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APR -1 2010  
NMOCD ARTESIA

# Remediation Plan

Prepared for  
Oxy USA

**Jones Canyon Satellite**  
**Eddy County, NM**

2RP -

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  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
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 Beaird
Address - 1502 W. Commerce Carlsbad, NM 88220	Telephone No. - (O) 575-628-4100
Facility Name - Jones Canyon 4-1	Facility Type - Satellite

Surface Owner - BLM	Mineral Owner - BLM	Lease No. 30-015-28076
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	4	22S	24E					EDDY

Latitude 32° 24.877' N Longitude 104° 30.253' W

**NATURE OF RELEASE**

Type of Release - Crude Oil & Produced Water	Volume of Release 7bbls-oil / 3 bbls-water	Volume Recovered - 3 bbls
Source of Release - Dump Line	Date and Hour of Occurrence	Date and Hour of Discovery 1-9-10 10:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher-NMOCD	
By Whom? Kelton Beaird HES - Oxy	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.\*

"T" broke on the dump line. Area affected was on location. Vac-truck called. Site was delineated with a hand auger. Site ranking is as follows: Wellhead Protection Area - 0 points, Surface Body of Water - 0 points, and Depth to Groundwater (>100') - 0 points. Total ranking for site 0 points. RAL's for the site are - 5,000ppm TPH, 250 ppm Chloride and 100ppm BTEX (using field vapor headspace measurement).

Describe Area Affected and Cleanup Action Taken.\* Oxy USA proposes to excavate 6" bgs at TP1, TP2 and TP5. Excavate 12" bgs at TP3. Excavate 24" at TP4. The excavated soil will be hauled to an NMOCD approved Disposal and clean native soil will be backfilled into the excavation.

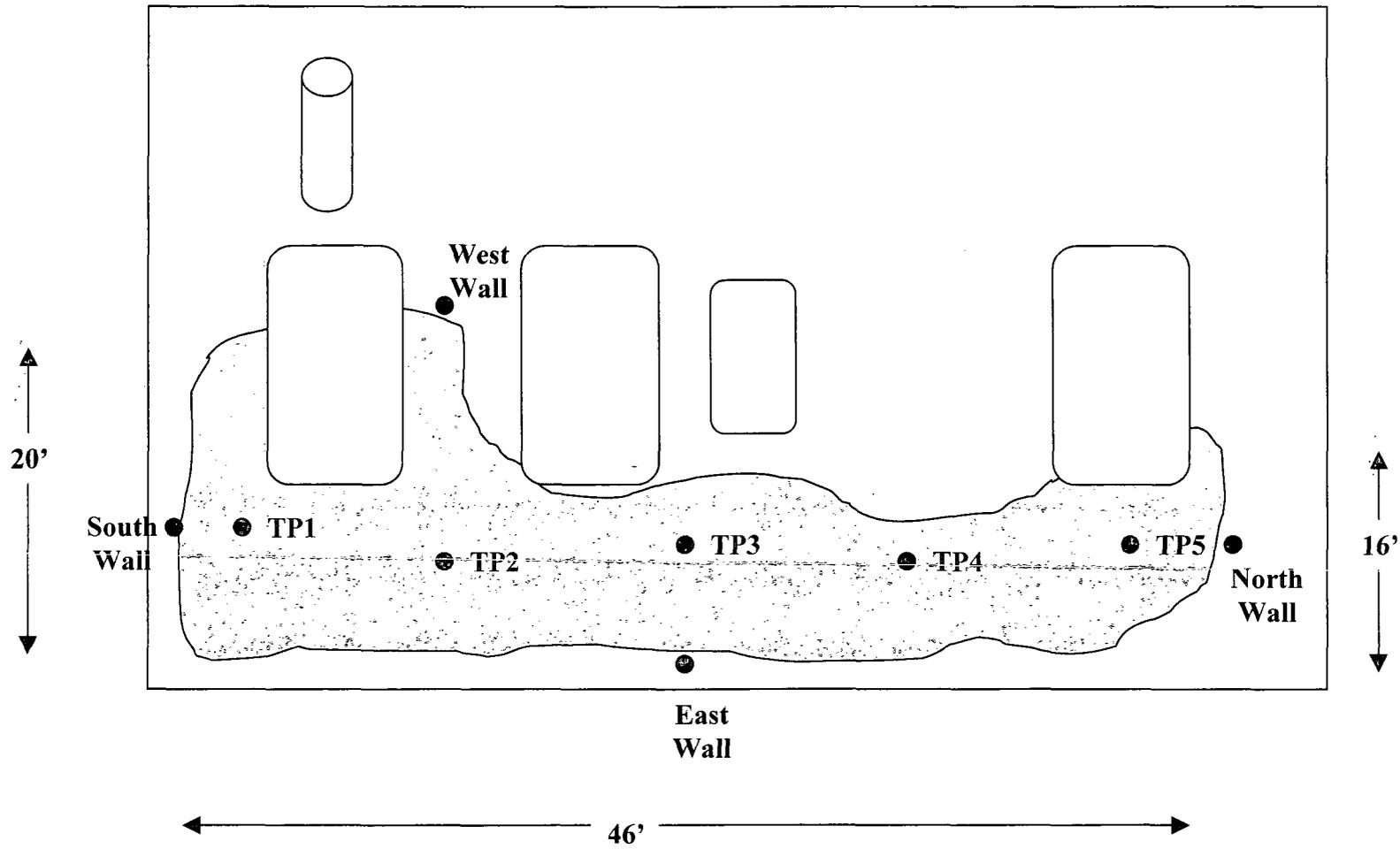
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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:		<b>OIL CONSERVATION DIVISION</b>	
		Approved by District Supervisor:	
Printed Name: Kelton Beaird		Approval Date:	Expiration Date:
Title: HES Specialist		Conditions of Approval:	
E-mail Address: kelton_beaird@oxy.com			
Date: 3-24-10		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

Oxy USA  
Jones Canyon Satellite

Plat Map



# Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768

## Field Analytical Report Form

Client Oxy USA Analyst Bobby Steadham

Site Jones Canyon Satellite

Sample ID	Date	Depth	418.1 TPH / PPM	CI / PPM	PID / PPM	GPS
TP1	2-16-10	3"		119	570	32° 24.877' N 104° 30.253' W
TP1	2-16-10	6"		125	381	32° 24.877' N 104° 30.253' W
TP1	2-16-10	12"	996	90	78.7	32° 24.877' N 104° 30.253' W
TP2	2-16-10	3"		131	355	32° 24.878' N 104° 30.250' W
TP2	2-16-10	6"		110	275	32° 24.878' N 104° 30.250' W
TP2	2-16-10	12"	4,258	89	78.1	32° 24.878' N 104° 30.250' W
TP3	2-16-10	3"		45	812	32° 24.880' N 104° 30.247' W
TP3	2-16-10	6"		87	338	32° 24.880' N 104° 30.247' W
TP3	2-16-10	12"		56	274	32° 24.880' N 104° 30.247' W
TP3	2-16-10	24"	750	125	42.3	32° 24.880' N 104° 30.247' W
TP4	2-16-10	3"		108	529	32° 24.879' N 104° 30.245' W
TP4	2-16-10	6"		124	401	32° 24.879' N 104° 30.245' W
TP4	2-16-10	12"		122	378	32° 24.879' N 104° 30.245' W
TP4	2-16-10	24"		111	170	32° 24.879' N 104° 30.245' W
TP4	2-16-10	30"	208	118	13.1	32° 24.879' N 104° 30.245' W

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



# Analytical Report 363053

for

**Elke Environmental, Inc.**

**Project Manager: Logan Anderson**

**Oxy USA**

**Jones Canyon Satellite**

**26-FEB-10**



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295)



26-FEB-10

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

Reference: XENCO Report No: **363053**  
**Oxy USA**  
Project Address: Jones Canyon Satellite

**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 363053. 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. 363053 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 363053**



**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>
TP1 @ 12"	S	Feb-16-10 17:30	12 In	363053-001
TP2 @ 12"	S	Feb-16-10 16:30	12 In	363053-002
TP3 @ 24"	S	Feb-16-10 14:30	24 In	363053-003
TP4 @ 30"	S	Feb-16-10 15:00	30 In	363053-004
TP5 @ 12"	S	Feb-16-10 09:30	12 In	363053-005



## CASE NARRATIVE

*Client Name: Elke Environmental, Inc.*

*Project Name: Oxy USA*



*Project ID: Jones Canyon Satellite*  
*Work Order Number: 363053*

*Report Date: 26-FEB-10*  
*Date Received: 02/22/2010*

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**Sample receipt non conformances and Comments:**

*None*

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**Sample receipt Non Conformances and Comments per Sample:**

*None*

**Analytical Non Conformances and Comments:**

*Batch: LBA-795451 Inorganic Anions by EPA 300*

*None*

*Batch: LBA-795507 Percent Moisture*

*None*

*Batch: LBA-795727 TPH By SW8015 Mod*

*None*



# Certificate of Analy Summary 363053

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA



Project Id: Jones Canyon Satellite

Contact: Logan Anderson

Project Location: Jones Canyon Satellite

Date Received in Lab: Mon Feb-22-10 09:11 am

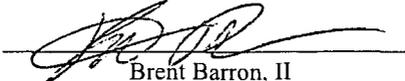
Report Date: 26-FEB-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	363053-001	363053-002	363053-003	363053-004	363053-005	
	Field Id:	TP1 @ 12"	TP2 @ 12"	TP3 @ 24"	TP4 @ 30"	TP5 @ 12"	
	Depth:	12 In	12 In	24 In	30 In	12 In	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Feb-16-10 17:30	Feb-16-10 16:30	Feb-16-10 14:30	Feb-16-10 15:00	Feb-16-10 09:30	
<b>Anions by E300</b>	Extracted:						
	Analyzed:	Feb-24-10 14:12					
	Units/RL:	mg/kg RL					
Chloride		41.2 4.81	36.4 5.51	20.6 4.90	32.4 4.63	16.4 4.83	
<b>Percent Moisture</b>	Extracted:						
	Analyzed:	Feb-23-10 17:00					
	Units/RL:	% RL					
Percent Moisture		12.8 1.00	23.8 1.00	14.4 1.00	9.34 1.00	13.1 1.00	
<b>TPH By SW8015 Mod</b>	Extracted:	Feb-25-10 09:45					
	Analyzed:	Feb-26-10 09:18	Feb-26-10 09:45	Feb-26-10 10:11	Feb-26-10 10:38	Feb-26-10 11:05	
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		100 17.2	150 19.7	28.2 17.4	18.1 16.5	35.3 17.3	
C12-C28 Diesel Range Hydrocarbons		823 17.2	763 19.7	141 17.4	248 16.5	185 17.3	
C28-C35 Oil Range Hydrocarbons		37.3 17.2	34.5 19.7	ND 17.4	16.8 16.5	ND 17.3	
Total TPH		960 17.2	948 19.7	169 17.4	283 16.5	220 17.3	

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



# 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.

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842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



# Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Vork Orders : 363053,

Project ID: Jones Canyon Satellite

Lab Batch #: 795727

Sample: 551566-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/26/10 07:29

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	99.7	97	70-135	
o-Terphenyl	46.9	49.9	94	70-135	

Lab Batch #: 795727

Sample: 551566-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/26/10 07:57

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.7	99.5	100	70-135	
o-Terphenyl	48.1	49.8	97	70-135	

Lab Batch #: 795727

Sample: 551566-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/26/10 08:24

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.7	99.8	82	70-135	
o-Terphenyl	49.3	49.9	99	70-135	

Lab Batch #: 795727

Sample: 363053-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 09:18

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.0	100	83	70-135	
o-Terphenyl	49.0	50.1	98	70-135	

Lab Batch #: 795727

Sample: 363053-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 09:45

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.9	99.9	87	70-135	
o-Terphenyl	50.1	50.0	100	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

Vork Orders : 363053,

Project ID: Jones Canyon Satellite

Lab Batch #: 795727

Sample: 363053-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 10:11

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.3	99.5	83	70-135	
o-Terphenyl	49.9	49.8	100	70-135	

Lab Batch #: 795727

Sample: 363053-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 10:38

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.9	100	82	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 795727

Sample: 363053-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 11:05

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.4	100	81	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

Lab Batch #: 795727

Sample: 363052-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 14:10

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.0	99.5	97	70-135	
o-Terphenyl	46.5	49.8	93	70-135	

Lab Batch #: 795727

Sample: 363052-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/26/10 14:37

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.5	99.9	95	70-135	
o-Terphenyl	46.0	50.0	92	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 #: 363053**

**Project ID: Jones Canyon Satellite**

**Lab Batch #: 795451**

**Sample: 795451-1-BKS**

**Matrix: Solid**

**Date Analyzed: 02/24/2010**

**Date Prepared: 02/24/2010**

**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	9.06	91	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 #: 363053**

**Analyst: BEV**

**Date Prepared: 02/25/2010**

**Project ID: Jones Canyon Satellite**

**Date Analyzed: 02/26/2010**

**Lab Batch ID: 795727**

**Sample: 551566-1-BKS**

**Batch #: 1**

**Matrix: Solid**

**Units: mg/kg**

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

<b>TPH By SW8015 Mod</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
C6-C12 Gasoline Range Hydrocarbons	ND	997	898	90	995	913	92	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	997	942	94	995	814	82	15	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 #: 363053

Lab Batch #: 795451

Project ID: Jones Canyon Satellite

Date Analyzed: 02/24/2010

Date Prepared: 02/24/2010

Analyst: LATCOR

QC- Sample ID: 363052-001 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	259	246	471	86	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 - MSD Recoveries



Project Name: Oxy USA

Work Order #: 363053

Project ID: Jones Canyon Satellite

Lab Batch ID: 795727

QC- Sample ID: 363052-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 02/26/2010

Date Prepared: 02/25/2010

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	ND	1220	1110	91	1230	1060	86	5	70-135	35
C12-C28 Diesel Range Hydrocarbons	ND	1220	990	81	1230	958	78	3	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 #: 363053**

**Lab Batch #: 795451**

**Project ID: Jones Canyon Satellite**

**Date Analyzed: 02/24/2010**

**Date Prepared: 02/24/2010**

**Analyst: LATCOR**

**QC- Sample ID: 363052-001 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	259	251	3	20	

**Lab Batch #: 795507**

**Date Analyzed: 02/23/2010**

**Date Prepared: 02/23/2010**

**Analyst: WRU**

**QC- Sample ID: 363054-003 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	11.2	13.6	20	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: Elke Env.  
 Date/ Time: 2-27-10 9:11  
 Lab ID #: 363053  
 Initials: AL

**Sample Receipt Checklist**

				Client Initials
#1	Temperature of container/ cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	-3.4 °C
#2	Shipping container in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#3	Custody Seals intact on shipping container/ cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not Present</del>
#4	Custody Seals intact on sample bottles/ container?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Present
#5	Chain of Custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	iD written on Cont/ Lid
#9	Container label(s) legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#11	Containers supplied by ELOT?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#12	Samples in proper container/ bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	See Below
#13	Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	See Below
#14	Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#15	Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#16	Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	See Below
#18	All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	See Below
#19	Subcontract of sample(s)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<del>Not Applicable</del>
#20	VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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