RECEIVED DEC 2 1 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

30-015-33622

Release Notification and Corrective Action

nMCB0936537176

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company - OXY USA	Contact - Kelton Beaird
Address - 1502 W. Commerce	Telephone No. - (O) 575-628-4121 C) 575-390-1903
Facility Name – Two Marks 36 State #1 Battery	Facility Type - Tank Battery

Surface Owner BLM	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	36	21S	24E					Eddy

Latitude 32° 23.763' N Longitude 104° 27.484' W

NATURE OF RELEASE

Type of Release - Produced Water	Volume of Release – 20 bbls	Volume Recovered - 6 bbls
Source of Release - Vent Line	Date and Hour of Occurrence	Date and Hour of Discovery 11-24-09 @ 10:00am
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour See above	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The dump from the vessel malfunctioned causing the produced water in the vessel to overflow out the vent line. A vac-truck was called to pickup all standing fluid remaining on location. The site was delineated with a backhoe. 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 and remediate site when battery is abandoned because the impacted soils are minimal levels, groundwater is over 100' from bottom of impacted soil and the battery is an active site.

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: 12-18-09

OIL CONSERVATION DIVISION
Accepted for record
NMOCD
Approved by District Supervisor: DEC 31 2010

~~Approval Date:~~ Expiration Date: JAN 31 2010

SEE Attached ☒

REMEDIATION per OCD Rules and Guidelines. SUBMIT REMEDIATION PROPOSAL BY: 1/31/10

* Attach Additional Sheets If Necessary

nMCB0936537672

2RP-379

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

OXY USA
1502 W. Commerce
Carlsbad, NM 88220
ATTN: Kelton Beaird

Reference: Two Marks 36 St. 1 CTB 30-015-33622 M-36-21-24 Eddy County, New Mexico

Mr. Beaird,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of an Initial Report Form C-141 reporting a release of produced fluids that occurred at the above referenced site on or about 11/24/09. The initial C-141 was received on 12/7/09. On 12/21/09, a second C-141 was received along with analytical data from a delineation sampling event. The second C-141 proposes to leave all soil in place and remediate site when battery is abandoned. Since the life of production facilities can span decades, and incur multiple releases, this type proposal will not be approved.

Analytical data presented does show low contaminant levels in most areas tested, however the area identified as TP3 shows slightly elevated chloride levels in the surface sample (1,524 ppm) and elevated VOCs as measured utilizing a PID meter (192 ppm). At this time, OCD would request further investigation as to the lateral extent of contamination at TP3 and may require removal of some materials in this area. Also, any area that shows an increase in contaminant levels with depth, will require deeper samples be obtained where practicable. It is noted that on the Field Analytical Report Form, hard rock was encountered at 3" to 12" bgs.

Please make arrangements to perform the investigation and submit an amended proposal to OCD not later than **January 31, 2010**. Also please include a representative analysis of the produced water at this site.

If you have any questions or concerns, please contact me.

Mike Bratcher
NMOCD District 2
1301 W. Grand Ave.
Artesia, NM 88210
575-748-1283 Ext.108
mike.bratcher@state.nm.us

Distribution: Email to Kelton Beaird

OCD Reference: 2RP-379

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Thursday, December 31, 2009 1:32 PM
To: 'Kelton_Beaird@oxy.com'
Subject: Two Marks 36 St 1 CTB
Attachments: OXY_ Two Marks CTB_12.09.doc

Kelton,

Please find attached my response letter to the C-141 and proposal for the release at the Two Marks 36 St. 1 CTB. In the event you are unable to open the attachment, please contact me.

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

Bratcher, Mike, EMNRD

From: postmaster@state.nm.us
Sent: Thursday, December 31, 2009 1:32 PM
To: Bratcher, Mike, EMNRD
Subject: Delivery Status Notification (Relay)
Attachments: ATT853857.txt; Two Marks 36 St 1 CTB

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

Kelton_Beaird@oxy.com

Bratcher, Mike, EMNRD

From: Logan Anderson [la_elkeenv@yahoo.com]
Sent: Monday, December 21, 2009 8:29 AM
To: Bratcher, Mike, EMNRD
Cc: Kelton Beaird
Subject: Oxy - Two Marks 36 State #1 Battery
Attachments: Remediation Plan.pdf

Mike,

Attached is the Remediation Plan for the spill at the Oxy USA - Two Marks 36 State #1 Battery. If you have any questions feel free to contact me.

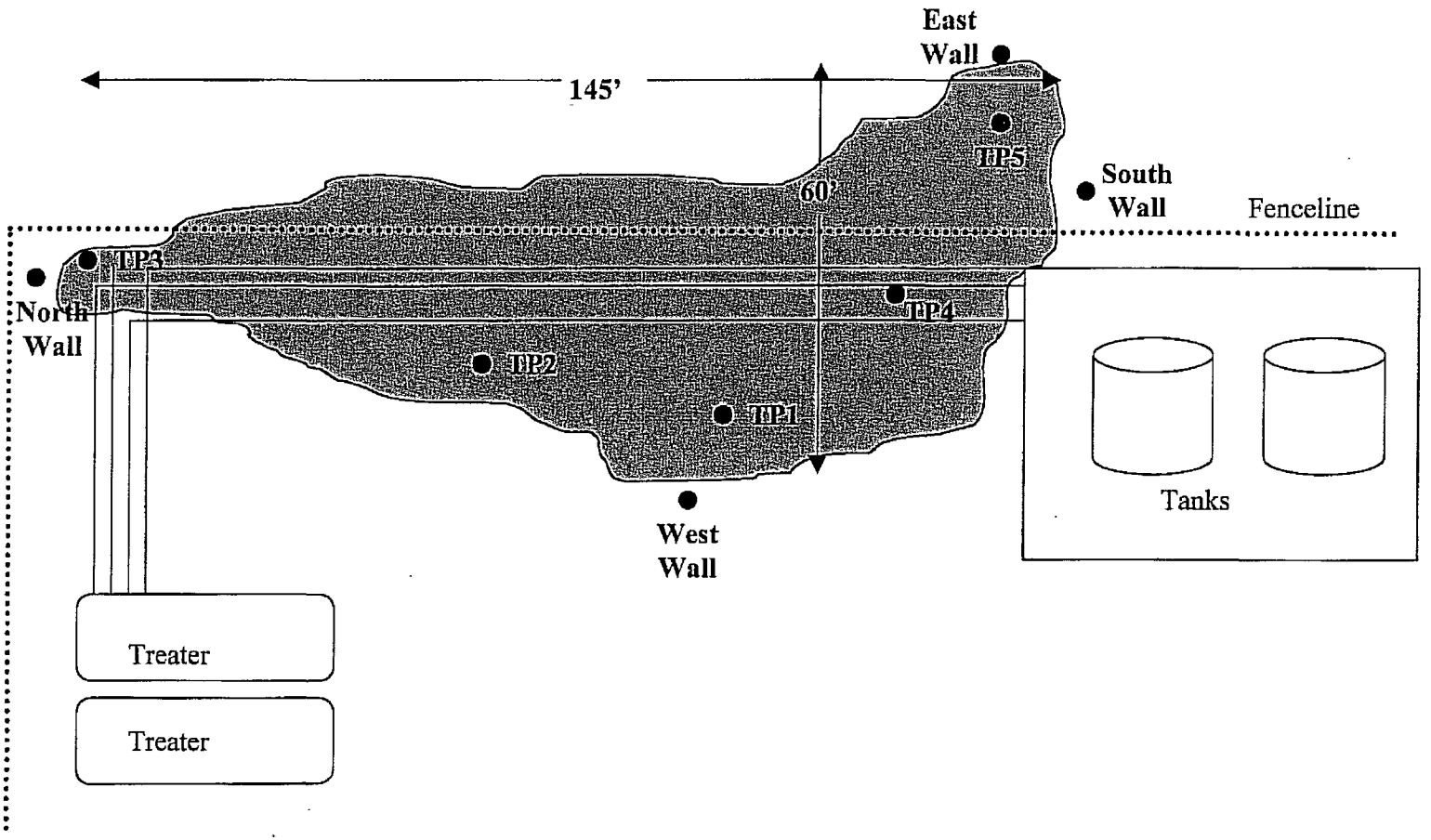
Thanks,
Logan Anderson

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

Oxy USA
Two Marks 36 State #1 Battery

N

Plat Map



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

Field Analytical Report Form

Client Oxy USA **Analyst** Bobby Steadham

Site Two Marks 36 State #1 Battery

Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	12-9-09	Surface		454	10.6	32° 23.763' N 104° 27.484' W
TP1	12-9-09	6"		236	19.3	32° 23.763' N 104° 27.484' W
TP1	12-9-09	12"	19	209	24.7	32° 23.763' N 104° 27.484' W
TP2	12-9-09	Surface		349	18.4	32° 23.767' N 104° 27.486' W
TP2	12-9-09	6"	27	438	8.6	32° 23.767' N 104° 27.486' W
TP3	12-9-09	Surface		1,524	192	32° 23.772' N 104° 27.478' W
TP3	12-9-09	6"	76	459	37.1	32° 23.772' N 104° 27.478' W
TP4	12-9-09	Surface		379	11.7	32° 23.760' N 104° 27.481' W
TP4	12-9-09	3"	53	599	15.5	32° 23.760' N 104° 27.481' W
TP5	12-9-09	Surface		409	18.3	32° 23.761' N 104° 27.474' W
TP5	12-9-09	6"	64	414	19.0	32° 23.761' N 104° 27.474' W
North Wall	12-9-09	3"	29	269	16.8	32° 23.760' N 104° 27.468' W
East Wall	12-9-09	3"	36	249	14	32° 23.766' N 104° 27.488' W
South Wall	12-9-09	3"	18	179	21.3	32° 23.748' N 104° 27.499' W
West Wall	12-9-09	3"	21	139	7.6	32° 23.778' N 104° 27.477' W

Analyst Notes Hard rock encountered at 3" to 12" bgs.

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00953		DOM	ED		4	4	24	21S	24E	552124	3591487*	66	28	38
C 01136		SAN	ED		4	3	28	21S	24E	546455	3589868*	138	83	55
C 01317		PRO	ED		2	3	22	21S	24E	548073	3591889*	140	80	60
C 01483		STK	ED		4	4	10	21S	24E	548807	3594778*	220	160	60
C 01530		DOM	ED	1	2	2	26	21S	24E	550416	3591200*	185	150	35
C 02261		COM	ED	1	2	2	29	21S	24E	545598	3591170*		20	
C 02261		PRO	ED	1	2	2	29	21S	24E	545598	3591170*		20	
C 02261		PUB	ED	1	2	2	29	21S	24E	545598	3591170*		20	
C 02320		STK	ED	2	2	3	25	21S	24E	551425	3590398*	400		
C 02321		STK	ED	2	2	4	25	21S	24E	552226	3590381*	500		
C 02398		DOM	ED			4	23	21S	24E	550310	3591692*	133	50	83
C 02489		STK	ED	1	1	4	02	21S	24E	549942	3596888*	480	260	220
C 02701		COM	ED	3	3	3	20	21S	24E	544393	3591373*	230	90	140

Average Depth to Water: **87 feet**
Minimum Depth: **20 feet**
Maximum Depth: **260 feet**

Record Count: 13

PLSS Search:

Township: 21S Range: 24E

***UTM location was derived from PLSS - see Help**

Analytical Report 355465

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy USA

Two Marks 36 State # 1

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: **355465**
Oxy USA
Project Address: Two Marks 36 State # 1

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 355465. 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. 355465 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 355465

Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP 1 @ 1'	S	Dec-09-09 13:00	12 In	355465-001
TP 2 @ 6"	S	Dec-09-09 13:30	6 In	355465-002
TP 3 @ 6"	S	Dec-09-09 17:00	6 In	355465-003
TP 4 @ 3"	S	Dec-09-09 15:40	3 In	355465-004
TP 5 @ 6"	S	Dec-09-09 16:00	6 In	355465-005

CASE NARRATIVE

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

Project ID: *Two Marks 36 State # 1* *Report Date:* *16-DEC-09*
Work Order Number: *355465* *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-785679 Percent Moisture
None

Batch: LBA-785867 Anions by E300
None

Batch: LBA-785893 TPH By SW8015 Mod
None

Certificate of Analysis Summary 355465

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA

Project Id: Two Marks 36 State # 1
Contact: Logan Anderson
Project Location: Two Marks 36 State # 1

Date Received in Lab: Mon Dec-14-09 09:00 am
Report Date: 16-DEC-09
Project Manager: Brent Barron, II

Analysis Requested																	
	Lab Id:	355465-001				355465-002				355465-003				355465-004			
	Field Id:	TP 1 @ 1'				TP 2 @ 6"				TP 3 @ 6"				TP 4 @ 3"			
	Depth:	12 In				6 In				6 In				3 In			
	Matrix:	SOIL				SOIL				SOIL				SOIL			
	Sampled:	Dec-09-09 13:00				Dec-09-09 13:30				Dec-09-09 17:00				Dec-09-09 15:40			
Anions by E300	*Extracted:*																
	Analyzed:	Dec-15-09 09:57				Dec-15-09 09:57				Dec-15-09 09:57				Dec-15-09 09:57			
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL			mg/kg	RL		
Chloride		254	9.51			654	9.93			423	25.5			573	20.3		
Percent Moisture	*Extracted:*																
	Analyzed:	Dec-14-09 17:00				Dec-14-09 17:00				Dec-14-09 17:00				Dec-14-09 17:00			
	Units/RL:	%	RL			%	RL			%	RL			%	RL		
Percent Moisture		11.7	1.00			15.4	1.00			17.7	1.00			17.2	1.00		
TPH By SW8015 Mod	*Extracted:*	Dec-14-09 11:00				Dec-14-09 11:00				Dec-14-09 11:00				Dec-14-09 11:00			
	Analyzed:	Dec-16-09 04:32				Dec-16-09 04:59				Dec-16-09 05:25				Dec-16-09 05:52			
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL			mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		ND	17.0			ND	17.7			21.7	18.1			ND	18.0		
C12-C28 Diesel Range Hydrocarbons		ND	17.0			ND	17.7			19.2	18.1			18.9	18.0		
C28-C35 Oil Range Hydrocarbons		ND	17.0			ND	17.7			ND	18.1			ND	18.0		
Total TPH		ND	17.0			ND	17.7			40.9	18.1			18.9	18.0		

	Lab Id:	355465-005							
	Field Id:	TP 5 @ 6"							
	Depth:	6 In							
	Matrix:	SOIL							
	Sampled:	Dec-09-09 16:00							
Anions by E300	*Extracted:*								
	Analyzed:	Dec-15-09 09:57							
	Units/RL:	mg/kg	RL						
Chloride		528	20.3						
Percent Moisture	*Extracted:*								
	Analyzed:	Dec-14-09 17:00							
	Units/RL:	%	RL						
Percent Moisture		17.4	1.00						
TPH By SW8015 Mod	*Extracted:*	Dec-14-09 11:00							
	Analyzed:	Dec-16-09 06:18							
	Units/RL:	mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	18.1						
C12-C28 Diesel Range Hydrocarbons		ND	18.1						
C28-C35 Oil Range Hydrocarbons		ND	18.1						
Total TPH		ND	18.1						

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.

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 355465,

Project ID: Two Marks 36 State # 1

Lab Batch #: 785893 **Sample:** 545602-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/15/09 21:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.6	108	70-135	
o-Terphenyl	56.0	49.8	112	70-135	

Lab Batch #: 785893 **Sample:** 355465-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 04:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	53.5	50.0	107	70-135	

Lab Batch #: 785893 **Sample:** 355465-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 04:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY 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	

* 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 : 355465,

Project ID: Two Marks 36 State # 1

Lab Batch #: 785893 **Sample:** 355465-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 05:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.5	110	70-135	
o-Terphenyl	55.5	49.8	111	70-135	

Lab Batch #: 785893 **Sample:** 355465-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 05:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.5	106	70-135	
o-Terphenyl	54.4	49.8	109	70-135	

Lab Batch #: 785893 **Sample:** 355465-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 06:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	56.7	50.0	113	70-135	

Lab Batch #: 785893 **Sample:** 355462-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/16/09 06:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY 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 #: 355465 **Project ID:** Two Marks 36 State # 1

Lab Batch #: 785867 **Sample:** 785867-1-BKS **Matrix:** Solid

Date Analyzed: 12/15/2009 **Date Prepared:** 12/15/2009 **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	10.4	104	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 #: 355465 **Project ID:** Two Marks 36 State # 1

Analyst: BEV **Date Prepared:** 12/14/2009 **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 **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	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 #: 355465
Lab Batch #: 785867
Project ID: Two Marks 36 State # 1
Date Analyzed: 12/15/2009
Date Prepared: 12/15/2009
Analyst: LATCOR
QC- Sample ID: 355465-001 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	254	226	471	96	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 # : 355465 **Project ID:** Two Marks 36 State # 1

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

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

Relative Percent Difference RPD = 200|(C-F)/(C+F)|*

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

Sample Duplicate Recovery

Project Name: Oxy USA

Work Order #: 355465

Lab Batch #: 785867 **Project ID:** Two Marks 36 State # 1

Date Analyzed: 12/15/2009 **Date Prepared:** 12/15/2009 **Analyst:** LATCOR

QC- Sample ID: 355465-001 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	254	256	1	20	

Lab Batch #: 785679

Date Analyzed: 12/14/2009 **Date Prepared:** 12/14/2009 **Analyst:** WRU

QC- Sample ID: 355465-001 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	11.7	11.2	4	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: Two Marks 36 State #1
PO#: Battery
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 355465

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) 8015M 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-Schedule) 24, 48, 72 hrs	Standard TAT
01	TP1 @ 1'		12"	12/9/09	2:00P		1	X								S	X			X								X
02	TP2 @ 6"		6"	12/9/09	1:30P		1	X								S	X			X								X
03	TP3 @ 6"		6"	12/9/09	5:00P		1	X								S	X			X								X
04	TP4 @ 3"		3"	12/9/09	3:40P		1	X								S	X			X								X
05	TP5 @ 6"		6"	12/9/09	4:00P		1	X								S	X			X								X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	12/14	9:00			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Amy R S.	12/14	9:00

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: 4.0°C 9.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Environmental

Date/ Time: 12/14/09 9:00

Lab ID #: 355~~60~~465

Initials: AS

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	0.1 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	(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

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