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

RECEIVED
APR 05 2010
HOBBSOCD

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 – Hannah 17 ST #2	Facility Type – Well with battery

Surface Owner - State	Mineral Owner	Lease No.- 30-025-36284

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	17	14S	36E					Lea

Latitude 33° 05.932' N **Longitude** 103° 19.268' W

NATURE OF RELEASE

Type of Release – Crude Oil	Volume of Release – 71 bbls	Volume Recovered – 20 – bbls
Source of Release – Tank Battery	Date and Hour of Occurrence	Date and Hour of Discovery 1-9-10 8:30 am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Geoffrey Leaking	
By Whom? Kelton Beaird – HES Specialist - Oxy	Date and Hour – See Above	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Load line disconnected from tank battery. Affected area was inside the dike. A vac-truck was called to pick up all remaining fluid. Ranking Criteria for the site is as follows: Wellhead Protection Area – 0 points, Surface Body of Water – 0 points and Groundwater (GW = 66') – 10 points. Total Ranking for the site is 10 points. RAL's for the site are 250ppm – Chlorides, 1,000ppm – TPH and 100ppm BTEX (using field vapor headspace measurement). A delineation of the site was completed using a backhoe.

Describe Area Affected and Cleanup Action Taken.*
During the delineation no impacted soil was found below 3" bgs. The top three inches was excavated and blended and a field analysis was sampled of the pile. The pile was backfilled into the excavation because all levels were below the RAL's for this site. Attached is a plat map, field analytical, lab confirmation and pictures of the remediation.

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.

APPROVED

Signature:

Printed Name: Kelton Beaird

Appro

Title: HES Specialist

Approval Date: 2/3/16 Expiration Date:

E-mail Address: kelton_beaird@oxy.com

Conditions of Approval:

Attached ☐
IRP 2/4/16

Date: 3-10-2010 Phone: 575-628-4121

* Attach Additional Sheets If Necessary

District I
1625 N French Dr , Hobbs, NM 88240
District II
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District IV
1220 S St Francis Dr , Santa Fe, NM 87505

RECEIVED
APR 05 2010
HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
JAN 19 2010
HOBBSOCD

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 Hannah 17 ST. #2	Facility Type Well with battery

Surface Owner State	Mineral Owner State	Lease No. 3002536284

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	17	14S	36E					LEA

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 71 bbls	Volume Recovered 20
Source of Release Tank Battery	Date and Hour of Occurrence	Date and Hour of Discovery 1-9-10 8:30am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Geoffrey Leking-NMOCD	
By Whom? Kelton Beaird - HES Specialist - Oxy	Date and Hour See above	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

WATER = 66'

Describe Cause of Problem and Remedial Action Taken.*
Load line disconnected from tank battery

Describe Area Affected and Cleanup Action Taken.*
Affected area was inside the dike. A vac-truck was called to pick up all remaining fluid Delineation will occur, and a clean-up plan will be submitted for approval.

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:

Printed Name: Kelton Beaird

Title: HES Specialist

E-mail Address: kelton_beaird@oxy.com

Date: 1-14-10

OIL CONSERVATION DIVISION

Approved by ~~District Supervisor~~ ENV. ENGINEER: Geoffrey Leking

Approval Date: 02/05/10 Expiration Date: 04/05/10

Conditions of Approval: DELINEATE TO CLEAN + L. SUBMIT FINAL C-141 BY 04/05/10

Attached ☐
HRP-10-2-2416

* Attach Additional Sheets If Necessary

fGRL 1003636294

Closure Report

Prepared for
Oxy USA

RECEIVED
APR 05 2010
HOBBSOCD

Hannah 17 State 'H' #2

~~Eddy~~ LEA County, NM

1RP – 10 – 2 – 2416

Prepared by
Elke Environmental, Inc.
P.O. Box 14167 Odessa, TX 79768
Phone (432) 366-0043 Fax (432) 366-0884

Elke Environmental, Inc.

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

March 10, 2010

New Mexico Oil Conservation Division
Mr. Larry Johnson
1625 N French Dr.
Hobbs, New Mexico 88240

Re: Oxy USA – Hannah 17 State H #2
UL 'P' Sec. 17 T14S R36E Lea County, NM
1RP-10-2-2416

Mr. Larry Johnson,

Elke Environmental was contracted by Oxy USA to complete the remediation of the leak at the Hannah 17 State H #2 Battery. Ranking Criteria for the site is as follows: Wellhead Protection Area – 0 points, Surface Body of Water – 0 points and Groundwater (GW = 66') – 10 points. Total Ranking for the site is 10 points. RAL's for the site are 250ppm – Chlorides, 1,000ppm – TPH and 100ppm BTEX (using field vapor headspace measurement).

A delineation of the site was completed using a backhoe. During the delineation no impacted soil was found below 3" bgs. The top three inches was excavated and blended and a field analysis was sampled of the pile. The pile was backfilled into the excavation because all levels were below the RAL's for this site. Attached is a plat map, field analytical, lab confirmation and pictures of the remediation. If you have any questions about the enclosed report please contact me at the office.

Sincerely,

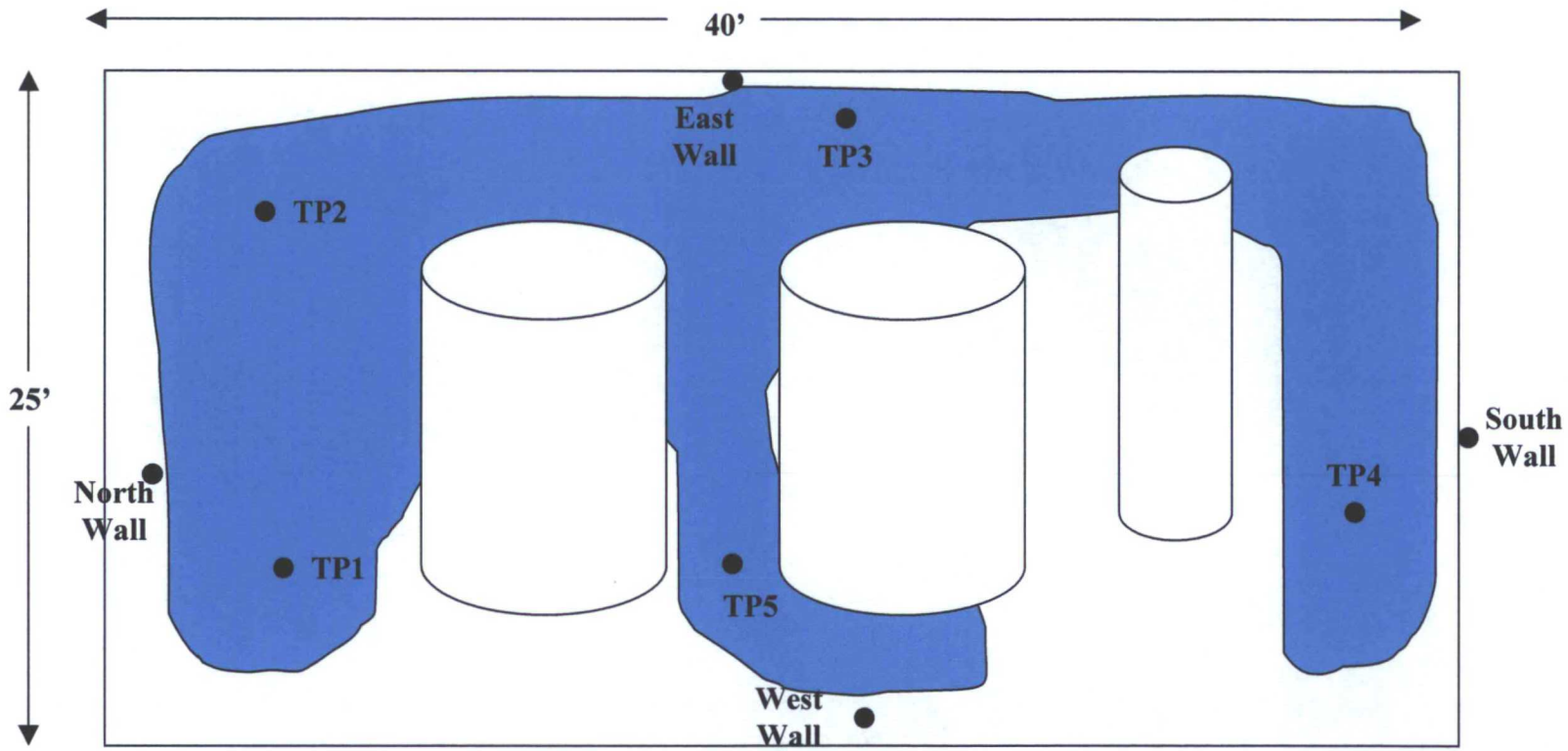
Logan Anderson

Cc: 1 – Elke Environmental, Inc. File
3 – Kelton Beaird (Oxy USA, Inc.)

Oxy USA
Hannah 17 State 'H' #2

N

Plat Map



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

Field Analytical Report Form

Client Oxy USA **Analyst** Bobby Steadham

Site Hannah 17 State H #2

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	2/26/10	3"	27	127	4.7	33° 05.932' N 103° 19.268' W
TP1	2/26/10	6"	15	139	1.0	33° 05.932' N 103° 19.268' W
TP2	2/26/10	3"	17	109	2.3	33° 05.932' N 103° 19.267' W
TP2	2/26/10	6"	13	189	3.6	33° 05.923' N 103° 19.267' W
TP3	2/26/10	3"	10	79	2.1	33° 05.928' N 103° 19.268' W
TP3	2/26/10	6"	5	127	1.8	33° 05.28' N 103° 19.268' W
TP4	2/26/10	3"	18	89	2.7	33° 05.923' N 103° 19.269' W
TP4	2/26/10	6"	20	89	2.0	33° 05.923' N 103° 19.269' W
TP5	2/26/10	3"	16	191	7.9	33° 05.928' N 103° 19.270' W
TP5	2/26/10	6"	20	219	5.4	33° 05.918' N 103° 19.270' W
North Wall	2/26/10	6"	27	119	1.1	33° 05.934' N 103° 19.268' W
East Wall	2/26/10	6"	12	128	2.3	33° 05.929' N 103° 19.266' W
South Wall	2/26/10	6"	11	98	1.4	33° 05.920' N 103° 19.269' W
West Wall	2/26/10	6"	8	87	0.9	33° 05.926' N 103° 19.273' W
Pile	3/1/10		16	89	1.3	

Analyst Notes Pile sample is a 5 point composite.

Oxy USA – Hannah 17 State H #2 Battery

East side of battery before excavation of impacted soil.

North side of battery before excavation of impacted soil.

East side of battery after excavation of impacted soil.

North side of battery after excavation of impacted soil.

Oxy USA – Hannah 17 State H #2 Battery

West side of battery after excavation of impacted soil.

South side of battery after backfill of remediated soil.

West side of battery after backfill of remediated soil.

East side of battery after backfill of remediated soil.

Analytical Report 363812

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy USA

Hannah 17 State H # 2

09-MAR-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)

09-MAR-10

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

Reference: XENCO Report No: **363812**
Oxy USA
Project Address: Hannah 17 State H # 2

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 363812. 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. 363812 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

XENCO Laboratories

Sample Cross Reference 363812

Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP1 @ 6"	S	Feb-26-10 09:30	6 In	363812-001
TP2 @ 6"	S	Feb-26-10 12:00	6 In	363812-002
TP3 @ 6"	S	Feb-26-10 10:45	6 In	363812-003
TP4 @ 6"	S	Feb-26-10 07:45	6 In	363812-004
TP5 @ 6"	S	Feb-26-10 13:00	6 In	363812-005

CASE NARRATIVE

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

Project ID:	*Hannah 17 State H # 2*	*Report Date:*	*09-MAR-10*
Work Order Number:	*363812*	*Date Received:*	*03/01/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-796264 Percent Moisture
None

Batch: LBA-796497 Inorganic Anions by EPA 300
None

Batch: LBA-796818 TPH By SW8015 Mod
None

Certificate of Analysis Summary 363812

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA

Project Id: Hannah 17 State H # 2
Contact: Logan Anderson
Project Location: Hannah 17 State H # 2

Date Received in Lab: Mon Mar-01-10 08:37 am
Report Date: 09-MAR-10
Project Manager: Brent Barron, II

Analysis Requested																
	Lab Id:	363812-001		363812-002		363812-003		363812-004		363812-005						
	Field Id:	TP1 @ 6"		TP2 @ 6"		TP3 @ 6"		TP4 @ 6"		TP5 @ 6"						
	Depth:	6 In		6 In		6 In		6 In		6 In						
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL						
	Sampled:	Feb-26-10 09:30		Feb-26-10 12:00		Feb-26-10 10:45		Feb-26-10 07:45		Feb-26-10 13:00						
Anions by E300	***Extracted:***															
	Analyzed:	Mar-03-10 02:03		Mar-03-10 02:03		Mar-03-10 02:03		Mar-03-10 02:03		Mar-03-10 02:03						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL					
Chloride		21.5	4.87	26.6	4.79	27.2	4.83	6.26	4.75	11.0	4.67					
Percent Moisture	***Extracted:***															
	Analyzed:	Mar-02-10 17:00		Mar-02-10 17:00		Mar-02-10 17:00		Mar-02-10 17:00		Mar-02-10 17:00						
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL					
Percent Moisture		13.8	1.00	12.4	1.00	13.0	1.00	11.6	1.00	10.0	1.00					
TPH By SW8015 Mod	***Extracted:***	Mar-02-10 11:00		Mar-02-10 11:00		Mar-02-10 11:00		Mar-02-10 11:00		Mar-02-10 11:00						
	Analyzed:	Mar-04-10 08:47		Mar-04-10 09:14		Mar-04-10 09:42		Mar-04-10 10:09		Mar-04-10 10:36						
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL					
C6-C12 Gasoline Range Hydrocarbons		ND	17.4	ND	17.1	ND	17.2	ND	16.9	ND	16.7					
C12-C28 Diesel Range Hydrocarbons		26.2	17.4	ND	17.1	17.7	17.2	20.8	16.9	18.6	16.7					
C28-C35 Oil Range Hydrocarbons		ND	17.4	ND	17.1	ND	17.2	ND	16.9	ND	16.7					
Total TPH		26.2	17.4	ND	17.1	17.7	17.2	20.8	16.9	18.6	16.7					

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 363812,

Project ID: Hannah 17 State H # 2

Lab Batch #: 796818 **Sample:** 552206-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/10 07:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.7	99.5	86	70-135	
o-Terphenyl	50.4	49.8	101	70-135	

Lab Batch #: 796818 **Sample:** 552206-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/10 07:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	99.8	88	70-135	
o-Terphenyl	50.9	49.9	102	70-135	

Lab Batch #: 796818 **Sample:** 552206-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/04/10 08:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.9	99.7	86	70-135	
o-Terphenyl	53.2	49.9	107	70-135	

Lab Batch #: 796818 **Sample:** 363812-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 08:47

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.3	99.9	84	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 796818 **Sample:** 363812-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 09:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.4	100	86	70-135	
o-Terphenyl	54.3	50.0	109	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 363812,

Project ID: Hannah 17 State H # 2

Lab Batch #: 796818 **Sample:** 363812-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 09:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.5	99.5	86	70-135	
o-Terphenyl	53.6	49.8	108	70-135	

Lab Batch #: 796818 **Sample:** 363812-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 10:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.9	99.7	90	70-135	
o-Terphenyl	56.4	49.9	113	70-135	

Lab Batch #: 796818 **Sample:** 363812-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 10:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.0	100	94	70-135	
o-Terphenyl	58.6	50.1	117	70-135	

Lab Batch #: 796818 **Sample:** 363812-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 13:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.1	100	97	70-135	
o-Terphenyl	57.4	50.1	115	70-135	

Lab Batch #: 796818 **Sample:** 363812-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/04/10 13:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.3	100	91	70-135	
o-Terphenyl	55.1	50.1	110	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 #: 363812 **Project ID:** Hannah 17 State H # 2

Lab Batch #: 796497 **Sample:** 796497-1-BKS **Matrix:** Solid

Date Analyzed: 03/03/2010 **Date Prepared:** 03/03/2010 **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	8.00	7.33	92	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 #: 363812
Analyst: BEV
Lab Batch ID: 796818
Sample: 552206-1-BKS
Units: mg/kg

Date Prepared: 03/02/2010
Batch #: 1

Project ID: Hannah 17 State H # 2
Date Analyzed: 03/04/2010
Matrix: Solid

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	995	903	91	998	922	92	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	995	924	93	998	747	75	21	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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Oxy USA

Work Order #: 363812
Lab Batch #: 796497
Project ID: Hannah 17 State H # 2
Date Analyzed: 03/03/2010
Date Prepared: 03/03/2010
Analyst: LATCOR
QC- Sample ID: 363810-027 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	23.4	83.3	105	98	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 - MS / MSD Recoveries

Project Name: Oxy USA

Work Order # : 363812 **Project ID:** Hannah 17 State H # 2

Lab Batch ID: 796818 **QC- Sample ID:** 363812-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/04/2010 **Date Prepared:** 03/02/2010 **Analyst:** BEV

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	1140	1090	96	1140	1040	91	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1140	1110	97	1140	808	71	31	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Oxy USA

Work Order #: 363812

Lab Batch #: 796497 **Project ID:** Hannah 17 State H # 2

Date Analyzed: 03/03/2010 **Date Prepared:** 03/03/2010 **Analyst:** LATCOR

QC- Sample ID: 363810-027 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	23.4	21.8	7	20	

Lab Batch #: 796264

Date Analyzed: 03/02/2010 **Date Prepared:** 03/02/2010 **Analyst:** LATCOR

QC- Sample ID: 363798-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	8.80	10.4	17	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

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Logan Anderson
Company Name: Elke Environmental
Company Address: P O Box 14167
City/State/Zip: Odessa, TX 79768
Telephone No: 432-366-0043 Fax No: 432-366-0884
Sampler Signature:
e-mail: la_elkeenv@yahoo.com

Project Name: OXY USA
Project #:
Project Loc: Hanagan 17 State H # 2
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 363812

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 / 8015M	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	TP1 @ 6"		6"	2/22/10	9:30PM			X								S	X			X										X
02	TP2 @ 6"		6"	2/22/10	12:00PM			X								S	X			X										X
03	TP3 @ 6"		6"	2/22/10	0:45AM			X								S	X			X										X
04	TP4 @ 6"		6"	2/22/10	9:45AM			X								S	X			X										X
05	TP5 @ 6"		6"	2/22/10	1:00PM			X								S	X			X										X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3/1	8:37			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Jaime Fitch	03-01-10	0837

Laboratory Comments:
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: -12.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Environmental

Date/ Time: 03-01-10 C0837

Lab ID #: 363817

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of contained/ cooler?	(Yes)	No	-12.6 °C	
#2	Shipping container in good condition?	Yes	No	(N/A)	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present (N/A)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#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: _____

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

Analytical Report 364387

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy USA

Hannah 17 State H # 2

14-MAR-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)

XENCO Laboratories

ACCREDITED IN ACCORDANCE WITH nelac

14-MAR-10

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

Reference: XENCO Report No: **364387**
Oxy USA
Project Address: Hannah 17 State H # 2

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 364387. 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. 364387 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

Sample Cross Reference 364387

Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Pile	S	Mar-01-10 15:30		364387-001

CASE NARRATIVE

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

Project ID:	Hannah 17 State H # 2	Report Date:	14-MAR-10
Work Order Number:	364387	Date Received:	03/04/2010

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-796849 Percent Moisture
AD2216A
Batch 796849, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 364387-001.

Batch: LBA-797069 TPH By SW8015 Mod
None

Batch: LBA-797785 Inorganic Anions by EPA 300
None

Certificate of Analysis Summary 364387

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA

Project Id: Hannah 17 State H # 2
Contact: Logan Anderson
Project Location: Hannah 17 State H # 2

Date Received in Lab: Thu Mar-04-10 02:39 pm
Report Date: 14-MAR-10
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	364387-001					
	Field Id:	Pile					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Mar-01-10 15:30					
Anions by E300	*Extracted:*						
	Analyzed:	Mar-11-10 14:20					
	Units/RL:	mg/kg	RL				
Chloride		83.4	7.00				
Percent Moisture	*Extracted:*						
	Analyzed:	Mar-05-10 17:00					
	Units/RL:	%	RL				
Percent Moisture		40.0	1.00				
TPH By SW8015 Mod	*Extracted:*	Mar-08-10 09:30					
	Analyzed:	Mar-08-10 22:51					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	25.0				
C12-C28 Diesel Range Hydrocarbons		26.5	25.0				
C28-C35 Oil Range Hydrocarbons		ND	25.0				
Total TPH		26.5	25.0				

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 364387,

Project ID: Hannah 17 State H # 2

Lab Batch #: 797069 **Sample:** 552365-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/08/10 13:22

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	57.3	50.0	115	70-135	

Lab Batch #: 797069 **Sample:** 552365-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/08/10 13:49

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	58.1	50.1	116	70-135	

Lab Batch #: 797069 **Sample:** 552365-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/08/10 14:17

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	101	100	70-135	
o-Terphenyl	59.7	50.3	119	70-135	

Lab Batch #: 797069 **Sample:** 364387-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/08/10 22:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.8	106	70-135	
o-Terphenyl	63.6	49.9	127	70-135	

Lab Batch #: 797069 **Sample:** 364388-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/09/10 00:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.6	103	70-135	
o-Terphenyl	58.4	49.8	117	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 364387,

Project ID: Hannah 17 State H # 2

Lab Batch #: 797069 **Sample:** 364388-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/09/10 00:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.8	106	70-135	
o-Terphenyl	60.3	49.9	121	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.

XENCO Laboratories

Blank Spike Recovery

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Project Name: Oxy USA

Work Order #: 364387 **Project ID:** Hannah 17 State H # 2

Lab Batch #: 797785 **Sample:** 797785-1-BKS **Matrix:** Solid

Date Analyzed: 03/11/2010 **Date Prepared:** 03/11/2010 **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	11.0	11.3	103	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 #: 364387
Analyst: BEV
Lab Batch ID: 797069 **Sample:** 552365-1-BKS **Batch #:** 1
Units: mg/kg

Date Prepared: 03/08/2010

Project ID: Hannah 17 State H # 2
Date Analyzed: 03/08/2010
Matrix: Solid

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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	ND	1000	902	90	1000	904	90	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	775	78	1000	991	99	24	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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Oxy USA

Work Order #: 364387

Lab Batch #: 797785

Project ID: Hannah 17 State H # 2

Date Analyzed: 03/11/2010

Date Prepared: 03/11/2010

Analyst: LATCOR

QC- Sample ID: 364174-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	104	111	107	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 - MS / MSD Recoveries

Project Name: Oxy USA

Work Order # : 364387 **Project ID:** Hannah 17 State H # 2

Lab Batch ID: 797069 **QC- Sample ID:** 364388-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/09/2010 **Date Prepared:** 03/08/2010 **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	1040	926	89	1040	965	93	4	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1040	843	81	1040	796	77	6	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Oxy USA

Work Order #: 364387

Lab Batch #: 797785 **Project ID:** Hannah 17 State H # 2

Date Analyzed: 03/11/2010 **Date Prepared:** 03/11/2010 **Analyst:** LATCOR

QC- Sample ID: 364174-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

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

Lab Batch #: 796849

Date Analyzed: 03/05/2010 **Date Prepared:** 03/05/2010 **Analyst:** WRU

QC- Sample ID: 364467-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.01	8.93	56	20	F

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

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Logan Anderson

Company Name: Elke Environmental

Company Address: P O Box 14167

City/State/Zip: Odessa, TX 79768

Telephone No: 432-366-0043 Fax No: 432-366-0664

Sampler Signature: [signature]

e-mail: la_elkeenv@yahoo.com

Project Name: OXY USA

Project #:

Project Loc: HANNAH 17 STATE #2

PO #:

Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 364838 7

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015B	TOTAL: TPH: 418.1 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.			RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT
01	PLS		-	3/1/10	3:30PM		1	X								S			X				X											X

Special Instructions:

Laboratory Comments:

VOCs Free of Headspace? (Y) N

Custody seals on container(s) (Y) N (N/A)

Sample Hand Delivered by Sampler/Client Rep. ? (Y) N

by Courier? UPS DHL FedEx Lone Star

4029955

Temperature Upon Receipt: 5.6 °C

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	3/4/10	2:39			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Cindy Lam	Date 3.4.10	Time 14:39

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.

Date/ Time: 3.4. 14:39

Lab ID #: 364387

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	5.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#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: _____

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