District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District 111
1000 Río 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

Form C-141 Revised October 10, 2003

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

Submit 2 Copies to appropriate
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 Final Report Address - 1502 W. Commerce Telephone No. - (O) 575-628-4121 C) 575-390-1903 Facility Name - Bluitt 19 Fed #2 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
В	19	8S	37E					Roosevelt

Latitude <u>33° 36.721' N</u> Longitude <u>103° 05.180' W</u> NATURE OF RELEASE

Type of Release - Produced Water	Volume of Release - 30 bble	Volume Recovered 4 bbls
Source of Release - Took Connection	Data and Hour of Occurrence	Data and Hour of Discourses
	Date and Hour of Occurrence	7-19-09 @ 11:00am
Was Immediate Notice Given?	If YES, To Whom?	
Yes 🗌 No 🗌 Not Required	Larry Johnson (Left Message)	
By Whom? Rick Kerby (HES Specialist - Oxy)	Date and Hour See above	
Was a Watercourse Reached?	If YES, Volume Impacting the W	atercourse.
🗋 Yes 🛛 No		
If a Watercourse was Impacted, Describe Fully.*		
,		
Describe Cause of Problem and Remedial Action Taken.* 2" connection	n on back of tank on the bottom was l	eaking causing PW to leak. Area affected was
inside the dike and all standing fluid was picked up with a vac-truck. T	he 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 - 10 points	ints (GW = $\overline{92}$ ). The total ranking for the
site is 10 points. RAL's for the site are Chloride - 250 ppm, TPH - 1,0	00 ppm and BTEX - 100 ppm (using t	field vapor headspace measurement).
Attached are a plat map, field analytical and lab confirmations.		
	· · · · · · · · · · · · · · · · · · ·	
Describe Area Affected and Cleanup Action Taken.* Oxy USA propos	es to leave all soil in place and remedi	ate site when battery is abandoned because
the impacted soils are minimal levels, groundwater is over 90' from bot	tom of impacted soil and the battery is	s an active site.
I hereby certify that the information given shows in take and complete to	the best of my knowledge and under	trand that augurat to NMOCD sulce and
regulations all operators are required to report and/or file certain release	polifications and perform corrective :	actions for releases which may endancer
public health or the environment. The accentance 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 remedi	iate contamination that pose a threat to	eround water, surface water, human health
or the environment. In addition, NMOCD acceptance of a Q-141 report	t does not relieve the operator of respo	nsibility for compliance with any other
federal, state, or local laws and/or regulations.	• •	
	OIL CONSER	<b>RVATION DIVISION</b>
Signature: ////////////////////////////////////	FAIL FAIL IN 1992	
	Approved by District Supervisor:	1 an AD
Printed Name: Kelton Beaird		Hersfilrey Jakim
Tide, UES Secondiat	A	Functional Deter 121 201000
rine, n23 operatist	Approvar Date: 10/28/07	Texplanon pare: 10128104
F-mail Address: kelton beaird@oxy.com	Conditions of Approval: FX(A)F	TTE A FIXIT
- man	OF COVER MATTERIAL AND	SEMPLIACE Attached
Date: 10-23-09	ALINGER OF 20 Mil PLAST	TK OR 6" 1RP-09-11,2714
* Attach Additional Sheets If Necessary	OF CLAY - THEN BACKED	
·	OBIGINAL MATERIAL, E	MPLALE
	LINER OVER WHOLE D	IKED AREA
FGRL0930642476	OR OVER SOUTHERN !!	2 OF DIKED
	AND ERIM SOUTH	ALLED
	TRUCK FILDER COULD	- DWARIE
		Search State State C. C. Sur
	TANKS INCLUSIVE OF	SHULCO

# **Remediation Plan**

Prepared for Oxy USA

Bluitt 19 Federal #2 Battery Roosevelt County, NM

Prepared by *Elke Environmental, Inc.* P.O. Box 14167 Odessa, TX 79768 Phone (432) 366-0043 Fax (432) 366-0884 OC1 2 3 2009 HOBBSOCD

**Oxy USA** Bluitt 19 Fed #2 Battery



Plat Map

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

# **Field Analytical Report Form**

Client Oxy USA

Analyst Bobby Steadham

Site Bluitt 19 Fed #2 Battery

Sample ID	Date	Depth	TPH / PPM	Cl/PPM	PID / PPM	GPS
TP1	8-31-09	Surface		1,835	57	33° 36.721' N 103° 05.180' W
TP1	8-31-09	1'		207	4.6	33° 36.721' N 103° 05.180' W
TP1	8-31-09	2'	16	149	4.8	33° 36.721' N 103° 05.180' W
TP2	8-31-09	Surface		823	66.3	33° 36.719' N 103° 05.180' W
TP2	8-31-09	1'		151	20.8	33° 36.719' N 103° 05.180' W
TP2	8-31-09	2'	21	119	18.7	33° 36.719' N 103° 05.180' W
TP3	8-31-09	Surface		491	27.5	33° 36.718' N 103° 05.180' W
TP3	8-31-09	1'		692	71.3	33° 36.718' N 103° 05.180' W
TP3	8-31-09	2'		144	42.9	33° 36.718' N 103° 05.180' W
TP3	8-31-09	3'	29	204	40.0	33° 36.718' N 103° 05.180' W
TP4	8-31-09	Surface		692	31.1	33° 36.719' N 103° 05.183' W
TP4	8-31-09	1'		571	48.7	33° 36.719' N 103° 05.183' W
TP4	8-31-09	2'		451	51.5	33° 36.719' N 103° 05.183' W
TP4	8-31-09	3'		532	94.9	33° 36.719' N 103° 05.183' W
TP4	8-31-09	4'		1,374	41.0	33° 36.719' N 103° 05.183' W
TP4	8-31-09	6'		3,898	40.8	33° 36.719' N 103° 05.183' W
TP4	8-31-09	8'		845	43.9	33° 36.719' N 103° 05.183' W

Analyst Notes\_

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

# **Field Analytical Report Form**

Client\_Oxy USA

Analyst Bobby Steadham

Site Bluitt 19 Fed #2 Battery

Sample ID	Date	Depth	TPH / PPM	Cl / PPM	PID / PPM	GPS
TP4	8-31-09	10'		1,560	28.8	33° 36.719' N 103° 05.183' W
TP4	8-31-09	12'		634	28.4	33° 36.719' N 103° 05 183' W
TP4	8-31-09	14'		299	37.0	33° 36.719' N 103° 05.183' W
TP4	9-1-09	15'	37	180	24.3	33º 36.719' N 103º 05.183' W
TP5	9-1-09	Surface		812	49.5	33° 36.719' N 103° 05 185' W
TP5	9-1-09	2'		629	108	33° 36.719' N 103° 05 185' W
TP5	9-1-09	4'		270	43.5	33° 36.719' N 103° 05 185' W
TP5	9-1-09	6'	31	242	37.4	33° 36.719' N 103° 05 185' W
South Wall	9-1-09	7'	23	198	35.4	33° 36.716' N 103° 05 184' W
East Wall	9-1-09	1'	18	144	30.3	33° 36.720' N 103° 05.176' W
West Wall	9-1-09	3'	28	198	49.9	33° 36.720' N 103° 05.189' W
North Wall	9-1-09	1'	38	204	42.6	33° 36.725' N 103° 05.183' W
Background	9-1-09			179		33° 36.722' N 103° 05.194' W
						,

\_\_\_\_\_

Analyst Notes\_

# Analytical Report 343029

for

### Elke Environmental, Inc.

#### **Project Manager: Logan Anderson**

Oxy USA

#### Billuit 19 Fed # 2

#### 08-SEP-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 (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)



08-SEP-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: 343029 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 343029. 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. 343029 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully

Brent Barron, II Odessa Laboratory Manager

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# Sample Cross Reference 343029



## Elke Environmental, Inc., Odessa, TX

Oxy USA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP 1 @ 2'	S	Aug-31-09 11:15	2 ft	343029-001
TP 2 @ 2'	S	Aug-31-09 10:30	2 ft	343029-002
TP 3 @ 3'	S	Aug-31-09 13:00	3 ft	343029-003
TP 5 @ 6'	S	Aug-31-09 15:00	6 ft	343029-004
TP 4 @ 15'	S	Sep-01-09 09:15	15 ft	343029-005

#### **CASE NARRATIVE**



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

Project ID: Billuit 19 Fed # 2 Work Order Number: 343029 Report Date: 08-SEP-09 Date Received: 09/02/2009

#### Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None Analytical Non Conformances and Comments:

Batch: LBA-770806 Inorganic Anions by EPA 300 None

Batch: LBA-770813 Percent Moisture AD2216A Batch 770813, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 343029-005, -002, -001, -003, -004.

Batch: LBA-771196 TPH by SW8015 Mod None



#### **Certificate of Analysis Summary 343029**

Elke Environmental, Inc., Odessa, TX

Project Name: Oxy USA



Project Id: Billuit 19 Fed # 2 Contact: Logan Anderson

Project Location-

Date Received in Lab: Wed Sep-02-09 08:20 am

roject Location:								Report	Date:	08-SEP-09		
					`			Project Ma	nager:	Brent Barron,	п	
	Lab Id:	343029-0	100	343029-(	)02	343029-0	003	343029-0	04	343029-0	005	
Aughoris Paguastad	Field Id:	TP 1 @	2'	TP 2 @	2'	TP 3 @	3'	TP 5 @	<b>ଟ</b>	TP 4 @	15'	
Anulysis Requested	Depth:	2 ft		2 ft		3 ft		6 ft		15 ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Aug-31-09	11:15	Aug-31-09	10:30	Aug-31-09	13:00	Aug-31-09	15:00	Scp-01-09	09:15	
Anions by EPA 300	Extracted:											
	Analyzed:	Sep-02-09	17:25	Sep-02-09	17:25	Sep-02-09	17:25	Sep-02-09	17:25	Sep-02-09	17:25	
	Units/RL:	mg/kg	RL.	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		143	5.09	26.9	5.05	100	5.10	212	5.12	51.8	5.44	
Percent Moisture	Extracted:											
	Analyzed:	Scp-03-09	09:41	Sep-03-09 09:41		Sep-03-09	09:41	Sep-03-09	09:41	Scp-03-09	09:41	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	
Percent Moisture		1.74	1.00	ND	1.00	2.04	1.00	2.39	1.00	8.14	1.00	
TPH By SW8015 Mod	Extracted:	Scp-07-09	13:04	Sep-07-09	13:04	Sep-07-09	13:04	Scp-07-09	13:04	Scp-07-09	13:04	
	Analyzed:	Sep-07-09	14:54	Sep-07-09	5:19	Sep-07-09	15:44	Sep-07-09	6:09	Sep-07-09	1 <b>6:34</b>	
	Units/RL:	mg/kg	RL	mg/kg	RL.	mg/kg	RL	mg/kg	RL	mg/kg	RL	
C6-C12 Gasoline Range Hydrocarbons		ND	15.2	ND	15.1	ND	15.3	ND	15.4	ND	16,3	
C12-C28 Diesel Range Hydrocarbons		ND	15.2	ND	15.1	ND	15.3	ND	15.4	ND	16.3	
C28-C35 Oil Range Hydrocarbons		ND	15.2	ND	15.1	ND	15.3	ND	15.4	ND	16.3	
Total TPH		ND	15.2	ND	15.1	ND	15.3	ND	15.4	ND	16.3	

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 ensumes no responsibility and makes no warranty to the end use of the data bereby presented. Our flability is finaled to the amount invoiced for this work order unless otherwise agreed to is writing.

Brent Barron, II Odessa Laboratory Manager

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- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- **BRL** Below Reporting Limit.
- **RL** Reporting Limit
- \* Outside XENCO's scope of NELAC Accreditation.

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



# Form 2 - Surrogate Recoveries

#### Project Name: Oxy USA

Vork Orders: 343029	, ,	VC Dutat	Project ID	Billuit 19 H	Fed # 2	
Lab Batch #: //1190	ط / فحظ-1-070/07/09 کی / فحظ	KS Bater	RROGATE RE	COVERY S	STUDY	
Units: mg/kg	By SW8015 Mod	Amount Found [A]	Truc Amount [B]	Recovery %R [D]	19 Fed # 2         RY STUDY         ry       Control Limits %R         70-135         RY STUDY         try       Control Limits %R         70-135	Flags
1-Chloroctane		95,8	100	96	70-135	
o-Terphenyl		37.9	50.0	76	70-135	
Lah Batch #: 771196	Sample: 537096-1-BSD / B	SD Bate	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 09/07/09 14:04	SU	RROGATE RE	COVERY S	STUDY	
TPH :	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Cantral Limits %R	Flags
1-Chlorooctane		97.7	99.9	98	70-135	
o-Terphenyl	<u></u>	38.8	50.0	78	70-135	
Lab Batch #: 771196	Sample: 537096-1-BLK / B	LK Bate	h:   Matrix:	Solid	· · · · ·	
Units: mg/kg	- Date Analyzed: 09/07/09 14:29	SU	RROGATE RE	COVERY S	STUDY	
TPH	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits %R	Flags	
1-Chlorooctane		84.0	100	84	70-135	
o-Terphenyl	<u> </u>	42.4	50,0	85	70-135	
Lab Batch #: 771196	Sample: 343029-001 / SMI	P Bate	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 09/07/09 14:54	SU	RROGATE RE	COVERY	STUDY	
ТРН	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chlorocetune			99.6	87	70-135	
o-Temhenyl		40.4	49.8	81	70-135	ļ
Lab Batch #: 771196	Sample: 343029-002 / SMI	p Batc	h. 1 Matrix	Soil		<u> </u>
Units: mg/kg	Date Analyzed: 09/07/09 15:19	SU	RROGATE RI	COVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I-Chloroactanc		102	99.8	102	70-135	<u> </u>
o-Terphenyl		49.9	49.9	100	70-135	

\* Surrogate outside of Laboratory QC limits

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



# Form 2 - Surrogate Recoveries

#### Project Name: Oxy USA

Work Orders : 343029	, Sample: 343029-003 / SMP	Rota	Project II	): Billuit 19 ] Soil	Fed # 2			
Units: mg/kg	Date Analyzed: 09/07/09 15:44	SU	RROGATE RE	COVERY	STUDY			
ТРН	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane		99.1	100	<u> </u>	70-135			
o-Terphenyl		47.3	50.0	95	70-135			
Lab Batch #: 771196	Sample: 343029-004 / SMP	Bate	h: 1 Matrix	Soil	[D]       70-135         99       70-135         95       70-135         95       70-135         VERY STUDY         covery       %R         %R       %R         [D]       %R         82       70-135         82       70-135         82       70-135         82       70-135         82       70-135         82       70-135         82       70-135         84       70-135         VERY STUDY         VERY STUDY         Control         Limits         %R         [D]         82       70-135         84       70-135         VERY STUDY         Control         Limits       Fi			
Units: mg/kg	Date Analyzed: 09/07/09 16:09	SU	RROGATE RI	COVERY	STUDY			
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
I-Chlorooctanc		82.2	99.9	82	70-135			
o-Terphenyl		40.8	50.0	82	70-135			
Lab Batch #: 771196	Sample: 343029-005 / SMP	Bate	h: l Matrix	:Soil				
Units: mg/kg	Date Analyzed: 09/07/09 16:34	SU	SURROGATE RECOVERY STUDY					
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
L Chlomostan	Analytes			101				
n-Tembenyl		41.8	99.8 49.0	82	70-135			
Lab Batch # 771196	Security 242020 001 S /MS	-11.0 1		Soil .	70-135			
Lap Batch #: //1190			BROCATE PI	COVERV	STUDY			
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane		98.0	99.7	98	70-135			
o-Terphenyl		40.0	49.9	80	70-135			
Lab Batch #: 771196	Sample: 343029-001 SD / N	ISD Bate	h: 1 Matrix	Soil				
Units: mg/kg	Date Analyzed: 09/07/09 23:58	SU	RROGATE RI	ECOVERY	STUDY			
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctane	-	101	99.8	101	70-135			
o-Terphenyl		40.2	49.9	81	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.





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## Project Name: Oxy USA

Work Order #: 343029		Pi	Project ID: Billuit 19 BKS Matrix: Solid Analyst: LATCOR BLANK /BLANK SPIKE RECOVERY ( Spike Blank Blank Control		) Fed # 2	
Lab Batch #: 770806 Date Analyzed: 09/02/2009	Sample: 770806-1-BKS Matrix: Solid Date Prepared: 09/02/2009 Analyst: LATCOR					
Reporting Units: mg/kg	Batch #: 1	Batch #: 1 BLANK /BLANK SPIKE RECOVERY S				STUDY
Anions by EPA 300	Blank Result	Spike Added	Blank Spike	Blank Spike	Control Limits	Flags
Analytes	[A]	[19]	IC)	[D]	70K	
Chloride	ND	10.0	9.41	94	80-120	

Blank Spike Recovery [D] = 100\*[CJ/[B] All results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit



#### **BS / BSD Recoveries**

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#### Project Name: Oxy USA

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Work Order #: 343029 Analyst: BHW Lab Batch ID: 771196 S	ample: 537096-1-BKS	ate Prepar Bate	red: 09/07/20( h#: 1	99			Pro Date A	ject ID: 1 nalyzed: ( Matrix: 5	Billuit 19 F 09/07/2009 Solid	ed # 2	
Units: mg/kg		BLAN	K/BLANK	SPIKE / 1	BLANK S	PIKE DUP	LICATE	RECOVI	ERY STUI	ŊΥ	
TPH By SW8015 M	Iod Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Basselt (F)	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[0]		ניטן א		Keante [14]	[G]				
C6-C12 Gasoline Range Hydrocarbons	ND	1000	869	87	999	886	89	. 2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	965	97	999	979	98	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** 

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Work Order #: 343029 Lab Batch #: 770806 0.000

Project ID: Billuit 19 Fcd # 2 Analysts I ATCOP

Date Analyzed: 09/02/2009 QC- Sample ID: 343029-001 S Reporting Units: mg/kg	Date Prepared: 09/02 Batch #: 1 MATR	/2009 IX / MA	Analyst: LATCOR Matrix: Soil ATRIX 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			
Chloride	143	102	250	105	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 USA



Work Order # : 343029						Project II	D: Billuit	19 Fed # 2	2		
Lab Batch ID: 771196 Date Analyzed: 09/07/2009	C- Sample ID: Date Prepared:	343029 09/07/2	-001 S 009	Ba An	tch #: alyst:	1 Matri: BHW	<b>x:</b> Soil				
Reporting Units: ing/kg		M	ATRIX SPIK	E/MAT	RIX SPL	KE DUPLICA	TE REC	OVERY	STUDY		
TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Costrol Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1010	912	90	1020	937	92	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	1030	102	1020	1070	105	4	70-135	35	

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

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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





#### Project Name: Oxy USA

Work Order #: 343029

Lab Batch #: 770806 Date Analyzed: 09/02/2009 QC- Sample ID: 343029-001 D	Date Prepared: 09/02/ Batch #: 1	2009 Ana Ma	Project I lyst: LATC trix: Soil	D: Billuit 19 OR	Fed # 2
Reporting Units: mg/kg	SAMP	LE / SAMPLE		ATE REC	OVERY
Anions by EPA 300 Analyte	Parent Sar Result [A]	iple Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	143	127	12	20	
Lab Batch #: 770813 Date Analyzed: 09/03/2009 QC- Sample ID: 343029-001 D	Date Prepared: 09/03/ Batch #: 1	2009 Ans Ma	ılyst: BEV trix: Soil		
Reporting Units: %	SAMP	LE / SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	Parent Sar Result [A]	aple Sample Dupilcate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	. 1.74	3.28	61	20	F

Spike Relative Difference RPD 200 \* | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit

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	City/State/Zip:	Odesse,	TX 7976	8									-		FO	n .							
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#### Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In

Client	EIKE ENV.
Date/ Time	09/02/09 8:20
Lab ID # :	343029
Initials:	and the

#### Sample Receipt Checklist

				Clie	nt Initia
#1	Temperature of container/ cooler?	Yes	No	· · cl	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals Intact on shipping contained cooler?	Yes	No	Not Present	
#4	Custody Seals Intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	(Yes5)	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?	CYes	Na	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?	(Yas	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?	(Yēš	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

#### Variance Documentation

Date/ Time:

Contact: Regarding:

Corrective Action Taken:

Check all that Apply:

Contacted by:

See attached c-mail/ fax Cilent understands and would like to proceed with analysis Cooling process had begun shortly after sampling event