Remediation Plan

Prepared for
Oxy USA

Vortec 27 #1 Battery
Eddy County, NM

2RP-320

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

June 25, 2009

New Mexico Oil Conservation Division
Mr. Mike Bratcher
1301 West Grand Ave.
Artesia, New Mexico 88210

Re: Remediation Plan for Spill
Oxy USA – Vortec 27 #1 Battery
UL'A' Sec. 27 T24S R29E Eddy County
2RP-320

Mr. Mike Bratcher,

Elke Environmental was contracted by Oxy USA to complete the remediation of the spill at the Vortec 27 #1 Battery. A delineation of the site was completed using a backhoe. During the vertical delineation the chloride levels dropped quickly from Surface to 2' bgs, then the levels rose quickly from 2' to 4' bgs. A background sample was obtained at depths of Surface, 2' and 4'. The chloride levels in the background samples showed higher levels than in the battery. Samples were sent to the lab for confirmations at the 2' depths in the battery and the highest background. The following is the ranking criteria for the site: Wellhead Protection Area – 0 points, Surface Body of Water – 0 points and Groundwater (< 50') – 20 points. The RAL's for the site are 100 ppm - TPH 8015M, 100 ppm - BTEX (Using field vapor headspace measurement) and Chlorides are to be less than background levels. Attached is a plat map, field analytical and lab confirmations for the site.

Oxy USA proposes to excavate 2' of impacted soil and blend with clean soil to below the RAL's and backfill the blended soil into the excavation. A final report will be submitted at the completion of the remediation. If you have any questions about the enclosed report please contact me at the office.

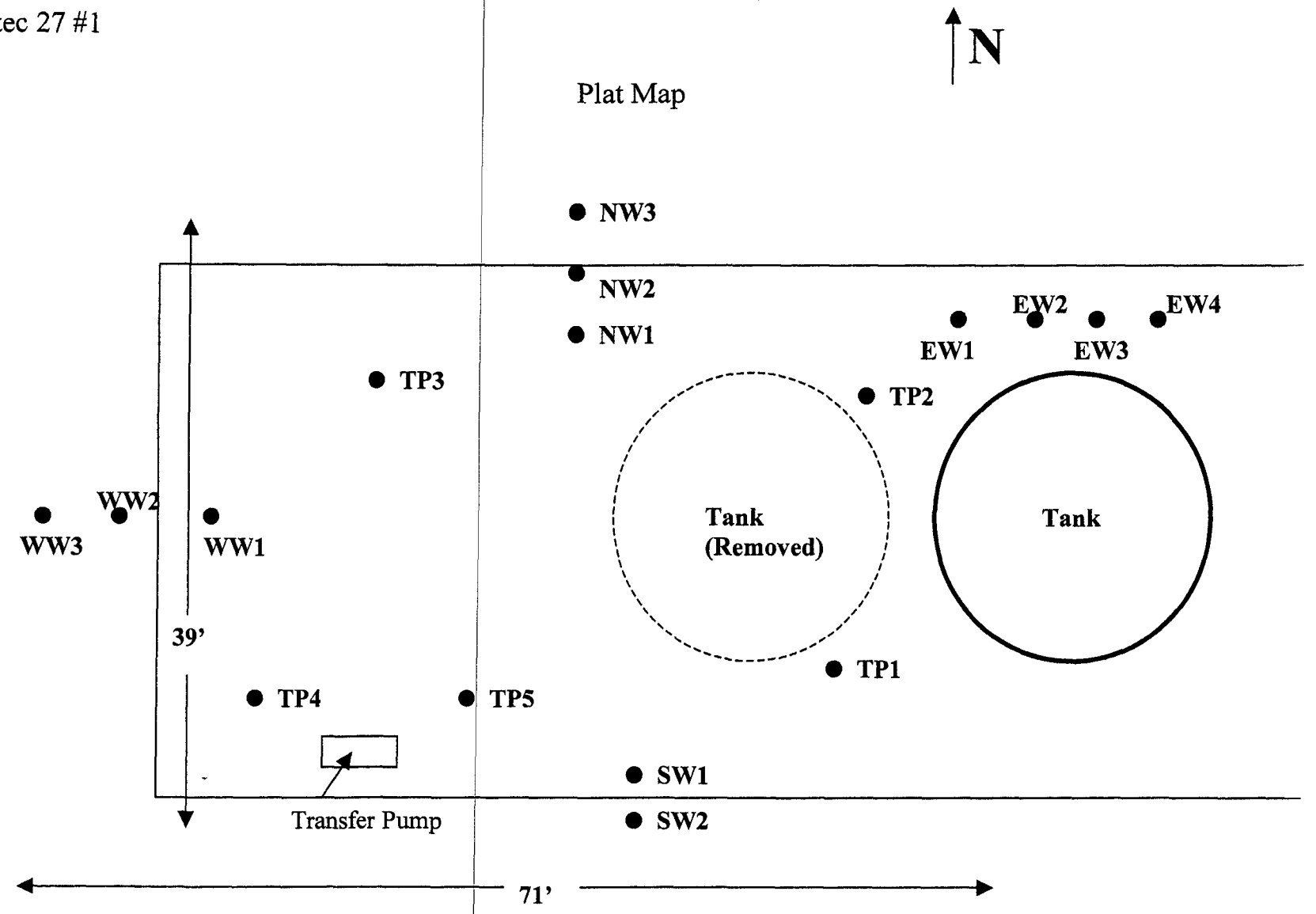
Sincerely,

Logan Anderson

DENIED
JUL 20 2009

Oxy USA
Vortec 27 #1

Plat Map



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

Field Analytical Report Form

Client Oxy USA **Analyst** Robert Spangler

Site Vortec 27 #1

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP1	6-4-09	Surface	40,000	6,107		32° 11.600' N 103° 57.907' W
TP1	6-4-09	2'	49	839	0.1	32° 11.600' N 103° 57.907' W
TP1	6-4-09	4'		5,289		32° 11.600' N 103° 57.907' W
TP2	6-4-09	Surface	36,200	5,112		32° 11.603' N 103° 57.907' W
TP2	6-4-09	2'	105	769	0.3	32° 11.603' N 103° 57.907' W
TP2	6-4-09	4'		3,598		32° 11.603' N 103° 57.907' W
TP3	6-4-09	Surface	8,000	3,651		32° 11.603' N 103° 57.912' W
TP3	6-4-09	2'	65	239	0.0	32° 11.603' N 103° 57.912' W
TP3	6-4-09	4'		4,985		32° 11.603' N 103° 57.912' W
TP4	6-4-09	Surface	41,682	4,557		32° 11.601' N 103° 57.915' W
TP4	6-4-09	2'	65	899	0.0	32° 11.601' N 103° 57.915' W
TP4	6-4-09	4'		3,448		32° 11.601' N 103° 57.915' W
TP5	6-4-09	Surface	49,858	911		32° 11.601' N 103° 57.910' W
TP5	6-4-09	2'	57	2,999	0.0	32° 11.601' N 103° 57.910' W
TP5	6-4-09	4'		5,489		32° 11.601' N 103° 57.910' W

Analyst Notes _____

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

Field Analytical Report Form

Client Oxy USA **Analyst** Robert Spangler

Site Vortec 27 #1

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
EW #1	6-4-09	Surface		893		32° 11.603' N 103° 57.907' W
EW #2	6-4-09	Surface		595		32° 11.604' N 103° 57.904' W
EW #3	6-4-09	Surface		899		32° 11.604' N 103° 57.903' W
EW #4	6-4-09	Surface	21	439	0.0	32° 11.604' N 103° 57.902' W
NW #1	6-4-09	Surface		2,489		32° 11.602' N 103° 57.912' W
NW #2	6-4-09	Surface		593		32° 11.604' N 103° 57.912' W
NW #3	6-4-09	Surface	56	320	0.0	32° 11.605' N 103° 57.913' W
WW #1	6-4-09	Surface		1,383		32° 11.601' N 103° 57.918' W
WW #2	6-4-09	Surface		754		32° 11.601' N 103° 57.919' W
WW #3	6-4-09	Surface	61	320	0.0	32° 11.601' N 103° 57.920' W
SW #1	6-4-09	Surface		4,664		32° 11.598' N 103° 57.911' W
SW #2	6-4-09	Surface	47	451	0.0	32° 11.598' N 103° 57.911' W
Background	6-4-09	Surface		449		32° 11.590' N 103° 57.914' W
Background	6-4-09	2'		923		32° 11.590' N 103° 57.914' W
Background	6-4-09	4'		5,548		32° 11.590' N 103° 57.914' W

Analyst Notes Background is 100' South of Battery. EW is East Wall.

Analytical Report 335099

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy

Voetec 27 # 1

17-JUN-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX
Corpus Christi, TX T104704370-08-TX - Dallas, TX T104704295-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

17-JUN-09

Project Manager: **Logan Anderson**
Elke Environmental, Inc.
4817 Andrews Hwy
P.O. Box 14167 Odessa, tx 79768
Odessa, TX 79762

Reference: XENCO Report No: **335099**
Oxy
Project Address:

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 335099. 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. 335099 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 335099

Elke Environmental, Inc., Odessa, TX

Oxy

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Background @ 4'	S	Jun-04-09 14:45	4 ft	335099-001
TP 1 @ 2'	S	Jun-04-09 15:45	2 ft	335099-002
TP 2 @ 2'	S	Jun-04-09 16:15	2 ft	335099-003
TP 3 @ 2'	S	Jun-04-09 16:45	2 ft	335099-004
TP 4 @ 2'	S	Jun-04-09 17:25	2 ft	335099-005
TP 5 @ 2'	S	Jun-04-09 17:40	2 ft	335099-006

CASE NARRATIVE

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

Project ID: *Voetec 27 # 1* *Report Date:* *17-JUN-09*
Work Order Number: *335099* *Date Received:* *06/10/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-762045 Percent Moisture
None

Batch: LBA-762052 TPH by SW8015 Mod
None

Batch: LBA-762098 Inorganic Anions by EPA 300
None

Batch: LBA-762368 TX1005
None

Certificate of Analysis Summary 335099

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy

Project Id: Voetec 27 # 1
Contact: Logan Anderson
Project Location:

Date Received in Lab: Wed Jun-10-09 03:48 pm
Report Date: 17-JUN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	335099-001		335099-002		335099-003		335099-004		335099-005		335099-006	
	Field Id:	Background @ 4'		TP 1 @ 2'		TP 2 @ 2'		TP 3 @ 2'		TP 4 @ 2'		TP 5 @ 2'	
	Depth:	4 ft		2 ft		2 ft		2 ft		2 ft		2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-04-09 14:45		Jun-04-09 15:45		Jun-04-09 16:15		Jun-04-09 16:45		Jun-04-09 17:25		Jun-04-09 17:40	
Anions by EPA 300	***Extracted:***												
	Analyzed:	Jun-11-09 12:00		Jun-11-09 12:00		Jun-11-09 12:00		Jun-11-09 12:00		Jun-11-09 12:00		Jun-11-09 12:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6130	114	946	59.6	2210	61.0	817	59.3	650	58.5	5210	117
Percent Moisture	***Extracted:***												
	Analyzed:	Jun-12-09 08:45		Jun-12-09 08:45		Jun-12-09 08:45		Jun-12-09 08:45		Jun-12-09 08:45		Jun-12-09 08:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		12.50	1.00	16.05	1.00	18.05	1.00	15.74	1.00	14.58	1.00	14.81	1.00
TPH By SW8015 Mod	***Extracted:***	Jun-11-09 11:32		Jun-11-09 11:32		Jun-11-09 11:32		Jun-15-09 10:17		Jun-15-09 10:17		Jun-15-09 10:17	
	Analyzed:	Jun-11-09 20:24		Jun-11-09 20:46		Jun-11-09 21:09		Jun-15-09 11:36		Jun-15-09 12:00		Jun-15-09 12:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	17.1	ND	17.9	ND	18.2	ND	17.7	ND	17.6	ND	17.5
C12-C28 Diesel Range Hydrocarbons		ND	17.1	ND	17.9	ND	18.2	ND	17.7	ND	17.6	ND	17.5
C28-C35 Oil Range Hydrocarbons		ND	17.1	ND	17.9	ND	18.2	ND	17.7	ND	17.6	ND	17.5
Total TPH		ND	17.1	ND	17.9	ND	18.2	ND	17.7	ND	17.6	ND	17.5

Brent Barron
Odessa Laboratory Director

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

Work Orders : 335099,

Project ID: Voetec 27 # 1

Lab Batch #: 762052 **Sample:** 531713-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/11/09 12:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.2	99.9	77	70-135	
o-Terphenyl	35.3	50.0	71	70-135	

Lab Batch #: 762052 **Sample:** 531713-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/11/09 12:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.3	100	81	70-135	
o-Terphenyl	35.6	50.0	71	70-135	

Lab Batch #: 762052 **Sample:** 531713-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/11/09 13:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.4	100	81	70-135	
o-Terphenyl	41.4	50.0	83	70-135	

Lab Batch #: 762052 **Sample:** 335099-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/11/09 20:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.0	100	84	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 762052 **Sample:** 335099-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/11/09 20:46

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	100	88	70-135	
o-Terphenyl	42.8	50.0	86	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

Work Orders : 335099,

Project ID: Voetec 27 # 1

Lab Batch #: 762052 **Sample:** 335099-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/11/09 21:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.8	99.5	86	70-135	
o-Terphenyl	41.3	49.8	83	70-135	

Lab Batch #: 762052 **Sample:** 335099-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/11/09 21:31

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	41.1	50.0	82	70-135	

Lab Batch #: 762052 **Sample:** 335099-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/11/09 21:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	100	95	70-135	
o-Terphenyl	41.6	50.0	83	70-135	

Lab Batch #: 762368 **Sample:** 531886-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/09 10:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.6	100	99	70-135	
o-Terphenyl	39.9	50.0	80	70-135	

Lab Batch #: 762368 **Sample:** 531886-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/09 10:50

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	38.9	50.0	78	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

Work Orders : 335099,

Project ID: Voetec 27 # 1

Lab Batch #: 762368 **Sample:** 531886-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/15/09 11:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.9	100	88	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 762368 **Sample:** 335099-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/09 11:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.8	99.5	87	70-135	
o-Terphenyl	43.2	49.8	87	70-135	

Lab Batch #: 762368 **Sample:** 335099-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/09 12:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.7	100	90	70-135	
o-Terphenyl	43.3	50.0	87	70-135	

Lab Batch #: 762368 **Sample:** 335099-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/09 12:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.0	99.5	87	70-135	
o-Terphenyl	43.3	49.8	87	70-135	

Lab Batch #: 762368 **Sample:** 335298-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/09 19:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	40.9	50.0	82	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

Work Orders : 335099,

Project ID: Voetec 27 # 1

Lab Batch #: 762368 **Sample:** 335298-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/15/09 20:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.9	106	70-135	
o-Terphenyl	39.9	50.0	80	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

Work Order #: 335099 **Project ID:** Voetec 27 # 1

Lab Batch #: 762098 **Sample:** 762098-1-BKS **Matrix:** Solid

Date Analyzed: 06/11/2009 **Date Prepared:** 06/11/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY						
Anions by EPA 300 **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
Chloride	ND	10.0	9.29	93	90-110	

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

Work Order #: 335099 **Project ID:** Voetec 27 # 1

Analyst: BHW **Date Prepared:** 06/11/2009 **Date Analyzed:** 06/11/2009

Lab Batch ID: 762052 **Sample:** 531713-1-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	999	704	70	1000	710	71	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	999	811	81	1000	820	82	1	70-135	35	

Analyst: BHW **Date Prepared:** 06/15/2009 **Date Analyzed:** 06/15/2009

Lab Batch ID: 762368 **Sample:** 531886-1-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	1000	812	81	1000	831	83	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1000	100	1000	1020	102	2	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

Work Order #: 335099

Lab Batch #: 762098

Project ID: Voetec 27 # 1

Date Analyzed: 06/11/2009

Date Prepared: 06/11/2009

Analyst: LATCOR

QC- Sample ID: 335099-001 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	6130	2290	8430	100	80-120	

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

Work Order # : 335099 **Project ID:** Voetec 27 # 1

Lab Batch ID: 762052 **QC- Sample ID:** 335099-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/11/2009 **Date Prepared:** 06/11/2009 **Analyst:** BHW

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	927	81	1140	909	80	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1140	1160	102	1140	1160	102	0	70-135	35	

Lab Batch ID: 762368 **QC- Sample ID:** 335298-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/15/2009 **Date Prepared:** 06/15/2009 **Analyst:** BHW

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	1090	914	84	1080	924	86	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1090	1130	104	1080	1140	106	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: Oxy

Work Order #: 335099

Lab Batch #: 762098 **Project ID:** Voetec 27 # 1

Date Analyzed: 06/11/2009 **Date Prepared:** 06/11/2009 **Analyst:** LATCOR

QC- Sample ID: 335099-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	6130	6200	1	20	

Lab Batch #: 762045

Date Analyzed: 06/12/2009 **Date Prepared:** 06/12/2009 **Analyst:** BEV

QC- Sample ID: 335099-001 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	12.5	12.7	1	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
Project Name: Oxy
Company Name: Elke Environmental
Project #: Vivetec 27 # 2
Company Address: P O Box 14167
Project Loc:
City/State/Zip: Odessa, TX 79768
PO #:
Telephone No: 432-366-0043
Fax No: 432-366-0884
Report Format: ☑ Standard ☐ TRRP ☐ NPDES
Sampler Signature:
e-mail: la_elkeenv@yahoo.com

(lab use only)
ORDER #: 335099

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: Drinking Water (DW) / Ground Water (GW) / Wastewater (WW) / Sludge (SL) / Other (Specify)	Analyze For: TCLP: TPH: 418.1 / 8015C	TOTAL: TPH: TX 1005	TX 1005	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	BackGround @ 4'		4'	6-4-09	2:45		1	X								S	X		X													X
02	TP1 @ 2'		2'	6-4-09	3:45		1	X								S	X		X													X	X
03	TP2 @ 2'		2'	6-4-09	4:15		1	X								S	X		X													X	X
04	TP3 @ 2'		2'	6-4-09	4:45		1	X								S	X		X													X	X
05	TP4 @ 2'		2'	6-4-09	5:25		1	X								S	X		X													X	X
06	TP5 @ 2'		2'	6-4-09	5:40		1	X								S	X		X													X	X

Special Instructions:

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered N
by Sampler/Client Rep. ? N
by Courier? UPS DHL FedEx Lone Star
6-4027915
Temperature Upon Receipt: 3.1 °C

Relinquished by	Date	Time	Received by:	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date 6-10-09	Time 3:48	Received by ELOT: Andrea Sam	Date 6-10-09	Time 15:48

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.

Date/ Time: 6.10.09 15:48

Lab ID #: 335099

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.1 °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

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

MAY 15 2009

Form C-141
Revised October 10, 2003

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

30-015-35041

nMLB0917435715

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company OXY USA 16696	Contact Kelton Beaird
Address 102 S Main Carlsbad, NM 88220	Telephone No. (O) 505-887-8337 C) 575-390-1903
Facility Name Vortec 27-1	Facility Type Well with battery

Surface Owner State	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
A	27	24S	29E	660	N	330	E	Eddy

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 10bbls.	Volume Recovered 2bbls.
Source of Release Tank Battery	Date and Hour of Occurrence	Date and Hour of Discovery 5-12-09 9:00am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher-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.*

Describe Cause of Problem and Remedial Action Taken.*
Corrosion at the bottom of the tank was the root cause. Pumper called for a vac-truck and all standing fluid was picked up.

Describe Area Affected and Cleanup Action Taken.*
The area affected was inside the firewall. Delineation will be performed to determine the extent of the chloride contamination. TPH and BTEX samples will be taken for verification purposes.

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: 5-13-09

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By: Mike Bratcher

Approval Date: JUN 23 2009 Expiration Date:

Conditions of Approval: Attached ☒

REMEDIATION per OCD Rules and Guidelines. SUBMIT REMEDIATION PROPOSAL BY: 7/23/09

2RP-320

* Attach Additional Sheets If Necessary

nMLB0917436223

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company – OXY USA	Contact – Kelton Beaird
Address – P O Box 1988 / 102 South Main St Carlsbad, NM	Telephone No. – 575-887-8337
Facility Name – Vortec 27 #1 Battery	Facility Type – Well with Battery

Surface Owner – State	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
A	27	24S	29E	660	North	330	East	Eddy

Latitude 32° 11.600' N **Longitude** 103° 57.907' W

NATURE OF RELEASE

Type of Release – Produced Water	Volume of Release - 10 bbls	Volume Recovered – 2 bbls
Source of Release – Tank Battery	Date and Hour of Occurrence	Date and Hour of Discovery – 5-12-09 9:00am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher – NMOCD	
By Whom? – Kelton Beaird - Oxy	Date and Hour – Same as above	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Corrosion at the bottom of the tank was the root cause. Pumper called for a vac-truck and all standing fluid was picked up. Spill was contained within the battery. The battery was delineated using field analysis. Confirmation samples were taken to the lab. The groundwater in the surrounding area shows < 50' using the SEO data and the ChevronTexaco groundwater map. The following are the Recommended Action Levels for the site : Chloride – Less than Background Levels, TPH – 100 ppm, BTEX – 100 ppm(field vapor headspace analysis).

Describe Area Affected and Cleanup Action Taken.* The remediation plan is the excavate 2' of impacted soil and blend with clean soil to below the RAL's. Once the RAL's have been achieved the blended 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:

Printed Name: Kelton Beaird

Title: HES Specialist

E-mail Address: kelton_beaird@oxy.com

Date: 6-25-09 Phone: 575-887-8337

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary