

Date Prepared: 12/14/2009

Analyst: LATCOR

Reporting Units: mg/kg

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Anions by E300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
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.

ND - Below Reporting Limit



# BS / BSD Recoveries



**Project Name: Oxy USA**

**Work Order #: 355462**

**Analyst: BEV**

**Date Prepared: 12/14/2009**

**Project ID: Indian Basin Station # 133**

**Date Analyzed: 12/15/2009**

**Lab Batch ID: 785893**

**Sample: 545602-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

## BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	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
<b>Analytes</b>											
C6-C12 Gasoline Range Hydrocarbons	ND	997	881	88	1000	879	88	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	997	832	83	1000	823	82	1	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

Work Order #: 355462

Lab Batch #: 785866

Project ID: Indian Basin Station # 133

Date Analyzed: 12/14/2009

Date Prepared: 12/14/2009

Analyst: LATCOR

QC- Sample ID: 355458-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

### MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
	Chloride	102	251	383	112	75-125

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

BRL - Below Reporting Limit



# Form 3 - Matrix MSD Recoveries



Project Name: Oxy USA

Work Order #: 355462

Project ID: Indian Basin Station # 133

Lab Batch ID: 785893

QC- Sample ID: 355462-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/16/2009

Date Prepared: 12/14/2009

Analyst: BEV

Reporting Units: mg/kg

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY 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	16.1	1050	902	84	1050	901	84	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1050	872	83	1050	861	82	1	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 Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit



# Sample Duplicate Recovery



**Project Name: Oxy USA**

**Work Order #: 355462**

**Lab Batch #: 785866**

**Project ID: Indian Basin Station # 133**

**Date Analyzed: 12/14/2009**

**Date Prepared: 12/14/2009**

**Analyst: LATCOR**

**QC- Sample ID: 355458-001 D**

**Batch #: 1**

**Matrix: Soil**

**Reporting Units: mg/kg**

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	102	108	6	20	

**Lab Batch #: 785673**

**Date Analyzed: 12/14/2009**

**Date Prepared: 12/14/2009**

**Analyst: WRU**

**QC- Sample ID: 355458-001 D**

**Batch #: 1**

**Matrix: Soil**

**Reporting Units: %**

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



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: EIke Environmental  
 Date/ Time: 12/14/09 9:00  
 Lab ID #: 355462  
 Initials: AS

### Sample Receipt Checklist

Client Initials

#1 Temperature of container/ cooler?	<input checked="" type="radio"/> Yes	No	0.1 °C	
#2 Shipping container in good condition?	<input checked="" type="radio"/> Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	<input checked="" type="radio"/> Yes	No	<del>Not Present</del>	
#4 Custody Seals intact on sample bottles/ container?	<input checked="" type="radio"/> Yes	No	Not Present	
#5 Chain of Custody present?	<input checked="" type="radio"/> Yes	No		
#6 Sample Instructions complete of Chain of Custody?	<input checked="" type="radio"/> Yes	No		
#7 Chain of Custody signed when relinquished/ received?	<input checked="" type="radio"/> Yes	No		
#8 Chain of Custody agrees with sample label(s)?	<input checked="" type="radio"/> Yes	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	<input checked="" type="radio"/> Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="radio"/> Yes	No		
#11 Containers supplied by ELOT?	<input checked="" type="radio"/> Yes	No		
#12 Samples in proper container/ bottle?	<input checked="" type="radio"/> Yes	No	See Below	
#13 Samples properly preserved?	<input checked="" type="radio"/> Yes	No	See Below	
#14 Sample bottles intact?	<input checked="" type="radio"/> Yes	No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No		
#17 Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/> Yes	No	See Below	
#18 All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	No	See Below	
#19 Subcontract of sample(s)?	<input checked="" type="radio"/> Yes	No	<u>Not Applicable</u>	
#20 VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	No	Not Applicable	

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

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

**Andrea Lam**

---

**From:** "Logan Anderson" <la\_elkeenv@yahoo.com>  
**To:** "Andrea Lam" <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.*

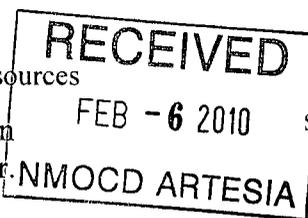
*Thank You,  
Andrea Lam  
Sample Receiving / Project Assistant*

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

12/14/2009

District I  
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.  
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

#### OPERATOR

Initial Report  Final Report

Name of Company OXY USA	Contact Kelton Beard	
Address 1502 W. Commerce Carlsbad, NM 88220	Telephone No. (O) 575-628-4100	
Facility Name Indian Basin Station 133	Facility Type Production Facility	
Surface Owner BLM	Mineral Owner	Lease No.3001528813

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	33	21S	24E					Eddy

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 15bbls	Volume Recovered 4bbls
Source of Release 6 inch tubing line	Date and Hour of Occurrence	Date and Hour of Discovery 11-22-09 @ 10:00am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour See above	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
6 inch tubing line rusted, causing the line to split

Describe Area Affected and Cleanup Action Taken.\*  
Area affected was on the location approx. 50' X 30'. A vac-truck was called to pick up all standing fluid remaining on location. Delineation was completed and all horizontal and vertical levels were below required levels. Groundwater is >100' BGS; Ranking Criteria is 0 points on well head protection and surface body of water protection. Site will be left as is. Lab analytical is in the original remediation plan that was submitted.

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.

Signature:	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Kelton Beard	Approved by District Supervisor:		
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: kelton_beard@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 2-2-10			

\* Attach Additional Sheets If Necessary