

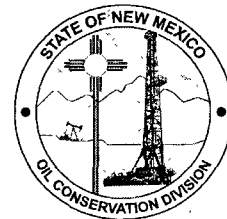
# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Jon Goldstein**  
Cabinet Secretary

**Jim Noel**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
**Oil Conservation Division**



February 5, 2010

Yates Petroleum Corporation  
Attn: Mr. Bob Asher  
105 S 4<sup>th</sup> Street  
Artesia, NM 88210

Reference: Lily ALY Federal 001 Battery 30-015-27262  
A-3-24S-31E Eddy County, New Mexico  
2RP-373

Operator,

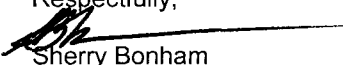
The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a remediation work plan proposal (plan) that states the release area to a depth of one (1) foot below the surface will be excavated and hauled to a NMOCD approved solid waste disposal facility.

Based on data presented, the plan is accepted with the following stipulations:

- Confirmation soil analyses for constituents of concern will be required upon completion of excavation.
- Notify the OCD 48 hours prior to obtaining samples where analyses are to be submitted to the OCD.
- Results of analytical data obtained through sampling shall be forwarded to OCD for approval **prior** to any backfilling activities
- A final Report C-141 is to be submitted to the OCD upon satisfactory completion of remediation project.
- Remediation requirements may be subject to change as site conditions warrant.
- Remediation activities to be completed on or before **March 31, 2010**.

Please be advised that NMOCD acceptance of documents, data, etc 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 documents, data, etc does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Respectfully,

  
Sherry Bonham  
NMOCD District 2  
1301 W Grand Avenue  
Artesia, NM 88210  
575.748.1283 ext. 109  
[sherry.bonham@state.nm.us](mailto:sherry.bonham@state.nm.us)



MARTIN YATES, III

1912-1985

FRANK W. YATES

1936-1986

S.P. YATES

1914-2008



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

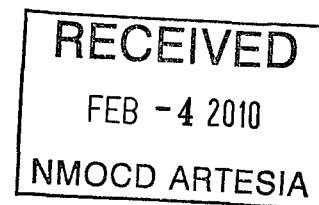
JOHN A. YATES  
CHAIRMAN OF THE BOARD  
PRESIDENT

JOHN A. YATES JR.  
ASSISTANT TO THE PRESIDENT

JAMES S. BROWN  
CHIEF OPERATING OFFICER

JOHN D. PERINI  
CHIEF FINANCIAL OFFICER

February 4, 2010



Ms. Sherry Bonham  
NMOCD District II  
1301 West Grand  
Artesia, NM 88210

Re: Lily ALY Federal #1 Battery  
30-015-27262  
Section 3, T24S-R31E  
Eddy County, New Mexico

Dear Ms. Bonham:

Yates Petroleum Corporation would like to submit for your consideration the enclosed work plan for the above captioned battery. The plan is being submitted in response to the C-141 report dated December 16, 2009. Scope of work described in the plan will be conducted as soon as the work plan is approved and a contractor can be scheduled.

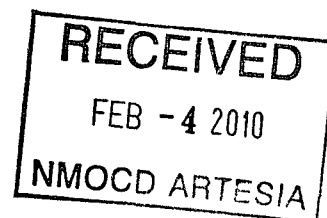
If you have any questions call me at (575) 748-4217

Thank you.

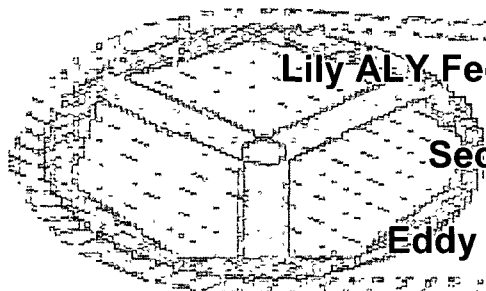
YATES PETROLEUM CORPORATION

Robert Asher  
Environmental Regulatory Agent

Enclosure(s)



**Yates Petroleum Corporation**



**Lily ALY Federal #1 Battery Work Plan**

**Section 3, T24S-R31E**

**Eddy County, New Mexico**

**February 4, 2010**

**I. Location**

The battery is located in Section 3, T24S-R31E of Eddy County, New Mexico and approximately 45 miles east-southeast of Carlsbad, NM, approximately 1 mile south of New Mexico State Highway 128 as represented by the attached Los Medanos, NM/Big Sinks, NM, USGS Quadrangle Maps.

**II. Background**

On December 16, 2009, Yates submitted to the NMOCD District II office a Form C-141 for a release of 11 barrels of oil from a lactic acid diversion line; 7 barrels of oil were recovered. The total affected area is approximately 20 feet by 50 feet. Analytical samples were taken on January 27, 2010 and sent to an NMOCD approved laboratory, the results (enclosed) for Sample GS/Comp-Surface show BTEX and TPH above RRAL's (50 ppm and 5,000 ppm) at a depth of six (6) inches for the site ranking of zero (0). Delineation samples at one (1) and two (2) foot depths are below RRAL's or Non Detect.

**III. Surface and Ground Water**

Area surface geology is Cenozoic. The nearest groundwater of record is listed on the New Mexico Office of the State Engineer shows the depth to groundwater is approximately 160 feet (Section 2 T24S-R31E) making the site ranking for this site a zero (0). Any watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the as following:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

**IV. Soils**

The area consists of soils that are sand and interspersed with caliche and clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

**V. Scope of Work**

Upon approval of this work plan, Yates Petroleum Corporation will have a contractor remove the impacted soils from the release area to a depth of one (1) foot below the surface. These soils will be taken to an NMOCD approved facility. Yates will notify the NMOCD of sampling (analysis to be presented to the NMOCD and samples will be sent to an NMOCD approved laboratory); Yates will then submit a C-141, Final Report and analytical results to the Oil Conservation Division requesting closure. Upon closure approval, Yates will have a contractor backfill excavation area with clean, like material.



# New Mexico Office of the State Engineer

## Wells with Well Log Information

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

POD Number	Sub basin	Use	County	Source	q	q	q	Sec	Tws	Rng	X	Y	Start Date	Finish Date	Log File	Depth Well	Depth Water
C 02405		IRR	ED	Shallow	3	4	1	02	24S	31E	617589	3568530*	09/29/1994	09/30/1994	12/05/1994	275	160
C 02440		PRO	ED		2	3	10	24S	31E		616103	3566599*	03/20/1995	03/21/1995	04/25/1995	350	
C 02460		PRO	ED	Shallow	3			02	24S	31E	617496	3568022*	08/25/1995	08/25/1995	09/07/1995	320	212
C 02464		PRO	ED	Shallow	3	4	1	02	24S	31E	617589	3568530*	08/24/1995	08/24/1995	09/07/1995	320	205

**Record Count: 4**

**PLSS Search:**

Section(s): 2, 3, 4, 9, 10, 11 Township: 24S Range: 31E

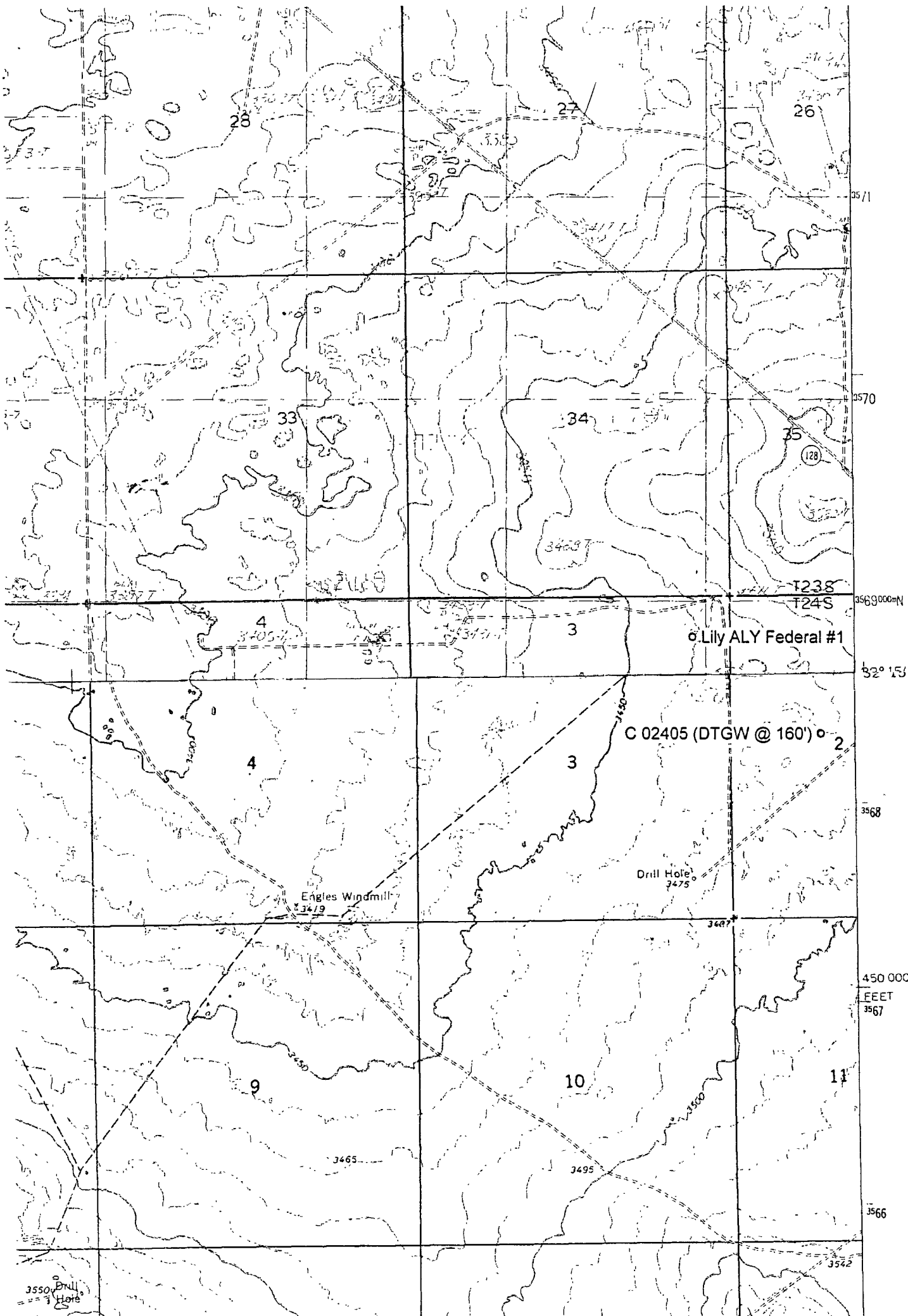
\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/10/09 9:42 AM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



# **Analytical Report 360284**

**for**

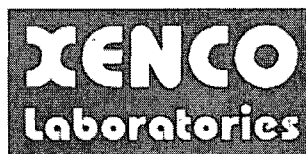
## **Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**Lily ALY Federal # 1 Battery**

**30-015-27262**

**04-FEB-10**



**12600 West I-20 East Odessa, Texas 79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

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

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)

Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),

South Carolina(96031001), Louisiana(04154), Georgia(917)



04-FEB-10

Project Manager: **Robert Asher**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: **360284**  
**Lily ALY Federal # 1 Battery**  
Project Address: Eddy County

**Robert Asher:**

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 360284. 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. 360284 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 360284



Yates Petroleum Corporation, Artesia, NM

Lily ALY Federal # 1 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-Surface	S	Jan-27-10 10:33	4 - 6 In	360284-001
GS/Comp-001	S	Jan-27-10 11:10	1 - 1 ft	360284-002
GS/Comp-002	S	Jan-27-10 11:31	2 - 2 ft	360284-003



# Certificate of Analysis Summary 360284

Yates Petroleum Corporation, Artesia, NM

Project Name: Lily ALY Federal # 1 Battery

Project Id: 30-015-27262

Contact: Robert Asher

Project Location: Eddy County

Date Received in Lab: Thu Jan-28-10 02:55 pm


Report Date: 04-FEB-10

Project Manager: Brent Barron, II

<b>Analysis Requested</b>	<b>Lab Id:</b>	360284-001	360284-002	360284-003			
	<b>Field Id:</b>	GS/Comp-Surface	GS/Comp-001	GS/Comp-002			
	<b>Depth:</b>	4-6 In	1-1 ft	2-2 ft			
	<b>Matrix:</b>	SOIL	SOIL	SOIL			
	<b>Sampled:</b>	Jan-27-10 10:33	Jan-27-10 11:10	Jan-27-10 11:31			
<b>BTEX by EPA 8021</b>	<b>Extracted:</b>	Feb-02-10 06:45	Feb-02-10 06:45	Jan-29-10 16:00			
	<b>Analyzed:</b>	Feb-02-10 10:59	Feb-02-10 09:05	Jan-30-10 15:49			
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		1.195 0.5431	ND 0.0011	0.0015 0.0011			
Toluene		15.81 1.086	ND 0.0022	0.0081 0.0021			
Ethylbenzene		8.521 0.5431	0.0014 0.0011	0.0021 0.0011			
m,p-Xylenes		22.04 1.086	0.0044 0.0022	0.0053 0.0021			
o-Xylene		7.820 0.5431	0.0030 0.0011	0.0015 0.0011			
Xylenes, Total		29.86 0.5431	0.0074 0.0011	0.0068 0.0011			
Total BTEX		55.39 0.5431	0.0088 0.0011	0.0185 0.0011			
<b>Percent Moisture</b>	<b>Extracted:</b>						
	<b>Analyzed:</b>	Jan-29-10 17:00	Jan-29-10 17:00	Jan-29-10 17:00			
	<b>Units/RL:</b>	% RL	% RL	% RL			
Percent Moisture		7.93 1.00	9.74 1.00	5.87 1.00			
<b>TPH by SW 8015B</b>	<b>Extracted:</b>	Jan-29-10 11:00	Jan-29-10 11:00	Jan-29-10 11:00			
	<b>Analyzed:</b>	Jan-29-10 14:59	Jan-29-10 15:26	Jan-29-10 15:53			
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C10 Gasoline Range Hydrocarbons		3270 324	ND 16.6	ND 15.9			
C10-C28 Diesel Range Hydrocarbons		6380 324	131 16.6	ND 15.9			
Total TPH		9650 324	131 16.6	ND 15.9			

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



## 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.

***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 - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477  
9701 Harry Hines Blvd , Dallas, TX 75220  
5332 Blackberry Drive, San Antonio TX 78238  
2505 North Falkenburg Rd, Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014  
12600 West I-20 East, Odessa, TX 79765  
842 Cantwell Lane, Corpus Christi, TX 78408

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116

### 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: Robert Asher Cooler # YPC-005

Project Name: Lily ALY Federal #1 Battery

Company Name	Yates Petroleum Corporation
--------------	-----------------------------

Project #: 30-015-27262

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip:      Artesia, NM 88210

PO #: 105632

Telephone No: 575-748-4217 Fax No: 575-748-4662

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:  e-mail: boba@yatespetroleum.com

[illegible]

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

Client: Yates Petroleum  
 Date/ Time: 1-28-10 14:55  
 Lab ID #: 360284  
 Initials: AL

**Sample Receipt Checklist**

				Client Initials	
#1	Temperature of container/ cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	1.4 °C	
#2	Shipping container in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#3	Custody Seals intact on shipping container/ cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Present	
#5	Chain of Custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#11	Containers supplied by ELOT?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#12	Samples in proper container/ bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#13	Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#14	Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#15	Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#16	Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#18	All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	See Below	
#19	Subcontract of sample(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	
#20	VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> 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



## CASE NARRATIVE

**Client Name:** Yates Petroleum Corporation

**Project Name:** Lily ALY Federal # 1 Battery

**Project ID:** 30-015-27262

**Work Order Number:** 360284

**Report Date:** 04-FEB-10

**Date Received:** 01/28/2010

---

**Sample receipt non conformances and Comments:**

None

---

**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

Batch: LBA-791598 TPH by SW 8015B

None

Batch: LBA-791643 Percent Moisture

None

Batch: LBA-791711 BTEX by EPA 8021

SW8021BM

Batch 791711, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 360284-003.

Batch: LBA-792073 BTEX by EPA 8021

SW8021BM

Batch 792073, Ethylbenzene RPD is outside the QC limit. This is most likely due to sample non-homogeneity.

Samples affected are: 360284-001, -002.

SW8021BM

Batch 792073, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 360284-002 D, 360284-001.

4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 360284-002 D, 360284-002.