

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

RECEIVED

APR 26 2011

NMOCD ARTESIA

February 24, 2010

Mr. Mike Bratcher  
NMOCD District II  
1301 W. Grand Ave.  
Artesia, NM 88210

RE: State D SWD #1  
30-015-21572  
Section 16, T20S-R24E  
Eddy County, New Mexico

Dear Mr. Bratcher,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on July 15, 2009. Vertical and horizontal delineation samples were taken on August 11, 2009 and February 17, 2010 and sent to an NMOCD approved laboratory. Results (enclosed) of sample GS/Comp-002 (2/17/2010) show elevated Total TPH which probably indicates an isolated pocket of contamination within the composite grab sample. The Diesel Range Hydrocarbons are at 3290 ppm putting the Total THP at 5110 and slightly above the Total Ranking Score of 5000ppm and very likely historical, and low mobility with the depth to ground water at approximately 350'. Yates Petroleum Corporation requests these soils be left in place until the time the battery is no longer in service and be addressed at that future time. Yates Petroleum Corporation requests closure.

Thank you.

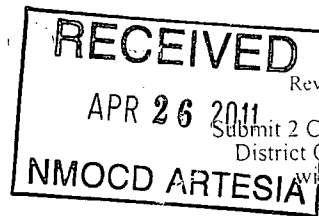
YATES PETROLEUM CORPORATION

Robert Asher  
Environmental Regulatory Agent

Enclosure(s)  
/rca

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

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505



Form C-141  
Revised October 10, 2003

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

|  |                            |                               |
|--|----------------------------|-------------------------------|
| Name of Company<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>State D SWD #1                | API Number<br>30-015-21572 | Facility Type<br>Battery      |

|                        |                        |                     |
|------------------------|------------------------|---------------------|
| Surface Owner<br>State | Mineral Owner<br>State | Lease No.<br>V-2531 |
|------------------------|------------------------|---------------------|

### LOCATION OF RELEASE

|                  |               |                 |              |                      |                           |                       |                        |                |
|------------------|---------------|-----------------|--------------|----------------------|---------------------------|-----------------------|------------------------|----------------|
| Unit Letter<br>N | Section<br>16 | Township<br>20S | Range<br>24E | Feet from the<br>660 | North/South Line<br>South | Feet from the<br>1980 | East/West Line<br>West | County<br>Eddy |
|------------------|---------------|-----------------|--------------|----------------------|---------------------------|-----------------------|------------------------|----------------|

Latitude 32.56807 Longitude 104.59483

### NATURE OF RELEASE

|  |  |   |
|--|--|---|
| Type of Release<br>Produced Water  | Volume of Release<br>110 B/PW                    | Volume Recovered<br>100 B/PW                |
| Source of Release<br>Pump containment vessel   | Date and Hour of Occurrence<br>7/15/2009, AM     | Date and Hour of Discovery<br>7/15/2009, AM |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Mike Bratcher/NMOCD, Artesia |   |
| By Whom?<br>Robert Asher/Yates Petroleum Corporation   | Date and Hour<br>7/15/2009, PM                   |   |
| 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.\*

Bad check valve on sump pump from building, sump pump burned out, causing containment vessel to overflow. Isolated line, called vacuum truck.

Describe Area Affected and Cleanup Action Taken.\*

An approximate area of 15' X 75'. Vacuum truck recovered remaining produced water. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's a Final Report, C-141 will be submitted to the OCD requesting closure. Will submit work plan if further remediation is required. **Depth to Ground Water: >100' (approx. 350'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0. Based on enclosed analytical results, amount of produced water recovered and depth to ground water, 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:  | OIL CONSERVATION DIVISION        |                  |                                   |
| Printed Name: Robert Asher   | Approved by District Supervisor: |                  |                                   |
| Title: Environmental Regulatory Agent  | Approval Date:                   | Expiration Date: |                                   |
| E-mail Address: boba@yatespetroleum.com  | Conditions of Approval:          |                  | Attached <input type="checkbox"/> |
| Date: Wednesday, February 24, 2010   | 2RP-                             |                  |                                   |

\* Attach Additional Sheets If Necessary

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

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

### Release Notification and Corrective Action

*AKMW 1111138956*

|  |                            |  |                                       |
|--|----------------------------|--|---------------------------------------|
| <b>OPERATOR</b>                                |                            | <input checked="" type="checkbox"/> Initial Report | <input type="checkbox"/> 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>505-748-1471                      |                                       |
| Facility Name<br>State D SWD #1                | API Number<br>30-015-21572 | Facility Type<br>Battery                           |                                       |
| Surface Owner<br>State                         | Mineral Owner<br>State     | Lease No.<br>V-2531                                |                                       |

### LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| N           | 16      | 20S      | 24E   | 660           | South            | 1980          | West           | Eddy   |

Latitude 32.56807 Longitude 104.59483

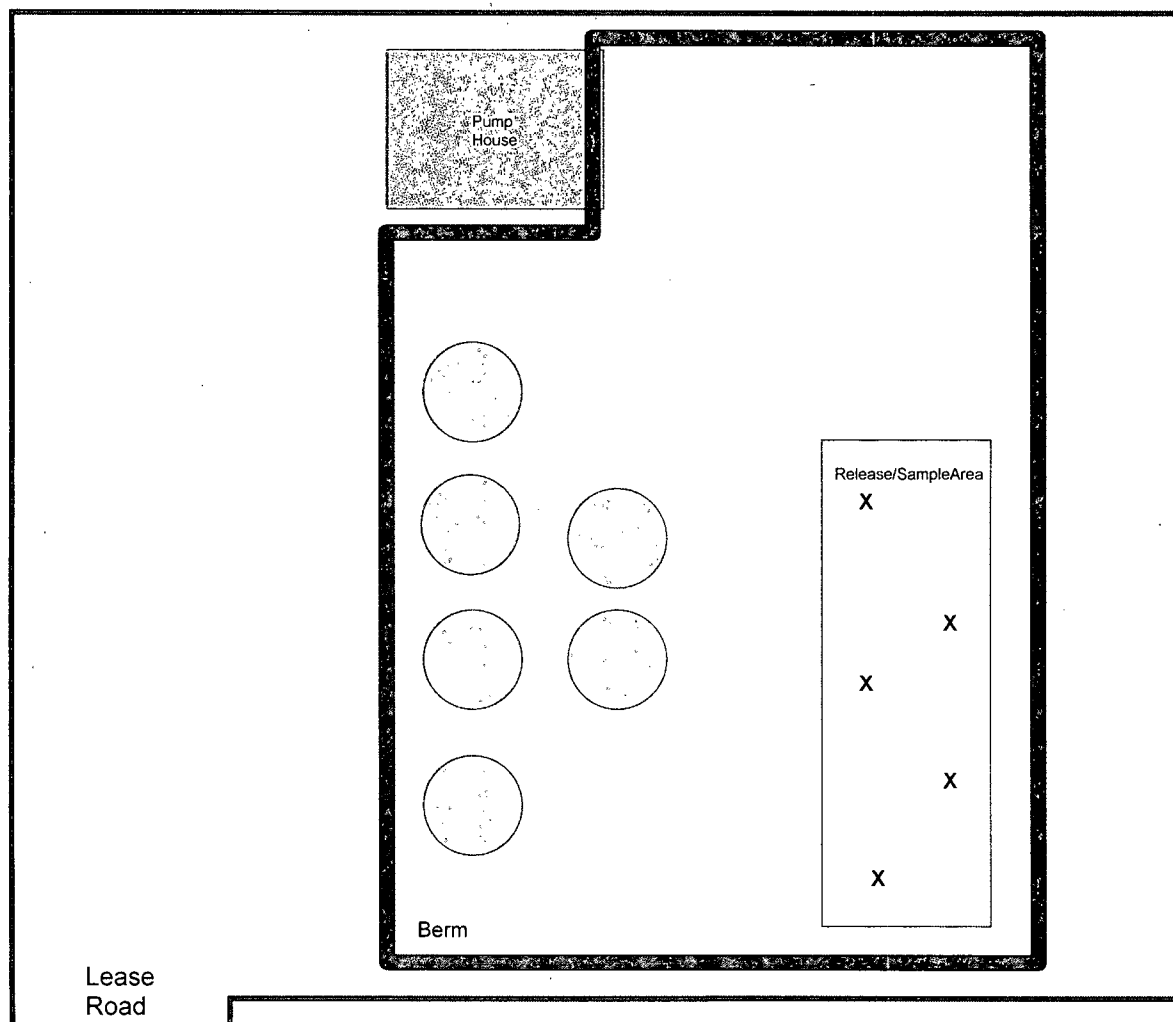
### NATURE OF RELEASE

|   |  |   |
|---|--|---|
| Type of Release<br>Produced Water   | Volume of Release<br>110 B/PW                    | Volume Recovered<br>100 B/PW                |
| Source of Release<br>Pump containment vessel  | Date and Hour of Occurrence<br>7/15/2009, AM     | Date and Hour of Discovery<br>7/15/2009, AM |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required  | If YES, To Whom?<br>Mike Bratcher/NMOCD, Artesia |   |
| By Whom?<br>Robert Asher/Yates Petroleum Corporation  | Date and Hour<br>7/15/2009, PM                   |   |
| 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.*<br>N/A  |  |   |
| Describe Cause of Problem and Remedial Action Taken.*<br>Bad check valve on sump pump from building, sump pump burned out, causing containment vessel to overflow. Isolated line, called vacuum truck.  |  |   |
| Describe Area Affected and Cleanup Action Taken.*<br>An approximate area of 15' X 75'. Vacuum truck recovered remaining produced water. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's a Final Report, C-141 will be submitted to the OCD requesting closure. Will submit work plan if further remediation is required. <b>Depth to Ground Water: &gt;100' (approx. 350'). Wellhead Protection Area: No, Distance to Surface Water Body: &gt;1000', SITE RANKING IS 0.</b>  |  |   |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCID 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 NMOCID 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, NMOCID 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: <i>Robert Asher</i>        | <b>OIL CONSERVATION DIVISION</b>   |                  |
| Printed Name: Robert Asher            | Approved by District Engineer: <i>Mike Bratcher</i>  |                  |
| Title: Environmental Regulatory Agent | Approval Date: <u>4/21/11</u>  | Expiration Date: |
| E-mail Address: boba@ypcnm.com        | Conditions of Approval:  |                  |
| Date: Wednesday, July 22, 2009        | Remediation per OCD Rules & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:</b> |                  |
| Phone: 505-748-1471                   | <u>5/21/11</u>   |                  |

\* Attach Additional Sheets If Necessary

**2 RP 755**



| Sample ID       | Sample Area  | Sample Date | Sample Type | Depth | BTEX   | GRO  | DRO  | TOTAL | Chlorides |
|-----------------|--------------|-------------|-------------|-------|--------|------|------|-------|-----------|
| GS/Comp-Surface | Battery Area | 8/11/2009   | Grab/Auger  | 4"    | ND     | ND   | 887  | 887   | 2910      |
| GS/Comp-001     | Battery Area | 8/11/2009   | Grab/Auger  | 12"   | 2.077  | 147  | 1130 | 1277  | 515       |
| GS/Comp-002     | Battery Area | 8/11/2009   | Grab/Auger  | 24"   | 2.319  | 182  | 787  | 969   | 299       |
| Sample ID       | Sample Area  | Sample Date | Sample Type | Depth | BTEX   | GRO  | DRO  | TOTAL | Chlorides |
| GS/Comp-Surface | Battery Area | 2/17/2010   | Grab/Auger  | 4"    | 0.2294 | 37.2 | 109  | 146.2 | 1970      |
| GS/Comp-001     | Battery Area | 2/17/2010   | Grab/Auger  | 12"   | 39.28  | 709  | 910  | 1619  | 682       |
| GS/Comp-002     | Battery Area | 2/17/2010   | Grab/Auger  | 24"   | 25.67  | 1820 | 3290 | 5110  | 397       |

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 350').

All results are ppm. Chloride results are for documentation. X - Sample Points



State D SWD #1  
30-015-21572  
Section 16 T20S-R24E  
Eddy County, NM

**SAMPLE DIAGRAM (Not to Scale)**  
Xenco Laboratories: #340666  
Report Date: 8/18/2009  
Xenco Laboratories: #362835 & 362836  
Report Date: 2/24/2010  
Prepared by Robert Asher  
Environmental Regulatory Agent

# Analytical Report 362836

for

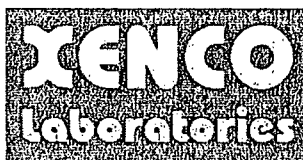
## Yates Petroleum Corporation

Project Manager: Robert Asher

State D SWD # 1

30-015-21572

24-FEB-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)



24-FEB-10

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

Reference: XENCO Report No: **362836**  
**State D SWD # 1**  
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 362836. 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. 362836 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 362836



Yates Petroleum Corporation, Artesia, NM

State D SWD # 1

| Sample Id       | Matrix | Date Collected  | Sample Depth | Lab Sample Id |
|-----------------|--------|-----------------|--------------|---------------|
| GS/Comp-Surface | S      | Feb-17-10 09:43 | 4 - 4 in     | 362836-001    |
| GS/Comp-001     | S      | Feb-17-10 09:59 | 1 - 1 ft     | 362836-002    |
| GS/Comp-002     | S      | Feb-17-10 10:18 | 2 - 2 ft     | 362836-003    |



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: State D SWD # 1*



*Project ID: 30-015-21572*

*Work Order Number: 362836*

*Report Date: 24-FEB-10*

*Date Received: 02/19/2010*

---

**Sample receipt non conformances and Comments:**

None

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

None

**Analytical Non Conformances and Comments:**

Batch: LBA-794783 Percent Moisture

None

Batch: LBA-794973 Anions in Soil By EPA 300.0

None





# Certificate of Analysis Summary 362836

Yates Petroleum Corporation, Artesia, NM

Project Name: State D SWD # 1



Project Id: 30-015-21572

Contact: Robert Asher

Date Received in Lab: Fri Feb-19-10 09:35 am

Report Date: 24-FEB-10

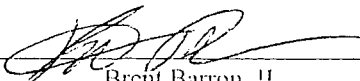
Project Manager: Brent Barron, II

Project Location: Eddy County

|                                    |                   |                 |                 |                 |  |  |  |
|------------------------------------|-------------------|-----------------|-----------------|-----------------|--|--|--|
| <b>Analysis Requested</b>          | <b>Lab Id:</b>    | 362836-001      | 362836-002      | 362836-003      |  |  |  |
|                                    | <b>Field Id:</b>  | GS/Comp-Surface | GS/Comp-001     | GS/Comp-002     |  |  |  |
|                                    | <b>Depth:</b>     | 4-4 in          | 1-1 ft          | 2-2 ft          |  |  |  |
|                                    | <b>Matrix:</b>    | SOIL            | SOIL            | SOIL            |  |  |  |
|                                    | <b>Sampled:</b>   | Feb-17-10 09:43 | Feb-17-10 09:59 | Feb-17-10 10:18 |  |  |  |
| <b>Anions in Soil By EPA 300.0</b> | <b>Extracted:</b> |                 |                 |                 |  |  |  |
|                                    | <b>Analyzed:</b>  | Feb-22-10 19:16 | Feb-22-10 19:16 | Feb-22-10 19:16 |  |  |  |
|                                    | <b>Units/RL:</b>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| Chloride                           |                   | 1970 49.5       | 682 20.0        | 397 20.2        |  |  |  |
| <b>Percent Moisture</b>            | <b>Extracted:</b> |                 |                 |                 |  |  |  |
|                                    | <b>Analyzed:</b>  | Feb-19-10 17:00 | Feb-19-10 17:00 | Feb-19-10 17:00 |  |  |  |
|                                    | <b>Units/RL:</b>  | % RL            | % RL            | % RL            |  |  |  |
| Percent Moisture                   |                   | 15.2 1.00       | 16.1 1.00       | 16.8 1.00       |  |  |  |

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.

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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 #

Project Name: State D SWD #1

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

Project #: 30-015-21572

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip:      Artesia, NM 88210

PO #: 105632

Telephone No: 505-748-4217 Fax No: 505-748-4662

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

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

e-mail: [boba@yatespetroleum.com](mailto:boba@yatespetroleum.com)

[illegible]

# Environmental Lab of Texas

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

Client: Yates Petroleum

Date/ Time: 2.19.10 9:35

Lab ID #: 362835 / 362836

Initials: AL

### Sample Receipt Checklist

Client Initials

|     |  |            |    |                          |  |
|-----|--|------------|----|--------------------------|--|
| #1  | Temperature of container/ cooler?                      | <u>Yes</u> | No | 4.6 °C                   |  |
| #2  | Shipping container in good condition?                  | <u>Yes</u> | No |                          |  |
| #3  | Custody Seals intact on shipping container/ cooler?    | <u>Yes</u> | No | Not Present              |  |
| #4  | Custody Seals intact on sample bottles/ container?     | <u>Yes</u> | No | Not Present              |  |
| #5  | Chain of Custody present?                              | <u>Yes</u> | No |                          |  |
| #6  | Sample instructions complete of Chain of Custody?      | <u>Yes</u> | No |                          |  |
| #7  | Chain of Custody signed when relinquished/ received?   | <u>Yes</u> | No |                          |  |
| #8  | Chain of Custody agrees with sample label(s)?          | <u>Yes</u> | No | ID written on Cont./ Lid |  |
| #9  | Container label(s) legible and intact?                 | <u>Yes</u> | No | Not Applicable           |  |
| #10 | Sample matrix/ properties agree with Chain of Custody? | <u>Yes</u> | No |                          |  |
| #11 | Containers supplied by ELOT?                           | <u>Yes</u> | No |                          |  |
| #12 | Samples in proper container/ bottle?                   | <u>Yes</u> | No | See Below                |  |
| #13 | Samples properly preserved?                            | <u>Yes</u> | No | See Below                |  |
| #14 | Sample bottles intact?                                 | <u>Yes</u> | No |                          |  |
| #15 | Preservations documented on Chain of Custody?          | <u>Yes</u> | No |                          |  |
| #16 | Containers documented on Chain of Custody?             | <u>Yes</u> | No |                          |  |
| #17 | Sufficient sample amount for indicated test(s)?        | <u>Yes</u> | No | See Below                |  |
| #18 | All samples received within sufficient hold time?      | <u>Yes</u> | No | See Below                |  |
| #19 | Subcontract of sample(s)?                              | <u>Yes</u> | No | Not Applicable           |  |
| #20 | VOC samples have zero headspace?                       | <u>Yes</u> | No | Not Applicable           |  |

### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken:

Check all that Apply:

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

# Analytical Report 362835

for

**Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**State D SWD # 1**

**30-015-21572**

**24-FEB-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)



24-FEB-10

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

Reference: XENCO Report No: **362835**  
**State D SWD # 1**  
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 362835. 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. 362835 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.*

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## Sample Cross Reference 362835



Yates Petroleum Corporation, Artesia, NM

State D SWD # 1

| Sample Id       | Matrix | Date Collected  | Sample Depth | Lab Sample Id |
|-----------------|--------|-----------------|--------------|---------------|
| GS/Comp-Surface | S      | Feb-17-10 09:43 | 4 - 4 In     | 362835-001    |
| GS/Comp-001     | S      | Feb-17-10 09:59 | 1 - 1 ft     | 362835-002    |
| GS/Comp-002     | S      | Feb-17-10 10:18 | 2 - 2 ft     | 362835-003    |



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: State D SWD # 1*



*Project ID: 30-015-21572*

*Work Order Number: 362835*

*Report Date: 24-FEB-10*

*Date Received: 02/19/2010*

---

**Sample receipt non conformances and Comments:**

None

---

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

None

**Analytical Non Conformances and Comments:**

Batch: LBA-794718 TPH by SW 8015B

SW8015B\_NM

Batch 794718, C10-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 362835-002, -001, -003.

The Laboratory Control Sample for C10-C28 Diesel Range Hydrocarbons is within laboratory Control Limits

Batch: LBA-794778 Percent Moisture

None





## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: State D SWD # 1*



*Project ID: 30-015-21572*

*Work Order Number: 362835*

*Report Date: 24-FEB-10*

*Date Received: 02/19/2010*

*Batch: LBA-795184 BTEX by EPA 8021  
SW8021BM*

*Batch 795184, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis*

*Samples affected are: 362835-002,362835-003,362835-001.*

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

*Samples affected are: 363035-011 S,363035-011 SD.*

*SW8021BM*

*Batch 795184, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.*

*Samples affected are: 362835-002, -001, -003.*

*The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits*

*SW8021BM*

*Batch 795184, Benzene, Ethylbenzene, Toluene, m,p-Xylenes , o-Xylene RPD was outside QC limits.*

*Samples affected are: 362835-002, -001, -003*



# Certificate of Analysis Summary 362835

Yates Petroleum Corporation, Artesia, NM

Project Name: State D SWD # 1



Project Id: 30-015-21572

Contact: Robert Asher

Project Location: Eddy County

Date Received in Lab: Fri Feb-19-10 09:35 am


Report Date: 24-FEB-10

Project Manager: Brent Barron, II

| <i>Analysis Requested</i>          | <i>Lab Id:</i>    | 362835-001      | 362835-002      | 362835-003      |  |  |  |
|------------------------------------|-------------------|-----------------|-----------------|-----------------|--|--|--|
|                                    | <i>Field Id:</i>  | GS/Comp-Surface | GS/Comp-001     | GS/Comp-002     |  |  |  |
|                                    | <i>Depth:</i>     | 4-4 in          | 1-1 ft          | 2-2 ft          |  |  |  |
|                                    | <i>Matrix:</i>    | SOIL            | SOIL            | SOIL            |  |  |  |
|                                    | <i>Sampled:</i>   | Feb-17-10 09:43 | Feb-17-10 09:59 | Feb-17-10 10:18 |  |  |  |
| <b>BTEX by EPA 8021</b>            | <i>Extracted:</i> | Feb-23-10 08:45 | Feb-23-10 08:45 | Feb-23-10 08:45 |  |  |  |
|                                    | <i>Analyzed:</i>  | Feb-23-10 16:53 | Feb-23-10 18:26 | Feb-24-10 01:03 |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| Benzene                            |                   | ND 0.0012       | ND 0.0591       | ND 0.0599       |  |  |  |
| Toluene                            |                   | 0.0049 0.0023   | 0.5123 0.1182   | 3.593 0.1199    |  |  |  |
| Ethylbenzene                       |                   | 0.0249 0.0012   | 3.696 0.0591    | 1.888 0.0599    |  |  |  |
| m,p-Xylenes                        |                   | 0.1063 0.0023   | 18.46 0.1182    | 11.86 0.1199    |  |  |  |
| o-Xylene                           |                   | 0.0933 0.0012   | 16.61 0.0591    | 8.327 0.0599    |  |  |  |
| Xylenes, Total                     |                   | 0.1996 0.0012   | 35.07 0.0591    | 20.19 0.0599    |  |  |  |
| Total BTEX                         |                   | 0.2294 0.0012   | 39.28 0.0591    | 25.67 0.0599    |  |  |  |
| <b>Percent Moisture</b>            | <i>Extracted:</i> | Feb-19-10 17:00 | Feb-19-10 17:00 | Feb-19-10 17:00 |  |  |  |
|                                    | <i>Analyzed:</i>  | Feb-19-10 17:00 | Feb-19-10 17:00 | Feb-19-10 17:00 |  |  |  |
|                                    | <i>Units/RL:</i>  | % RL            | % RL            | % RL            |  |  |  |
| Percent Moisture                   |                   | 15.2 1.00       | 16.1 1.00       | 16.7 1.00       |  |  |  |
| <b>TPH by SW 8015B</b>             | <i>Extracted:</i> | Feb-19-10 11:45 | Feb-19-10 11:45 | Feb-19-10 11:45 |  |  |  |
|                                    | <i>Analyzed:</i>  | Feb-20-10 04:46 | Feb-20-10 05:14 | Feb-20-10 05:41 |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| C6-C10 Gasoline Range Hydrocarbons |                   | 37.2 17.7       | 709 179         | 1820 180        |  |  |  |
| C10-C28 Diesel Range Hydrocarbons  |                   | 109 17.7        | 910 179         | 3290 180        |  |  |  |
| Total TPH                          |                   | 146 17.7        | 1619 179        | 5110 180        |  |  |  |

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.

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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 #

**Project Name: State D SWD #1**

**Company Name** Yates Petroleum Corporation

Project #: 30-015-21572

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip:       Artesia, NM 88210

PO #: 105632

Telephone No: 505-748-4217

Fax No: 505-748-4662

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:

e-mail: [boba@yatespetroleum.com](mailto:boba@yatespetroleum.com)

[illegible]

# Environmental Lab of Texas

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

Client: Yates Petroleum  
 Date/ Time: 2.19.10 9:35  
 Lab ID #: 362835 / 362836  
 Initials: AL

### Sample Receipt Checklist

Client Initials

|     |  |       |    |                          |  |
|-----|--|-------|----|--------------------------|--|
| #1  | Temperature of container/ cooler?                      | (Yes) | No | 4.6 °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 340666

for

**Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**State D SWD # 1**

**30-015-21572**

**18-AUG-09**



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

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

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

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

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

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

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

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

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18-AUG-09

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

Reference: XENCO Report No: **340666**  
**State D SWD # 1**  
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 340666. 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. 340666 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 340666



Yates Petroleum Corporation, Artesia, NM

State D SWD # 1

| Sample Id       | Matrix | Date Collected  | Sample Depth | Lab Sample Id |
|-----------------|--------|-----------------|--------------|---------------|
| GS/Comp-Surface | S      | Aug-11-09 11:29 | 4 - 4 In     | 340666-001    |
| GS/Comp-001     | S      | Aug-11-09 11:44 | 1 - 1 ft     | 340666-002    |
| GS/Comp-002     | S      | Aug-11-09 11:59 | 2 - 2 ft     | 340666-003    |





## CASE NARRATIVE

Client Name: Yates Petroleum Corporation

Project Name: State D SWD # 1

Project ID: 30-015-21572

Work Order Number: 340666

Report Date: 18-AUG-09

Date Received: 08/12/2009

---

**Sample receipt non conformances and Comments:**

None

---

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

None

**Analytical Non Conformances and Comments:**

Batch: LBA-768358 Percent Moisture

AD2216A %Moisture

Batch 768358, Percent Moisture RPD recovered outside QC limits. This is most likely due to sample non-homogeneity.

Samples affected are: 340658-001 D.

Batch: LBA-768362 Inorganic Anions by EPA 300

None

Batch: LBA-768535 BTEX-MTBE EPA 8021B

SW8021BM

Batch 768535, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 340666-003.

4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 535392-1-BLK.

4-Bromofluorobenzene recovered above QC limits Data not confirmed by re-analysis. Samples affected are: 535392-1-BKS and 535392-1-BSD

4-Bromofluorobenzene recovered above QC limits Sample Data confirmed by re-analysis.

Samples affected are: 340666-003

---

SW8021BM

Batch 768535, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 340666-003.

The Laboratory Control Sample for Toluene, m,p-Xylenes , Ethylbenzene, o-Xylene is within laboratory Control Limits

Batch: LBA-768651 TPH by SW 8015B

None



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: State D SWD # 1*

*Project ID: 30-015-21572*

*Work Order Number: 340666*

*Report Date: 18-AUG-09*

*Date Received: 08/12/2009*

---

*Batch: LBA-768717 BTEX-MTBE EPA 8021B*

*SW8021BM*

*Batch 768717, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis*

*Samples affected are: 340666-002.*

*4-Bromofluorobenzene recovered below QC limits sample Data confirmed by re-analysis.*

*Samples affected are: 535470-1-BLK, 340666-001.*

*QC data was not reanalyzed for confirmation.*

*4-Bromofluorobenzene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 340666-002, 340908-001 D*

---



# Certificate of Analysis Summary 340666

Yates Petroleum Corporation, Artesia, NM

Project Name: State D SWD # 1



Project Id: 30-015-21572

Contact: Robert Asher

Project Location: Eddy County

Date Received in Lab: Wed Aug-12-09 09:27 am

Report Date: 18-AUG-09

Project Manager: Brent Barron, II

| <i>Analysis Requested</i>          | <i>Lab Id:</i>    | 340666-001      | 340666-002      | 340666-003      |  |  |  |
|------------------------------------|-------------------|-----------------|-----------------|-----------------|--|--|--|
|                                    | <i>Field Id:</i>  | GS/Comp-Surface | GS/Comp-001     | GS/Comp-002     |  |  |  |
|                                    | <i>Depth:</i>     | 4-4 In          | 1-1 ft          | 2-2 ft          |  |  |  |
|                                    | <i>Matrix:</i>    | SOIL            | SOIL            | SOIL            |  |  |  |
|                                    | <i>Sampled:</i>   | Aug-11-09 11:29 | Aug-11-09 11:44 | Aug-11-09 11:59 |  |  |  |
| <b>Anions by EPA 300</b>           | <i>Extracted:</i> |                 |                 |                 |  |  |  |
|                                    | <i>Analyzed:</i>  | Aug-12-09 15:37 | Aug-12-09 15:37 | Aug-12-09 15:37 |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| Chloride                           |                   | 2910 53.5       | 515 11.5        | 299 11.8        |  |  |  |
| <b>BTEX by EPA 8021B</b>           | <i>Extracted:</i> | Aug-14-09 13:00 | Aug-14-09 13:00 | Aug-13-09 17:00 |  |  |  |
|                                    | <i>Analyzed:</i>  | Aug-15-09 16:55 | Aug-15-09 17:13 | Aug-13-09 20:51 |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| Benzene                            |                   | ND 0.0054       | ND 0.0058       | ND 0.0235       |  |  |  |
| Toluene                            |                   | ND 0.0107       | 0.0530 0.0115   | ND 0.0470       |  |  |  |
| Ethylbenzene                       |                   | ND 0.0054       | 0.2101 0.0058   | 0.1816 0.0235   |  |  |  |
| m,p-Xylenes                        |                   | ND 0.0107       | 1.058 0.0115    | 1.350 0.0470    |  |  |  |
| o-Xylene                           |                   | ND 0.0054       | 0.7559 0.0058   | 0.7872 0.0235   |  |  |  |
| Total Xylenes                      |                   | ND 0.0054       | 1.814 0.0058    | 2.137 0.0235    |  |  |  |
| Total BTEX                         |                   | ND 0.0054       | 2.077 0.0058    | 2.319 0.0235    |  |  |  |
| <b>Percent Moisture</b>            | <i>Extracted:</i> |                 |                 |                 |  |  |  |
|                                    | <i>Analyzed:</i>  | Aug-12-09 16:00 | Aug-12-09 16:00 | Aug-12-09 16:00 |  |  |  |
|                                    | <i>Units/RL:</i>  | % RL            | % RL            | % RL            |  |  |  |
| Percent Moisture                   |                   | 6.58 1.00       | 13.15 1.00      | 14.96 1.00      |  |  |  |
| <b>TPH By SW8015B Mod</b>          | <i>Extracted:</i> | Aug-13-09 10:52 | Aug-13-09 10:52 | Aug-13-09 10:52 |  |  |  |
|                                    | <i>Analyzed:</i>  | Aug-13-09 14:39 | Aug-13-09 15:04 | Aug-13-09 15:29 |  |  |  |
|                                    | <i>Units/RL:</i>  | mg/kg RL        | mg/kg RL        | mg/kg RL        |  |  |  |
| C6-C10 Gasoline Range Hydrocarbons |                   | ND 16.0         | 147 86.3        | 182 88.1        |  |  |  |
| C10-C28 Diesel Range Hydrocarbons  |                   | 887 16.0        | 1130 86.3       | 787 88.1        |  |  |  |
| Total TPH                          |                   | 887 16.0        | 1277 86.3       | 969 88.1        |  |  |  |

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.

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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.

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| (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

Phone: 432-563-1800  
Fax: 432-563-1713

Project Name: State D SWD #1

Project #: 30-015-21572

Project Loc: Eddy County

FO #: 105632

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

e-mail: [bcbai@yatespetroleum.com](mailto:bcbai@yatespetroleum.com)

[illegible]

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

Client: Nates Petroleum  
Date/ Time: 8.17.09 9:27  
Lab ID #: 34060600  
Initials: CL

Sample Receipt Checklist

|     |  |          | Client Initials          |    |
|-----|--|----------|--------------------------|----|
| #1  | Temperature of container/ cooler?                      | (Yes) No | 5.6                      | °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 EL-OT?                          | (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