

MARTIN YATES, III  
1912-1985  
FRANK W. YATES  
1936-1986  
S.P. YATES  
1914-2008

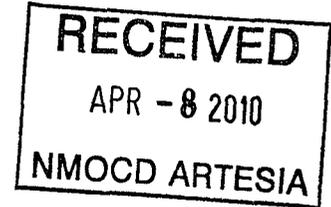


105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

JOHN A. YATES  
CHAIRMAN OF THE BOARD  
JOHN A. YATES JR.  
PRESIDENT  
SCOTT M. YATES  
VICE PRESIDENT  
JAMES S. BROWN  
CHIEF OPERATING OFFICER  
JOHN D. PERINI  
CHIEF FINANCIAL OFFICER

April 7, 2010

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



Re: Lily ALY Federal #1 Battery  
2RP-373  
30-015-27262  
Section 3, T24S-R31E  
Eddy County, New Mexico

Dear Ms. Bonham,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on December 8, 2009 (11 bbls of oil with 7 bbls of oil being recovered). The release was from a diversion line of the lact unit causing a tank to over flow. Samples were taken on 1/27/2010 and sent to an NMOCD approved laboratory for analysis, the enclosed results indicated that TPH & BTEX for sample GS/Comp-Surface were above RRAL's for the site ranking of (0) zero (all other samples were below RRAL's). Yates Petroleum Corporation submitted a work plan (NMOCD approved, 2/8/2010), Yates had a contractor excavate one (1) foot of soil and was taken to an NMOCD approved facility. Samples were taken on 3/30/2010 and sent to an NMOCD approved laboratory and analyzed for TPH & BTEX. Based on results (enclosed with a sample diagram), impacted soils removed and site ranking, Yates Petroleum Corporation requests closure. Upon NMOCD approval, clean, like materials will be backfilled in the excavated area of the battery.

If you have any questions, please call me at 575-748-4217.

Thank you.

YATES PETROLEUM CORPORATION

Robert Asher  
Environmental Regulatory Agent

/rca  
Enclosure(s)

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**  
**APR - 8 2010**  
**NMOCD ARTESIA**

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<br>Yates Petroleum Corporation | OGRID Number<br>25575      | Contact<br>Robert Asher       |
| Address<br>104 S. 4 <sup>TH</sup> Street       |                            | Telephone No.<br>575-748-1471 |
| Facility Name<br>Lily ALY Federal #1 Battery   | API Number<br>30-015-27262 | Facility Type<br>Battery      |

|                          |                          |                       |
|--------------------------|--------------------------|-----------------------|
| Surface Owner<br>Federal | Mineral Owner<br>Federal | Lease No.<br>NM-80645 |
|--------------------------|--------------------------|-----------------------|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| A           | 3       | 24S      | 31E   | 660           | North            | 660           | East           | Eddy   |

Latitude 32.25173 Longitude 104.75878

**NATURE OF RELEASE**

|  |  |   |
|--|--|---|
| Type of Release<br>Oil   | Volume of Release<br>11 B/O                      | Volume Recovered<br>7 B/O                   |
| Source of Release<br>Production tank   | Date and Hour of Occurrence<br>12/8/2009, AM     | Date and Hour of Discovery<br>12/8/2009, AM |
| Was Immediate Notice Given?<br><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom?<br>N/A                          |   |
| By Whom?<br>N/A  | Date and Hour<br>N/A                             |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.<br>N/A |   |

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Diversion line from lact unit unloaded to full stock tank with pressure causing it to release from thief hatch. Vacuum truck called, crews called to move line and clean up location.

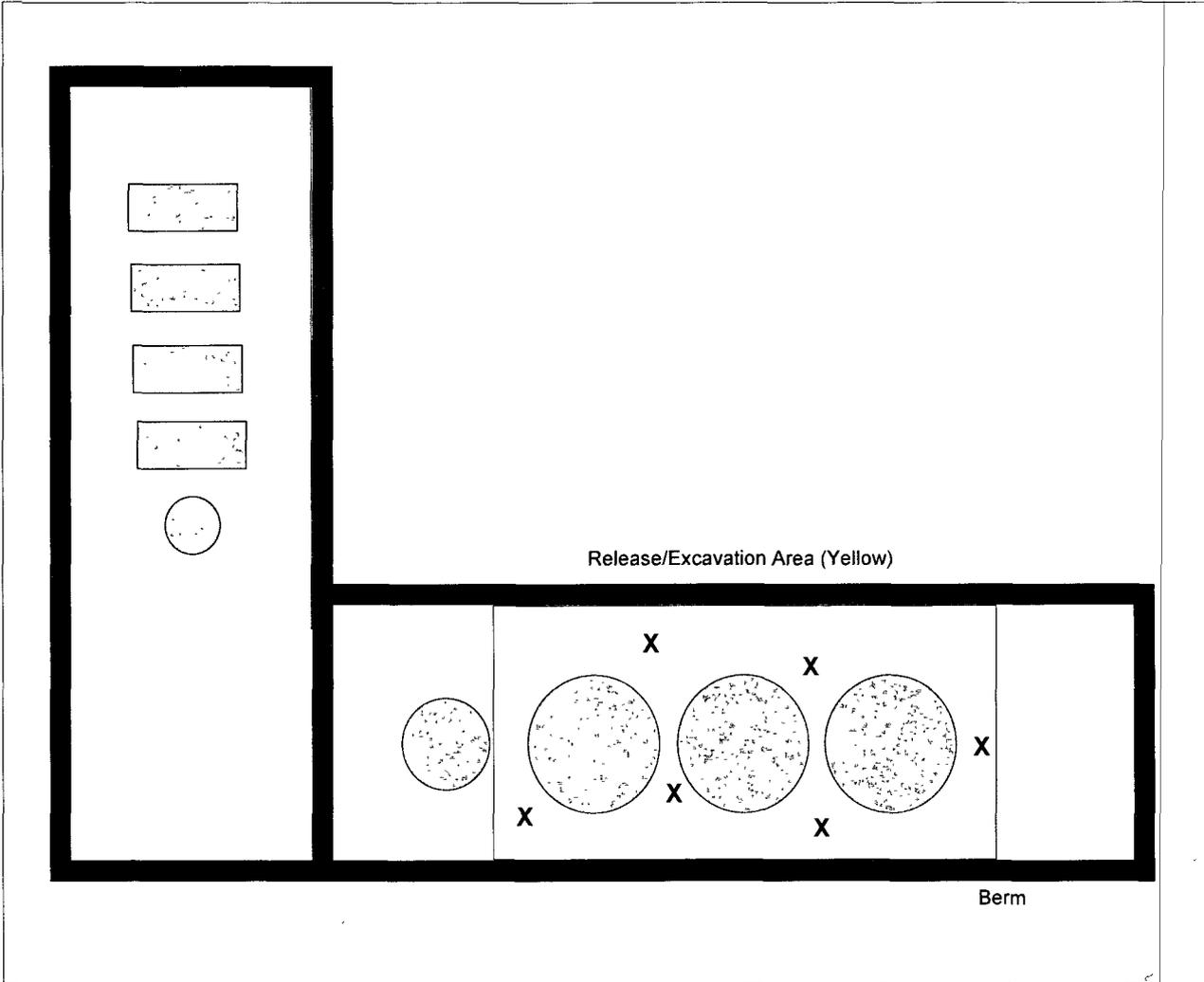
Describe Area Affected and Cleanup Action Taken.\*  
An approximate area of 50' X 20'. Vacuum truck recovered remaining oil. Will conduct vertical & horizontal delineation to determine extent of contamination. Work plan to be submitted. **Depth to Ground Water: >100' (approx. 160', Section 2, T24S-R31E, per New Mexico Office of the State Engineer), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0. Based on impacted soils excavated, sample results and site ranking, Yates Petroleum Corporation requests closure.**

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:                                | <b>OIL CONSERVATION DIVISION</b>   |  |            |
| Printed Name: Robert Asher                | Approved by District Supervisor:   |  |            |
| Title: Environmental Regulatory Agent     | Approval Date: <u>4-8-10</u>       | Expiration Date:                             | <u>N/A</u> |
| E-mail Address: boba@yatespetrpolleun.com | Conditions of Approval: <u>N/A</u> | Attached <input type="checkbox"/> <u>N/A</u> |            |
| Date: Wednesday, April 07, 2010           | Phone: 575-748-4217                | 2RP-373                                      |            |

\* Attach Additional Sheets If Necessary

2RP-373



| Sample ID       | Sample Area  | Sample Date | Sample Type | Depth | BTEX   | GRO  | DRO  | TOTAL |
|-----------------|--------------|-------------|-------------|-------|--------|------|------|-------|
| GS/Comp-Surface | Battery Area | 1/27/2010   | Grab/Auger  | 4-6"  | 55.390 | 3270 | 6380 | 9650  |
| GS/Comp-001     | Battery Area | 1/27/2010   | Grab/Auger  | 12"   | 0.0088 | ND   | 131  | 131   |
| GS/Comp-002     | Battery Area | 1/27/2010   | Grab/Auger  | 24"   | 0.019  | ND   | ND   | ND    |
| Sample ID       | Sample Area  | Sample Date | Sample Type | Depth | BTEX   | GRO  | DRO  | TOTAL |
| GS/Comp-001     | Battery Area | 3/30/2010   | Grab/Auger  | 12"   | 0.0191 | 37.1 | 54.2 | 91.3  |
| GS/Comp-002     | Battery Area | 3/30/2010   | Grab/Auger  | 24"   | ND     | 20.7 | 28.8 | 49.5  |

**Site Ranking is Zero (0).** Depth to Ground Water >100' (approx. 160', per NMOSE, Section 2, T24S-R31E).

All results are ppm. X - Sample Points



**Lily ALY Federal #1 Battery**

**30-015-27262**

**Section 3, T24S-R31E**

**Eddy County, NM**

**SAMPLE DIAGRAM (Not to Scale)**

**Xenco Report #: 360284 & 367432  
Report Date: 2/4/2010 & 4/6/2010**

**Prepared by Robert Asher  
Environmental Regulatory Agent**

# Analytical Report 367432

for

## Yates Petroleum Corporation

**Project Manager: Robert Asher**

**Lily ALY Federal # 1 Battery**

**30-015-27262**

**06-APR-10**



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-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 (LAO00312), 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-TX)

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

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

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295)



06-APR-10

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

Reference: XENCO Report No: **367432**  
**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 367432. 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. 367432 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 367432**



**Yates Petroleum Corporation, Artesia, NM**  
Lily ALY Federal # 1 Battery

| <b>Sample Id</b> | <b>Matrix</b> | <b>Date Collected</b> | <b>Sample Depth</b> | <b>Lab Sample Id</b> |
|------------------|---------------|-----------------------|---------------------|----------------------|
| GS/Comp-001      | S             | Mar-30-10 10:37       | 1 - 1 ft            | 367432-001           |
| GS/Comp-002      | S             | Mar-30-10 10:51       | 2 - 2 ft            | 367432-002           |



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Lily ALY Federal # 1 Battery*

*Project ID: 30-015-27262*

*Report Date: 06-APR-10*

*Work Order Number: 367432*

*Date Received: 03/31/2010*

---

**Sample receipt non conformances and Comments:**

None

---

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

None

**Analytical Non Conformances and Comments:**

Batch: LBA-800574 TPH by SW 8015B

None

Batch: LBA-800622 Percent Moisture

None

Batch: LBA-801206 BTEX by EPA 8021

SW8021BM

Batch 801206, Ethylbenzene, m,p-Xylenes , o-Xylene RPD is outside the QC limit. This is most likely due to sample non-homogeneity.

Samples affected are: 367432-002, -001.

SW8021BM

Batch 801206, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 367432-002,367432-001.

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

Samples affected are: 367432-001 D,367432-001.



# Certificate of Analysis Summary 367432

Yates Petroleum Corporation, Artesia, NM

Project Name: Lily ALY Federal # 1 Battery

Date Received in Lab: Wed Mar-31-10 09 38 am

Project Id: 30-015-27262

Contact: Robert Asher

Report Date: 06-APR-10

Project Location: Eddy County

Project Manager: Brent Barron, II

| <i>Analysis Requested</i>          | <i>Lab Id:</i>    | 367432-001      | 367432-002      |  |  |  |  |
|------------------------------------|-------------------|-----------------|-----------------|--|--|--|--|
|                                    | <i>Field Id:</i>  | GS/Comp-001     | GS/Comp-002     |  |  |  |  |
|                                    | <i>Depth:</i>     | 1-1 ft          | 2-2 ft          |  |  |  |  |
|                                    | <i>Matrix:</i>    | SOIL            | SOIL            |  |  |  |  |
|                                    | <i>Sampled:</i>   | Mar-30-10 10:37 | Mar-30-10 10:51 |  |  |  |  |
| <b>BTEX by EPA 8021</b>            | <i>Extracted:</i> | Apr-06-10 07:30 | Apr-06-10 07:30 |  |  |  |  |
|                                    | <i>Analyzed:</i>  | Apr-06-10 12:36 | Apr-06-10 12:58 |  |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg      RL   | mg/kg      RL   |  |  |  |  |
| Benzene                            |                   | ND 0.0011       | ND 0.0011       |  |  |  |  |
| Toluene                            |                   | ND 0.0021       | ND 0.0022       |  |  |  |  |
| Ethylbenzene                       |                   | 0.0025 0.0011   | ND 0.0011       |  |  |  |  |
| m,p-Xylenes                        |                   | 0.0099 0.0021   | ND 0.0022       |  |  |  |  |
| o-Xylene                           |                   | 0.0067 0.0011   | ND 0.0011       |  |  |  |  |
| Xylenes, Total                     |                   | 0.0166 0.0011   | ND 0.0011       |  |  |  |  |
| Total BTEX                         |                   | 0.0191 0.0011   | ND 0.0011       |  |  |  |  |
| <b>Percent Moisture</b>            | <i>Extracted:</i> |                 |                 |  |  |  |  |
|                                    | <i>Analyzed:</i>  | Mar-31-10 17:00 | Mar-31-10 17:00 |  |  |  |  |
|                                    | <i>Units/RL:</i>  | %      RL       | %      RL       |  |  |  |  |
| Percent Moisture                   |                   | 6.74 1.00       | 9.13 1.00       |  |  |  |  |
| <b>TPH by SW 8015B</b>             | <i>Extracted:</i> | Mar-31-10 14:45 | Mar-31-10 14:45 |  |  |  |  |
|                                    | <i>Analyzed:</i>  | Mar-31-10 18:13 | Mar-31-10 18:40 |  |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg      RL   | mg/kg      RL   |  |  |  |  |
| C6-C10 Gasoline Range Hydrocarbons |                   | 37.1 16.0       | 20.7 16.6       |  |  |  |  |
| C10-C28 Diesel Range Hydrocarbons  |                   | 54.2 16.0       | 28.1 16.6       |  |  |  |  |
| Total TPH                          |                   | 91.3 16.0       | 48.8 16.6       |  |  |  |  |

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.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - 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

|   | Phone          | Fax            |
|---|----------------|----------------|
| 4143 Greenbriar Dr, Stafford, Tx 77477      | (281) 240-4200 | (281) 240-4280 |
| 9701 Harry Hines Blvd , Dallas, TX 75220    | (214) 902 0300 | (214) 351-9139 |
| 5332 Blackberry Drive, San Antonio TX 78238 | (210) 509-3334 | (210) 509-3335 |
| 2505 North Falkenburg Rd, Tampa, FL 33619   | (813) 620-2000 | (813) 620-2033 |
| 5757 NW 158th St, Miami Lakes, FL 33014     | (305) 823-8500 | (305) 823-8555 |
| 12600 West I-20 East, Odessa, TX 79765      | (432) 563-1800 | (432) 563-1713 |
| 842 Cantwell Lane, Corpus Christi, TX 78408 | (361) 884-0371 | (361) 884-9116 |



## Environmental Lab of Texas

### Variance/ Corrective Action Report- Sample Log-In

Client: Yates Petroleum  
 Date/ Time: 3/31/10 09:38  
 Lab ID #: 307432  
 Initials: AS

#### Sample Receipt Checklist

|  |       |    |                          | Client Initials |
|--|-------|----|--------------------------|-----------------|
| #1 Temperature of container/ cooler?                       | (Yes) | No | 21 °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

# 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 (AAL11), 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

| <b>Sample Id</b> | <b>Matrix</b> | <b>Date Collected</b> | <b>Sample Depth</b> | <b>Lab Sample Id</b> |
|------------------|---------------|-----------------------|---------------------|----------------------|
| 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           |



## 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.*



# Certificate of Analysis Summary 360284

Yates Petroleum Corporation, Artesia, NM

Project Name: Lily ALY Federal # 1 Battery

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

Project Id: 30-015-27262

Contact: Robert Asher

Report Date: 04-FEB-10

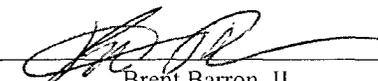
Project Location: Eddy County

Project Manager: Brent Barron, II

| <i>Analysis Requested</i>          | <i>Lab Id:</i>    | 360284-001      | 360284-002       | 360284-003       |  |  |  |
|------------------------------------|-------------------|-----------------|------------------|------------------|--|--|--|
|                                    | <i>Field Id:</i>  | GS/Comp-Surface | GS/Comp-001      | GS/Comp-002      |  |  |  |
|                                    | <i>Depth:</i>     | 4-6 In          | 1-1 ft           | 2-2 ft           |  |  |  |
|                                    | <i>Matrix:</i>    | SOIL            | SOIL             | SOIL             |  |  |  |
|                                    | <i>Sampled:</i>   | Jan-27-10 10:33 | Jan-27-10 11:10  | Jan-27-10 11:31  |  |  |  |
| <b>BTEX by EPA 8021</b>            | <i>Extracted:</i> | Feb-02-10 06:45 | Feb-02-10 06:45  | Jan-29-10 16:00  |  |  |  |
|                                    | <i>Analyzed:</i>  | Feb-02-10 10:59 | Feb-02-10 09:05  | Jan-30-10 15:49  |  |  |  |
|                                    | <i>Units/RL:</i>  | 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>            | <i>Extracted:</i> |                 |                  |                  |  |  |  |
|                                    | <i>Analyzed:</i>  | Jan-29-10 17:00 | Jan-29-10 17:00  | Jan-29-10 17:00  |  |  |  |
|                                    | <i>Units/RL:</i>  | %    RL         | %    RL          | %    RL          |  |  |  |
| Percent Moisture                   |                   | 7.93    1.00    | 9.74    1.00     | 5.87    1.00     |  |  |  |
| <b>TPH by SW 8015B</b>             | <i>Extracted:</i> | Jan-29-10 11:00 | Jan-29-10 11:00  | Jan-29-10 11:00  |  |  |  |
|                                    | <i>Analyzed:</i>  | Jan-29-10 14:59 | Jan-29-10 15:26  | Jan-29-10 15:53  |  |  |  |
|                                    | <i>Units/RL:</i>  | 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 user 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

|   | Phone          | Fax            |
|---|----------------|----------------|
| 4143 Greenbriar Dr, Stafford, Tx 77477      | (281) 240-4200 | (281) 240-4280 |
| 9701 Harry Hines Blvd , Dallas, TX 75220    | (214) 902 0300 | (214) 351-9139 |
| 5332 Blackberry Drive, San Antonio TX 78238 | (210) 509-3334 | (210) 509-3335 |
| 2505 North Falkenburg Rd, Tampa, FL 33619   | (813) 620-2000 | (813) 620-2033 |
| 5757 NW 158th St, Miami Lakes, FL 33014     | (305) 823-8500 | (305) 823-8555 |
| 12600 West I-20 East, Odessa, TX 79765      | (432) 563-1800 | (432) 563-1713 |
| 842 Cantwell Lane, Corpus Christi, TX 78408 | (361) 884-0371 | (361) 884-9116 |

# XENCO-Environmental Lab of Texas

## 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  
 Company Name Yates Petroleum Corporation  
 Company Address: 105 South 4th Street  
 City/State/Zip: Artesia, NM 88210  
 Telephone No. 575-748-4217 Fax No: 575-748-4662  
 Sampler Signature: *Robert Asher* e-mail: boba@yatespetroleum.com

Project Name: Lily ALY Federal #1 Battery  
 Project #: 30-015-27262  
 Project Loc: Eddy County  
 PO #: 105632  
 Report Format:  Standard  TRRP  NPDES

| (lab use only)       |                        | Analyze For:    |              |                   |                 |              |                       |                                |          |           |           |           |             |             |                         |                              |                 |                                |           |               |                              |     |      |           |  |              |
|----------------------|------------------------|-----------------|--------------|-------------------|-----------------|--------------|-----------------------|--------------------------------|----------|-----------|-----------|-----------|-------------|-------------|-------------------------|------------------------------|-----------------|--------------------------------|-----------|---------------|------------------------------|-----|------|-----------|--|--------------|
| LAB # (lab use only) | ORDER #:               | TCLP            | TOTAL:       |                   |                 |              |                       |                                |          |           |           |           |             |             |                         |                              |                 |                                |           |               |                              |     |      |           |  |              |
|                      | <u>340284</u>          |                 |              |                   |                 |              |                       |                                |          |           |           |           |             |             |                         |                              |                 |                                |           |               |                              |     |      |           |  |              |
| LAB # (lab use only) | FIELD CODE             | Beginning Depth | Ending Depth | Date Sampled      | Time Sampled    | Field Filled | Total # of Containers | Preservation & # of Containers | Matrix   | TPH 418 1 | TPH 8015M | TPH 8016B | TPH TX 1005 | TPH TX 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO4, Alkalinity) | SAR / ESP / CEC | Metals As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 8021B/8030 or BTEX 8260 | RCI | NORM | Chlorides | RUSH TAT (Pre-Schedule) 24, 48, 72 hrs | Standard TAT |
| <u>01</u>            | <u>GS/Comp-Surface</u> | <u>4"</u>       | <u>6"</u>    | <u>1/27/2010</u>  | <u>10:33 AM</u> | <u>1</u>     | <u>X</u>              |                                | <u>S</u> | <u>X</u>  |           |           |             |             |                         |                              |                 |                                |           |               | <u>X</u>                     |     |      |           |  | <u>X</u>     |
| <u>02</u>            | <u>GS/Comp-001</u>     | <u>1'</u>       | <u>1'</u>    | <u>1/27/2010</u>  | <u>11:10 AM</u> | <u>1</u>     | <u>X</u>              |                                | <u>S</u> | <u>X</u>  |           |           |             |             |                         |                              |                 |                                |           |               | <u>X</u>                     |     |      |           |  | <u>X</u>     |
| <u>03</u>            | <u>GS/Comp-002</u>     | <u>2'</u>       | <u>2'</u>    | <u>1/257/2010</u> | <u>11:31 AM</u> | <u>1</u>     | <u>X</u>              |                                | <u>S</u> | <u>X</u>  |           |           |             |             |                         |                              |                 |                                |           |               | <u>X</u>                     |     |      |           |  | <u>X</u>     |

Special Instructions: TPH: 8015B & BTEX: 8021B. Please show ALL results as mg/kg. Thank you.

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 by Sampler/Client Rep.? N  
 by Courier? UPS DHL FedEx Lone Star  
 Temperature Upon Receipt: 4oz glass 1.4 °C

|                     |                 |                |                   |                |              |
|---------------------|-----------------|----------------|-------------------|----------------|--------------|
| Relinquished by:    | Date            | Time           | Received by:      | Date           | Time         |
| <u>Robert Asher</u> | <u>01/27/10</u> | <u>3:01 PM</u> |                   |                |              |
| Relinquished by:    | Date            | Time           | Received by:      | Date           | Time         |
| <u>FedEx</u>        |                 |                | <u>Andrea Sam</u> | <u>1-28-10</u> | <u>14:55</u> |

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