

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

OCT 26 2009
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	Telephone No. (O) 575-628-4121 C) 575-390-1903
Facility Name State CL Lease	Facility Type Tank Battery

Surface Owner State	Mineral Owner	Lease No. 30-025-01576
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	2	18S	33E					Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 20 bbls.	Volume Recovered 10bbls.
Source of Release Tank	Date and Hour of Occurrence	Date and Hour of Discovery 8-28-09 @ 10:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson (NMOCD)-left message	
By Whom? Kelton Beaird (HES)	Date and Hour See above	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

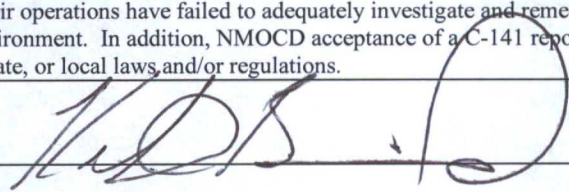
Describe Cause of Problem and Remedial Action Taken.*

The water-transfer pump failed causing the tank to overflow produced water out of the tank A vac-truck was called to pick up all remaining fluid

Describe Area Affected and Cleanup Action Taken.*

Area affected was inside of the containment area. Delineation was performed and no further contamination was caused, therefore we will continue with the approved work plan already approved from the first spill.

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: 		OIL CONSERVATION DIVISION	
Printed Name: Kelton Beaird		Approved by District Supervisor:	
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: kelton_beaird@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8-28-09			

* Attach Additional Sheets If Necessary

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Release Notification and Corrective Action

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 State CL Lease	Facility Type Tank Battery

Surface Owner State	Mineral Owner	Lease No. - 30-025-01576
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	2	18S	33E					Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 116 bbls.	Volume Recovered 60 bbls.
Source of Release Steel Circulating Line	Date and Hour of Occurrence	Date and Hour of Discovery 7-9-09 @ 12:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson (NMOCD)	
By Whom? Kelton Beaird (HES)	Date and Hour See above	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

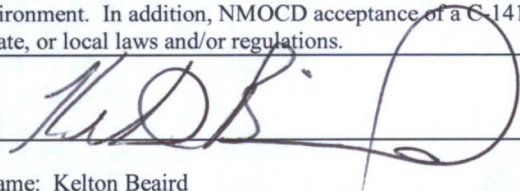
Describe Cause of Problem and Remedial Action Taken.*

The circulating line coming out of the oil tank into the pump corroded causing crude oil to leak. A vac-truck was called to pick up all remaining fluid

Describe Area Affected and Cleanup Action Taken.*

All contaminated material was removed per NMOCD standards.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Kelton Beaird	Approved by District Supervisor:		
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: kelton_beaird@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10-22-09			

* Attach Additional Sheets If Necessary

IRP-09.7-2228

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side of form

Release Notification and Corrective Action UPDATED

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company – OXY USA	Contact – Kelton Beaird	
Address – P O Box 1988 / 1502 W. Commerce Carlsbad, NM	Telephone No. – 575-887-8337	
Facility Name – State CL Battery	Facility Type – Flowline	
Surface Owner – State	Mineral Owner	Lease No. – 30-025-01576

LOCATION OF RELEASE

Unit Letter A	Section 2	Township 18S	Range 33E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude 32° 46.957' N Longitude 103° 38.170' W

NATURE OF RELEASE

Type of Release – Crude Oil	Volume of Release 116 bbls	Volume Recovered – 60 bbls
Source of Release – Steel Circulating Line	Date and Hour of Occurrence –	Date and Hour of Discovery 7-9-09 @ 12:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson – NMOCD	
By Whom? – Kelton Beaird – HES Oxy	Date and Hour – see above	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*


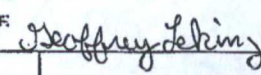
Describe Cause of Problem and Remedial Action Taken.* The circulating line coming out of the oil tank into the pump corroded causing crude oil to leak. A vac-truck was called to pick up all remaining fluid. The spill was contained inside the berms of the battery. A vertical and horizontal delineation of the site was completed 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. Attached is a plat map, field analytical and lab confirmation for the site.

GW @ 130'

Describe Area Affected and Cleanup Action Taken.* The remediation will be to excavate all impacted soil, which is 18" at TP3 and TP5 and 24" at TP4, and haul to Lea Land Disposal. The excavation will be backfilled with clean native soil. The site will not be re-seeded since the site is a caliche pad for a battery. A final report will be submitted at the completion of the remediation. A final report will be submitted at the completion of the project.

Hobbs NMOCD will be notified before start of job and before backfill of the clean soil.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Logan Anderson	ENV ENGINEER Approved by District Supervisor: 	
Title: Consultant	Approval Date: 08/26/09	Expiration Date: 09/14/09
E-mail Address: la_elkeenv@yahoo.com	Conditions of Approval: SUBMIT FINAL C-141 BY 09/14/09	Attached <input type="checkbox"/>
Date 8-18-09	Phone: 432-664-1269	IRP-09-7-2228

* Attach Additional Sheets If Necessary

RECEIVED

OCT 26 2009

HOBBSOCD

Oxy USA
Closure Document
State-CL #2 CTB
Sec. 2 T18S-R33E

Prepared by:
Kelton Beaird-HES Specialist
Occidental Petroleum
Mid-Continent Business Unit
Southwest Asset
Carlsbad, NM
(575)-628-4121

Introduction

This closing document addresses the closure for two releases at the State CL Tank Battery located in Lea County, New Mexico. Spill information is attached to this report in later pages. Elke environmental was the contractor hired to complete the delineation process and Gandy's was the contractor hired by Oxy to complete the excavation.

Area Description

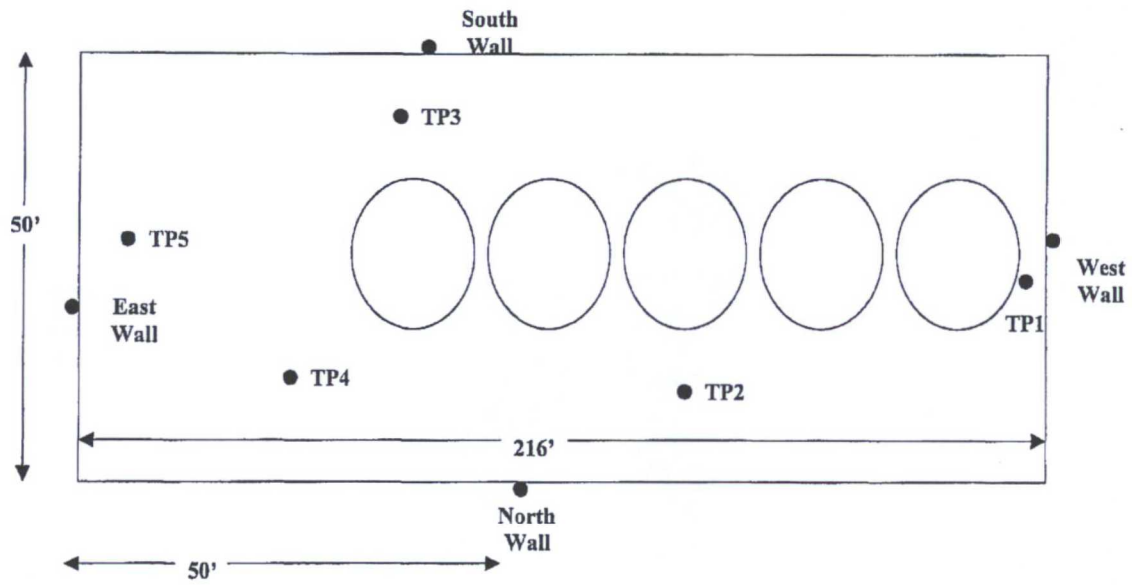
This area mainly consist of a hard caliche surface. There are no waterwells or surface bodies of water located within 0.5 miles of this location. According to the Chevron Water Map, groundwater is in excess of 100 feet below ground surface.

Clean-up Process

All contamination on this site was completely removed per standards set by the NMOCD. Delineation was performed after the second spill to re-assure that contamination did not travel any further. The affected area was excavated to 18" below ground surface at TP3 and TP5, and 24" at TP 4. All contaminated material was hauled to Lea Land Disposal. The excavated area was then backfilled with clean caliche. Re-seeding was not necessary, due to this being an active site. Analytical data, pictures and the final C-141 document is attached to this closure report.

Oxy USA
State CL Battery

Plat Map



Analytical Report 340235

for

Elke Environmental, Inc.

Project Manager: Logan Anderson

Oxy USA

State CL Tank Battery

12-AUG-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 (E87428), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

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

Xenco-Miramar (EPA Lab code: FL01246): Florida (E86349)

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)

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



12-AUG-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: **340235**
Oxy USA
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 340235. 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. 340235 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II

Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



Sample Cross Reference 340235



Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP # 1 @ Surface	S	Aug-06-09 14:20	0 - 0 ft	340235-001
TP # 2 @ Surface	S	Aug-06-09 13:50	0 - 0 ft	340235-002
TP # 3 @ 18"	S	Aug-06-09 13:30	0 - 18 In	340235-003
TP # 4 @ 18"	S	Aug-06-09 11:30	0 - 18 In	340235-004
TP # 5 @ 18"	S	Aug-06-09 10:30	0 - 18 In	340235-005

Certificate of Analysis Summary 340235

Elke Environmental, Inc., Odessa, TX



Project Id: State CL Tank Battery
Contact: Logan Anderson
Project Location:


Date Received in Lab: Fri Aug-07-09 01:44 pm
Report Date: 12-AUG-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	340235-001	340235-002	340235-003	340235-004	340235-005
	Field Id:	TP # 1 @ Surface	TP # 2 @ Surface	TP # 3 @ 18"	TP # 4 @ 18"	TP # 5 @ 18"
	Depth:	0-0 ft	0-0 ft	0-18 In	0-18 In	0-18 In
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Aug-06-09 14:20	Aug-06-09 13:50	Aug-06-09 13:30	Aug-06-09 11:30	Aug-06-09 10:30
Anions by EPA 300	Extracted:					
	Analyzed:	Aug-08-09 11:47	Aug-08-09 12:25	Aug-08-09 12:38	Aug-08-09 12:51	Aug-08-09 13:03
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		ND 5.40	8.61 5.29	74.8 5.44	480 10.9	87.7 5.09
Percent Moisture	Extracted:					
	Analyzed:	Aug-10-09 09:02	Aug-10-09 09:02	Aug-10-09 09:02	Aug-10-09 09:02	Aug-10-09 09:02
	Units/RL:	% RL	% RL	% RL	% RL	% RL
Percent Moisture		7.36 1.00	5.47 1.00	8.10 1.00	8.61 1.00	1.86 1.00
TPH By SW8015 Mod	Extracted:					
	Analyzed:	Aug-10-09 09:42	Aug-10-09 09:42	Aug-10-09 09:42	Aug-10-09 09:42	Aug-10-09 09:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 80.6	17.8 15.9	327 16.3	617 82.1	ND 15.3
C12-C28 Diesel Range Hydrocarbons		665 80.6	604 15.9	2910 16.3	4950 82.1	51.0 15.3
C28-C35 Oil Range Hydrocarbons		285 80.6	204 15.9	236 16.3	467 82.1	17.8 15.3
Total TPH		950 80.6	826 15.9	3473 16.3	6034 82.1	68.8 15.3

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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


 Brent Barron, II
 Odessa Laboratory Manager



Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 340235,

Project ID: State CL Tank Battery

Lab Batch #: 768150

Sample: 535087-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/10/09 11:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 768150

Sample: 535087-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/10/09 11:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	43.5	50.0	87	70-135	

Lab Batch #: 768150

Sample: 535087-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/10/09 12:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	87.1	100	87	70-135	
o-Terphenyl	46.5	50.0	93	70-135	

Lab Batch #: 768150

Sample: 340235-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 19:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	86.2	99.6	87	70-135	
o-Terphenyl	45.8	49.8	92	70-135	

Lab Batch #: 768150

Sample: 340235-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 19:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	82.0	100	82	70-135	
o-Terphenyl	42.7	50.0	85	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 : 340235,

Project ID: State CL Tank Battery

Lab Batch #: 768150

Sample: 340235-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 19:55

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	97.0	100	97	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 768150

Sample: 340235-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 20:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.5	100	97	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 768150

Sample: 340235-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 20:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	88.3	100	88	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

Lab Batch #: 768150

Sample: 339957-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 21:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 768150

Sample: 339957-003 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/10/09 21:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	45.6	50.0	91	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 #: 340235

Project ID: State CL Tank Battery

Lab Batch #: 768018

Sample: 768018-1-BKS

Matrix: Solid

Date Analyzed: 08/08/2009

Date Prepared: 08/08/2009

Analyst: BRB

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	10.0	100	80-120	

Blank Spike Recovery $[D] = 100 * [C] / [B]$

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

BRL - Below Reporting Limit

Project Name: Oxy USA

Work Order #: 340235

Analyst: BHW

Lab Batch ID: 768150

Sample: 535087-1-BKS

Date Prepared: 08/10/2009

Batch #: 1

Project ID: State CL Tank Battery

Date Analyzed: 08/10/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg												
TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C12 Gasoline Range Hydrocarbons		ND	1000	859	86	1000	843	84	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons		ND	1000	881	88	1000	889	89	1	70-135	35	

Analytes

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 #: 340235

Lab Batch #: 768018

Date Analyzed: 08/08/2009

Date Prepared: 08/08/2009

Project ID: State CL Tank Battery

Analyst: BRB

QC- Sample ID: 340235-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	ND	108	108	100	80-120	

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

BRL - Below Reporting Limit

Project Name: Oxy USA

Work Order # : 340235

Lab Batch ID: 768150

Date Analyzed: 08/10/2009

Reporting Units: mg/kg

Project ID: State CL Tank Battery

QC- Sample ID: 339957-003 S

Date Prepared: 08/10/2009

Batch #: 1

Matrix: Soil

Analyst: BHW

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Reporting Units: mg/kg	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 %RPD	Flag
	C6-C12 Gasoline Range Hydrocarbons	ND	1050	952	91	1050	958	91	1	70-135	35
	C12-C28 Diesel Range Hydrocarbons	ND	1050	1000	95	1050	1020	97	2	70-135	35

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

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



Sample Duplicate Recovery



Project Name: Oxy USA

Work Order #: 340235

Lab Batch #: 768018

Date Analyzed: 08/08/2009

QC- Sample ID: 340235-001 D

Reporting Units: mg/kg

Project ID: State CL Tank Battery

Analyst: BRB

Date Prepared: 08/08/2009

Batch #: 1

Matrix: Soil

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

Lab Batch #: 768017

Date Analyzed: 08/10/2009

QC- Sample ID: 340058-001 D

Reporting Units: %

Date Prepared: 08/10/2009

Analyst: BEV

Batch #: 1

Matrix: Solid

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	ND	ND	NC	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 Xeno Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
12600 West 120 East
Odessa, Texas 79765
Phone: 432-583-1800
Fax: 432-583-1713

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: [Signature]
e-mail: la_elkeenv@yahoo.com
Project Name: OXY U3A
Project #:
Project Loc: State CL Tank Battery
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Total # of Containers	Field Filtered	Matrix	Preservation & # of Containers	Analyze For:
01 TP #1 @ Surface	0' 0" 8-6-09	0' 0" 8-6-09	0' 0" 8-6-09	2:30 PM	1			TP# 1 TX 1005 TX 1006	TP# 1 TX 1005 TX 1006	TP# 1 TX 1005 TX 1006
02 TP #2 @ Surface	0' 0" 8-6-09	0' 0" 8-6-09	0' 0" 8-6-09	1:50 PM	1			TP# 2 TX 1005 TX 1006	TP# 2 TX 1005 TX 1006	TP# 2 TX 1005 TX 1006
03 TP #3 @ 18"	0' 18" 8-6-09	0' 18" 8-6-09	0' 18" 8-6-09	1:30 PM	1			TP# 3 TX 1005 TX 1006	TP# 3 TX 1005 TX 1006	TP# 3 TX 1005 TX 1006
04 TP #4 @ 18"	0' 18" 8-6-09	0' 18" 8-6-09	0' 18" 8-6-09	1:30 PM	1			TP# 4 TX 1005 TX 1006	TP# 4 TX 1005 TX 1006	TP# 4 TX 1005 TX 1006
05 TP #5 @ 18"	0' 18" 8-6-09	0' 18" 8-6-09	0' 18" 8-6-09	10:30 PM	1			TP# 5 TX 1005 TX 1006	TP# 5 TX 1005 TX 1006	TP# 5 TX 1005 TX 1006

Special Instructions:

Received by: [Signature] Date: 8-7-09 Time: 1:44 PM

Relinquished by: [Signature] Date: Time:

Relinquished by: [Signature] Date: 8-7-09 Time: 13:44

Received by: [Signature] Date: 8-7-09 Time: 13:44

Relinquished by: [Signature] Date: Time:

Relinquished by: [Signature] Date: Time:

LAB # (lab use only)

FIELD CODE

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Total # of Containers

Field Filtered

Matrix

Preservation & # of Containers

Laboratory Comments:

Sample Containers Intact? ☒
VOCs Free of Headspace? ☒
Custody seals on container(s) ☒
Custody seals on cooler(s) ☒
Sample Hand Delivered ☒
by Courier? ☒
by UPS ☒
by DHL ☒
by FedEx ☒
Temperature/Support Receipt: 3.1 °C

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.
Date/ Time: 8-7-09 13:44
Lab ID #: 340235
Initials: AL

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>31</u> ° C
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	<u>Not Present</u>
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	<u>Not Present</u>
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	Yes	No	<u>Not Applicable</u>
#20	VOC samples have zero headspace?	<u>Yes</u>	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



Sample Cross Reference 341204



Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP # 4 @ 2'	S	Aug-14-09 10:15	2 ft	341204-001



Certificate of Analysis Summary 341204

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA



Project Id: State CL Battery
Contact: Logan Anderson
Project Location: State CL Battery

Date Received in Lab: Mon Aug-17-09 09:26 am
Report Date: 18-AUG-09
Project Manager: Brent Barron, II

Analysis Requested		Lab Id: Field Id: Depth: Matrix: Sampled:	341204-001 TP # 4 @ 2' 2 ft SOIL Aug-14-09 10:15			
Anions by EPA 300		Extracted: Analyzed: Units/RL:	Aug-17-09 16:10 mg/kg RL ND 5.04			
Chloride						
Percent Moisture		Extracted: Analyzed: Units/RL:	Aug-17-09 16:00 % RL ND 1.00			
TPH By SW8015 Mod		Extracted: Analyzed: Units/RL:	Aug-17-09 12:45 Aug-17-09 23:21 mg/kg RL ND 15.0 ND 15.0 ND 15.0 ND 15.0			
C6-C12 Gasoline Range Hydrocarbons						
C12-C28 Diesel Range Hydrocarbons						
C28-C35 Oil Range Hydrocarbons						
Total TPH						

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Brent Barron, II
Odessa Laboratory Manager

Form 2 - Surrogate Recoveries

Project Name: Oxy USA

Work Orders : 341204,

Project ID: State CL Battery

Lab Batch #: 768790

Sample: 535559-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/09 19:12

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	43.3	50.0	87	70-135	

Lab Batch #: 768790

Sample: 535559-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/09 19:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 768790

Sample: 535559-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/09 20:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	90.6	99.9	91	70-135	
o-Terphenyl	47.1	50.0	94	70-135	

Lab Batch #: 768790

Sample: 341204-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/09 23:21

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	99.7	100	100	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 768790

Sample: 341204-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/18/09 01:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	45.6	50.0	91	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 : 341204,

Lab Batch #: 768790

Sample: 341204-001 SD / MSD

Project ID: State CL Battery

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/18/09 02:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.5	99.9	100	70-135	
o-Terphenyl	39.2	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.



Blank Spike Recovery



Project Name: Oxy USA

Work Order #: 341204

Project ID:

State CL Battery

Lab Batch #: 768815

Sample: 768815-1-BKS

Matrix: Solid

Date Analyzed: 08/17/2009

Date Prepared: 08/17/2009

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	9.77	98	80-120	

Blank Spike Recovery [D] = $100 * [C] / [B]$

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

BRL - Below Reporting Limit

Project Name: Oxy USA

Work Order #: 341204

Analyst: BHW

Project ID: State CL Battery

Date Analyzed: 08/17/2009

Lab Batch ID: 768790

Date Prepared: 08/17/2009

Sample: 535559-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg													
Analytes	TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	C6-C12 Gasoline Range Hydrocarbons		ND	1000	940	94	1000	952	95	1	70-135	35	
	C12-C28 Diesel Range Hydrocarbons		ND	1000	1150	115	1000	1160	116	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 #: 341204

Lab Batch #: 768815

Date Analyzed: 08/17/2009

Date Prepared: 08/17/2009

Project ID: State CL Battery

Analyst: LATCOR

QC- Sample ID: 341204-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	101	102	101	80-120	

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

BRL - Below Reporting Limit

Work Order # : 341204

Lab Batch ID: 768790

Date Analyzed: 08/18/2009

Reporting Units: mg/kg

Project ID: State CL Battery

QC- Sample ID: 341204-001 S

Batch #: 1

Matrix: Soil

Date Prepared: 08/17/2009

Analyst: BHW

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Reporting Units: mg/kg												
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	1000	941	94	999	861	86	9	70-135	35	
	C12-C28 Diesel Range Hydrocarbons	ND	1000	1190	119	999	1090	109	9	70-135	35	

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

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

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



Sample Duplicate Recovery



Project Name: Oxy USA

Work Order #: 341204

Lab Batch #: 768815

Date Analyzed: 08/17/2009

QC- Sample ID: 341204-001 D

Reporting Units: mg/kg

Project ID: State CL Battery

Analyst: LATCOR

Batch #: 1

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY

Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	ND	ND	NC	20	

Lab Batch #: 768810

Date Analyzed: 08/17/2009

QC- Sample ID: 341204-001 D

Reporting Units: %

Date Prepared: 08/17/2009

Analyst: BEV

Batch #: 1

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	ND	ND	NC	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

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

BRL - Below Reporting Limit

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Elke Env.
Date/ Time: 8.17.09 9:26
Lab ID #: 341204
Initials: al

Sample Receipt Checklist

	Yes	No	Client Initials
#1 Temperature of container/ cooler?	<input checked="" type="radio"/>	<input type="radio"/>	2.6 °C
#2 Shipping container in good condition?	<input checked="" type="radio"/>	<input type="radio"/>	
#3 Custody Seals intact on shipping container/ cooler?	<input checked="" type="radio"/>	<input type="radio"/>	(Not Present)
#4 Custody Seals intact on sample bottles/ container?	<input checked="" type="radio"/>	<input type="radio"/>	Not Present
#5 Chain of Custody present?	<input checked="" type="radio"/>	<input type="radio"/>	
#6 Sample instructions complete of Chain of Custody?	<input checked="" type="radio"/>	<input type="radio"/>	
#7 Chain of Custody signed when relinquished/ received?	<input checked="" type="radio"/>	<input type="radio"/>	
#8 Chain of Custody agrees with sample label(s)?	<input checked="" type="radio"/>	<input type="radio"/>	ID written on Cont./ Lid
#9 Container label(s) legible and intact?	<input checked="" type="radio"/>	<input type="radio"/>	Not Applicable
#10 Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="radio"/>	<input type="radio"/>	
#11 Containers supplied by ELOT?	<input checked="" type="radio"/>	<input type="radio"/>	
#12 Samples in proper container/ bottle?	<input checked="" type="radio"/>	<input type="radio"/>	See Below
#13 Samples properly preserved?	<input checked="" type="radio"/>	<input type="radio"/>	See Below
#14 Sample bottles intact?	<input checked="" type="radio"/>	<input type="radio"/>	
#15 Preservations documented on Chain of Custody?	<input checked="" type="radio"/>	<input type="radio"/>	
#16 Containers documented on Chain of Custody?	<input checked="" type="radio"/>	<input type="radio"/>	
#17 Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/>	<input type="radio"/>	See Below
#18 All samples received within sufficient hold time?	<input checked="" type="radio"/>	<input type="radio"/>	See Below
#19 Subcontract of sample(s)?	<input checked="" type="radio"/>	<input type="radio"/>	(Not Applicable)
#20 VOC samples have zero headspace?	<input checked="" type="radio"/>	<input type="radio"/>	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

