

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

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CHIEF OPERATING OFFICER

September 24, 2014

Dr. Tomas Oberding  
NMOCD District I  
1625 N. French Drive  
Hobbs, New Mexico 88240

Re: Lotus ALT State #9  
30-025-37661  
Section 32, T22S-R32E  
Lea County, New Mexico

Dr. Oberding:

Yates Petroleum Corporation is submitting the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated September 6, 2013.

If you have any questions, feel free to call me at (575) 748-4171

Thank you.

YATES PETROLEUM CORPORATION

Chase Settle  
Environmental Regulatory Agent

Enclosure(s)

KATHY H. PORTER  
SECRETARY

DENNIS G. KINSEY  
TREASURER

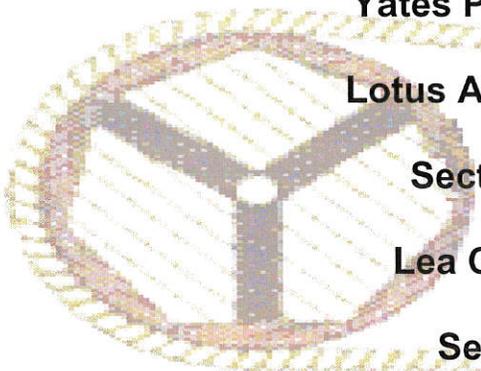
**Yates Petroleum Corporation**

**Lotus ALT State #9 Work Plan**

**Section 32, T22S-R32E**

**Lea County, New Mexico**

**September 24, 2014**



**I. Location**

The well is located approximately 6 miles southeast of the Waste Isolation Pilot Plant which is located 31 miles east of Carlsbad, NM.

**II. Background**

On September 6, 2013, Yates submitted to the NMOCD District I office a Form C-141 for the release of 15 B/O and 25 B/PW with 0 B/O and 0 B/PW recovered. The total affected area is approximately a 50 feet by 60 feet area (off the east side of the location). The release was from failure of a poly flow line causing oil and produced water to spray across the location and surrounding areas (east of the location). Initial delineation samples were taken (10/10/2013) and sent to a NMOCD approved laboratory (10/21/2013, results enclosed). Cross contamination occurred on the S4 sample due to the collapse of the walls during the sampling process. Based on analytical results (10/21/13), Yates Petroleum Corporation excavated six (6) feet of impacted soils in the S4 sample area. Those soils were taken to an approved NMOCD facility. A second sampling of the S4 sample area was conducted after excavation (02/03/2014) and sent to a NMOCD approved laboratory (02/12/14, results enclosed).

**III. Surface and Ground Water**

Area surface geology ranges from Cenozoic Quaternary to Cenozoic Quaternary-Tertiary. The ChevronTexaco Trend Map displays at this location (Section 8, T25S-R28E) that depth to groundwater is approximately 325' feet making the site ranking for this site a zero (0). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

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

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

**IV. Soils**

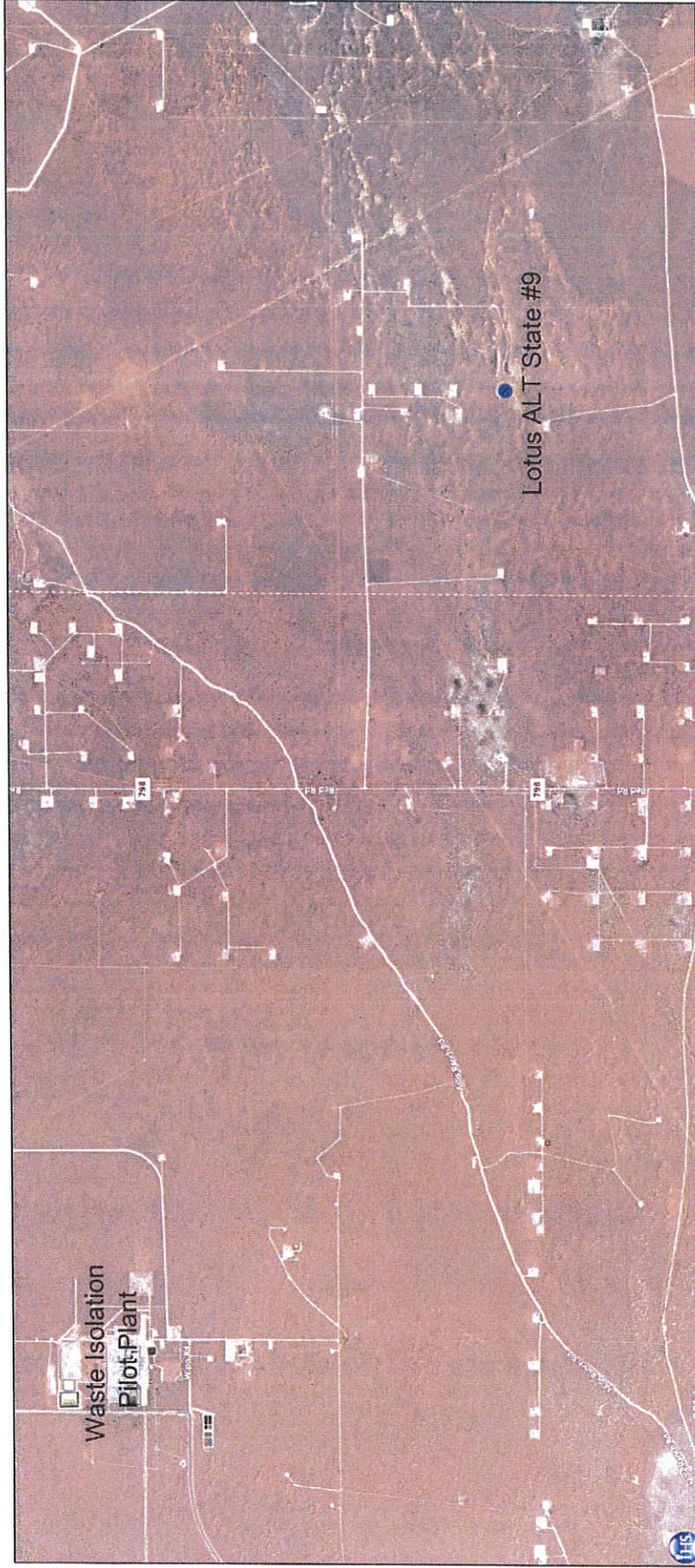
The area consists of soils that are caliche and loamy top soil and are interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

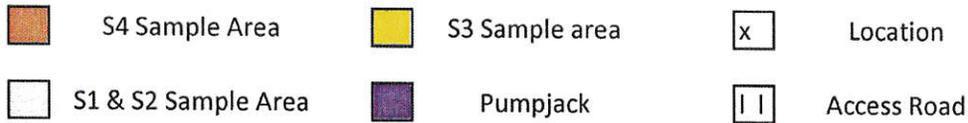
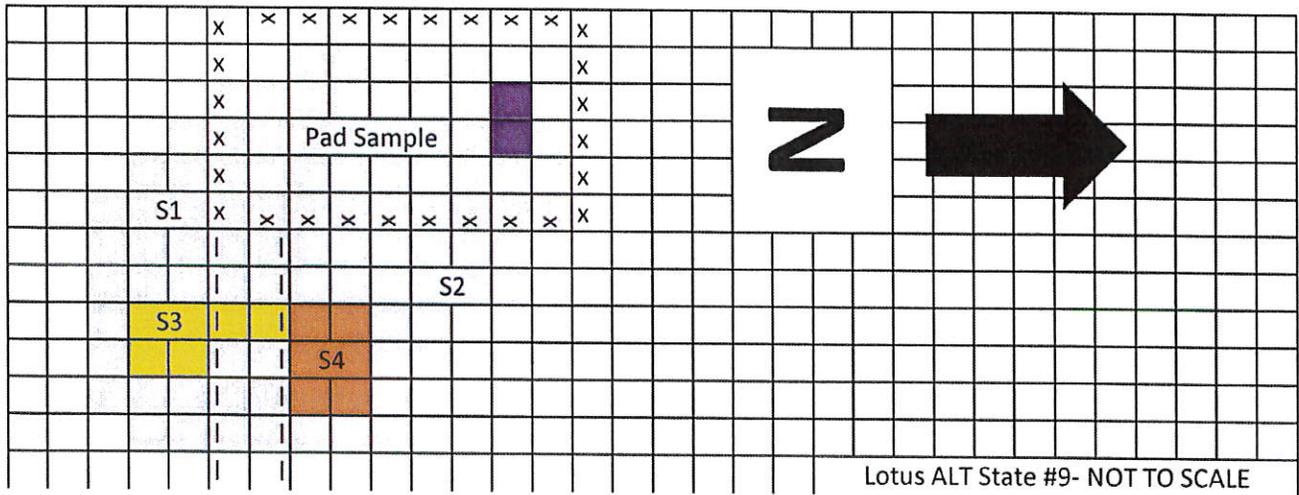
**V. Scope of Work**

Based on enclosed analytical results, the depth to groundwater (325'), and a decrease in chlorides, Yates Petroleum Corporation will backfill the excavated area with four (4) feet of packed caliche to serve as a clay liner to restrict vertical migration of chlorides upward or downward, and two (2) feet of like, similar topsoil which will allow for vegetative repopulation of the disturbed area which will further restrict water percolation through the vadose zone. The TPH & BTEX are within the RRAL's for BTEX (50 ppm) and TPH (5000 ppm) for the Total Ranking Score of zero (0), no further analytical testing of TPH and/or BTEX will be conducted (all chloride analytical results are for documentation). When remediation work is completed a C-141, Final Report, analytical results and a site sample diagram will be submitted to the NMOCD and request closure of the site.



Lotus ALT State #9 Map





| Analytical Report-<br>H302508-01 (Card) | Sample Area  | Sample Date | Sample Type | Depth   | BTEX | GRO   | DRO   | Chlorides |
|---|--------------|-------------|-------------|---------|------|-------|-------|-----------|
| S1-SUR                                  | Release Area | 10/10/2013  | Shovel      | Surface | <0.3 | <10.0 | <10.0 | 48        |
| S1-1'                                   | Release Area | 10/10/2013  | Backhoe     | 1'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S1-2'                                   | Release Area | 10/10/2013  | Backhoe     | 2'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S2-SUR                                  | Release Area | 10/10/2013  | Shovel      | Surface | <0.3 | <10.0 | <10.0 | <16.0     |
| S2-1'                                   | Release Area | 10/10/2013  | Backhoe     | 1'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S2-2'                                   | Release Area | 10/10/2013  | Backhoe     | 2'      | <0.3 | <10.0 | <10.0 | <16.0     |
| PAD-SUR                                 | Release Area | 10/10/2013  | Shovel      | Surface | <0.3 | <10.0 | <10.0 | 64        |
| PAD-1'                                  | Release Area | 10/10/2013  | Backhoe     | 1'      | <0.3 | <10.0 | <10.0 | 96        |
| PAD-2'                                  | Release Area | 10/10/2013  | Backhoe     | 2'      | <0.3 | <10.0 | <10.0 | 32        |
| <b>H302509-01</b>                       |              |             |             |         |      |       |       |           |
| S3-5'                                   | Release Area | 10/10/2013  | Backhoe     | 5'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S3-6'                                   | Release Area | 10/10/2013  | Backhoe     | 6'      | <0.3 | <10.0 | <10.0 | 32        |
| S3-7'                                   | Release Area | 10/10/2013  | Backhoe     | 7'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S3-8'                                   | Release Area | 10/10/2013  | Backhoe     | 8'      | <0.3 | <10.0 | <10.0 | <16.0     |
| S4-6'                                   | Release Area | 10/10/2013  | Backhoe     | 6'      | <0.3 | <10.0 | <10.0 | 5120      |
| S4-7'                                   | Release Area | 10/10/2013  | Backhoe     | 7'      | <0.3 | <10.0 | 10    | 13300     |
| S4-8'                                   | Release Area | 10/10/2013  | Backhoe     | 8'      | <0.3 | <10.0 | <10.0 | 26800     |
| <b>H400380-01</b>                       |              |             |             |         |      |       |       |           |
| S4-7'                                   | Release Area | 2/3/2014    | Backhoe     | 7'      | <0.3 | <10.0 | <10.0 | 5440      |
| S4-8'                                   | Release Area | 2/3/2014    | Backhoe     | 8'      | <0.3 | <10.0 | <10.0 | 7720      |
| S4-9'                                   | Release Area | 2/3/2014    | Backhoe     | 9'      | <0.3 | <10.0 | <10.0 | 4400      |
| S4-10'                                  | Release Area | 2/3/2014    | Backhoe     | 10'     | <0.3 | <10.0 | <10.0 | 1420      |

Site Ranking is Zero (0). DTGW >100' (approx 325', Section 32, T22S-R32E, Trend Map)

All results are ppm.

Released: 15 B/O, 25 B/PW; Recovered: 0 B/O, 0 B/PW Release Date: 09/03/2013



October 21, 2013

LUPE CARRASCO  
YATES PETROLEUM CORPORATION  
105 S 4th Street  
Artesia, NM 88210

RE: LOTUS ALT STATE #9

Enclosed are the results of analyses for samples received by the laboratory on 10/16/13 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S1-SUR (H302508-01)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.93 | 96.4       | 2.00          | 1.36 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.99 | 99.3       | 2.00          | 2.92 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 2.01 | 100        | 2.00          | 2.99 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.85 | 97.4       | 6.00          | 2.79 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 48.0   | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

Surrogate: 1-Chlorooctane 109 % 65.2-140

Surrogate: 1-Chlorooctadecane 119 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S1-1' (H302508-02)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.93 | 96.4       | 2.00          | 1.36 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.99 | 99.3       | 2.00          | 2.92 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 2.01 | 100        | 2.00          | 2.99 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.85 | 97.4       | 6.00          | 2.79 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |      |           |  |

*Surrogate: 4-Bromofluorobenzene (PIL) 99.9 % 89.4-126*

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane 97.5 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 104 % 63.6-154*

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\* = Accredited Analyte

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 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S1-2' (H302508-03)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.93 | 96.4       | 2.00          | 1.36 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.99 | 99.3       | 2.00          | 2.92 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 2.01 | 100        | 2.00          | 2.99 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.85 | 97.4       | 6.00          | 2.79 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |      |           |  |

*Surrogate: 4-Bromofluorobenzene (PIC) 100 % 89.4-126*

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane 101 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 112 % 63.6-154*

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S2-SUR (H302508-04)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE) 101 % 89.4-126*

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane 99.3 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 115 % 63.6-154*

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
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|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S2-1' (H302508-05)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE)* 101 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane* 111 % 65.2-140

*Surrogate: 1-Chlorooctadecane* 113 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S2-2' (H302508-06)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE)*    101 %    89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane*    97.6 %    65.2-140

*Surrogate: 1-Chlorooctadecane*    110 %    63.6-154

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: PAD-SUR (H302508-07)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIC) 101 % 89.4-126*

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 64.0   | 16.0            | 10/17/2013 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane 100 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 110 % 63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: PAD-1' (H302508-08)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIC)* 100 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 96.0   | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

*Surrogate: 1-Chlorooctane* 90.9 % 65.2-140

*Surrogate: 1-Chlorooctadecane* 99.3 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: PAD-2' (H302508-09)**

| BTEX 8021B      |              | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte         | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*        | <0.050       | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| <b>Toluene*</b> | <b>0.065</b> | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*   | <0.050       | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes*  | <0.150       | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX      | <0.300       | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PIC) 100 % 89.4-126

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>32.0</b> | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES  
101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Lupe Carrasco

Company: (505) 393-2326 Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4350

Fax No:

Sampler Signature: *Lupe Carrasco*

e-mail:

lcarrasco@yatespetroleum.com

Report Format:

Standard

TRRP

NPDES

Project Name:

Lotus A/T State #9

Project #:

Project Loc:

PO #: 103-163

(lab use only)

ORDER #: H302508

| LAB # (lab use only) | FIELD CODE | Beginning Depth | Ending Depth | Date Sampled | Time Sampled | Field Filtered | Total #. of Containers | Ice | HNO <sub>3</sub> | HCl | H <sub>2</sub> SO <sub>4</sub> | NaOH | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | None | Other (Specify) | DW=Drinking Water SL=Sludge<br>GW = Groundwater S=Soil/Solid<br>NP=Non-Potable Specify Other | TPH: 418.1 8015M 8015 | TPH: TX 1005 TX 1006 | Cations (Ca, Mg, Na, K) | Anions (Cl, SO <sub>4</sub> , Alkalinity) | SAR / ESP / CEC | Metals: As Ag Ba Cd Cr Pb Hg Se | Volatiles | Semivolatiles | BTEX 8021B/5030 or BTEX 8260 | RCI | N.O.R.M. | Chlorides | SAR | RUSH TAT (Pre-Schedule) 24, 48, 72 hrs | Standard TAT |  |
|----------------------|------------|-----------------|--------------|--------------|--------------|----------------|------------------------|-----|------------------|-----|--------------------------------|------|---|------|-----------------|--|-----------------------|----------------------|-------------------------|---|-----------------|---------------------------------|-----------|---------------|------------------------------|-----|----------|-----------|-----|--|--------------|--|
| 1                    | S1-Sur     |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 2                    | S1-1'      |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 3                    | S1-2'      |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 4                    | S2-Sur     |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 5                    | S2-1'      |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 6                    | S2-2'      |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 7                    | Pad-Sur    |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 8                    | Pad-1'     |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |
| 9                    | Pad-2'     |                 |              | 10/10/2013   |              |                |                        |     |                  |     |                                |      |   |      |                 |  | X                     |                      |                         |   |                 |                                 |           |               |                              |     |          |           |     |  |              |  |

Special Instructions:

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by: ELOT:

Date

Time

*Lupe Carrasco*

10/16/13

10:30

Laboratory Comments:

Sample Containers Intact?  Y  
VOCs Free of Headspace?  Y  
Labels on container(s)  Y  
Custody seals on container(s)  Y  
Custody seals on cooler(s)  Y  
Sample Hand Delivered by Sampler/Client Rep. ?  Y  
By Courier? UPS  DHL  FedEx  Lone Star  N

Temperature Upon Receipt: 1.0 °C

|        |  |
|--------|--|
| TC/CP: |  |
| TOTAL: |  |

Analyze For:

|   |         |         |      |
|---|---------|---------|------|
| TPH:                                      | 418.1   | 8015M   | 8015 |
| TPH:                                      | TX 1005 | TX 1006 |      |
| Cations (Ca, Mg, Na, K)                   |         |         |      |
| Anions (Cl, SO <sub>4</sub> , Alkalinity) |         |         |      |
| SAR / ESP / CEC                           |         |         |      |
| Metals: As Ag Ba Cd Cr Pb Hg Se           |         |         |      |
| Volatiles                                 |         |         |      |
| Semivolatiles                             |         |         |      |
| BTEX 8021B/5030 or BTEX 8260              |         |         |      |
| RCI                                       |         |         |      |
| N.O.R.M.                                  |         |         |      |
| Chlorides                                 |         |         |      |
| SAR                                       |         |         |      |



October 21, 2013

LUPE CARRASCO  
YATES PETROLEUM CORPORATION  
105 S 4th Street  
Artesia, NM 88210

RE: LOTUS ALT STATE #9

Enclosed are the results of analyses for samples received by the laboratory on 10/16/13 10:30.

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Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S3-5' (H302509-01)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/17/2013 | ND              | 189 | 94.6       | 200           | 4.47 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/17/2013 | ND              | 181 | 90.6       | 200           | 1.79 |           |  |

Surrogate: 1-Chlorooctane 115 % 65.2-140

Surrogate: 1-Chlorooctadecane 117 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S3-6' (H302509-02)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 32.0   | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

Surrogate: 1-Chlorooctane 110 % 65.2-140

Surrogate: 1-Chlorooctadecane 118 % 63.6-154

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\* = Accredited Analyte

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 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S3-7' (H302509-03)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE)* 99.6 % 89.4-126

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

*Surrogate: 1-Chlorooctane* 117 % 65.2-140

*Surrogate: 1-Chlorooctadecane* 118 % 63.6-154

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|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S3-8' (H302509-04)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIC) 101 % 89.4-126*

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

*Surrogate: 1-Chlorooctane 117 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 123 % 63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

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|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S4-6' (H302509-05)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE)* 99.7 % 89.4-126

| Chloride, SM4500CI-B |             | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>5120</b> | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

*Surrogate: 1-Chlorooctane* 109 % 65.2-140

*Surrogate: 1-Chlorooctadecane* 115 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

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|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S4-7' (H302509-06)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE)*      99.8 %      89.4-126

| Chloride, SM4500Cl-B |              | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result       | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>13300</b> | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M              |             | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte                | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10             | <10.0       | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| <b>DRO &gt;C10-C28</b> | <b>10.0</b> | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

*Surrogate: 1-Chlorooctane*      106 %      65.2-140

*Surrogate: 1-Chlorooctadecane*      110 %      63.6-154

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 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |               |
|-------------------|--------------------|---------------------|---------------|
| Received:         | 10/16/2013         | Sampling Date:      | 10/10/2013    |
| Reported:         | 10/21/2013         | Sampling Type:      | Soil          |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact |
| Project Number:   | 103-163            | Sample Received By: | Kathy Perez   |
| Project Location: | NOT GIVEN          |                     |               |

**Sample ID: S4-8' (H302509-07)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |       |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.89 | 94.4       | 2.00          | 0.484 |           |  |
| Toluene*       | <0.050 | 0.050           | 10/19/2013 | ND              | 1.95 | 97.4       | 2.00          | 0.486 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 10/19/2013 | ND              | 1.97 | 98.4       | 2.00          | 0.735 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 10/19/2013 | ND              | 5.81 | 96.8       | 6.00          | 0.984 |           |  |
| Total BTEX     | <0.300 | 0.300           | 10/19/2013 | ND              |      |            |               |       |           |  |

*Surrogate: 4-Bromofluorobenzene (PIL)*    100 %    89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AP |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 26800  | 16.0            | 10/17/2013 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 10/18/2013 | ND              | 204 | 102        | 200           | 8.49 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 10/18/2013 | ND              | 199 | 99.4       | 200           | 8.56 |           |  |

*Surrogate: 1-Chlorooctane*    120 %    65.2-140

*Surrogate: 1-Chlorooctadecane*    121 %    63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celest D. Keene, Lab Director/Quality Manager



February 12, 2014

LUPE CARRASCO  
YATES PETROLEUM CORPORATION  
105 S 4th Street  
Artesia, NM 88210

RE: LOTUS ALT STATE #9

Enclosed are the results of analyses for samples received by the laboratory on 02/06/14 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3)  |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |                |
|-------------------|--------------------|---------------------|----------------|
| Received:         | 02/06/2014         | Sampling Date:      | 02/03/2014     |
| Reported:         | 02/12/2014         | Sampling Type:      | Soil           |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact  |
| Project Number:   | NONE GIVEN         | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN          |                     |                |

**Sample ID: S4-7' (H400380-01)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 02/11/2014 | ND              | 2.34 | 117        | 2.00          | 4.12 |           |  |
| Toluene*       | <0.050 | 0.050           | 02/11/2014 | ND              | 2.32 | 116        | 2.00          | 3.68 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 02/11/2014 | ND              | 2.30 | 115        | 2.00          | 4.18 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 02/11/2014 | ND              | 6.76 | 113        | 6.00          | 3.04 |           |  |
| Total BTEX     | <0.300 | 0.300           | 02/11/2014 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PIC) 120 % 89.4-126

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 5440   | 16.0            | 02/11/2014 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: ms |     |            |               |       |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 02/10/2014 | ND              | 214 | 107        | 200           | 0.383 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 02/10/2014 | ND              | 198 | 99.1       | 200           | 3.57  |           |  |

Surrogate: 1-Chlorooctane 105 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |                |
|-------------------|--------------------|---------------------|----------------|
| Received:         | 02/06/2014         | Sampling Date:      | 02/03/2014     |
| Reported:         | 02/12/2014         | Sampling Type:      | Soil           |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact  |
| Project Number:   | NONE GIVEN         | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN          |                     |                |

**Sample ID: S4-8' (H400380-02)**

| BTEX 8021B      |              | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte         | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*        | <0.050       | 0.050           | 02/11/2014 | ND              | 2.34 | 117        | 2.00          | 4.12 |           |  |
| <b>Toluene*</b> | <b>0.081</b> | 0.050           | 02/11/2014 | ND              | 2.32 | 116        | 2.00          | 3.68 |           |  |
| Ethylbenzene*   | <0.050       | 0.050           | 02/11/2014 | ND              | 2.30 | 115        | 2.00          | 4.18 |           |  |
| Total Xylenes*  | <0.150       | 0.150           | 02/11/2014 | ND              | 6.76 | 113        | 6.00          | 3.04 |           |  |
| Total BTEX      | <0.300       | 0.300           | 02/11/2014 | ND              |      |            |               |      |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE) 120 % 89.4-126*

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>7720</b> | 16.0            | 02/11/2014 | ND              | 400 | 100        | 400           | 3.92 |           |  |

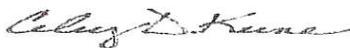
| TPH 8015M    |        | mg/kg           |            | Analyzed By: ms |     |            |               |       |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 02/10/2014 | ND              | 214 | 107        | 200           | 0.383 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 02/10/2014 | ND              | 198 | 99.1       | 200           | 3.57  |           |  |

*Surrogate: 1-Chlorooctane 100 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 104 % 63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |                |
|-------------------|--------------------|---------------------|----------------|
| Received:         | 02/06/2014         | Sampling Date:      | 02/03/2014     |
| Reported:         | 02/12/2014         | Sampling Type:      | Soil           |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact  |
| Project Number:   | NONE GIVEN         | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN          |                     |                |

**Sample ID: S4-9' (H400380-03)**

| BTEX 8021B      |              | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|-----------------|--------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte         | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*        | <0.050       | 0.050           | 02/11/2014 | ND              | 2.34 | 117        | 2.00          | 4.12 |           |  |
| <b>Toluene*</b> | <b>0.140</b> | 0.050           | 02/11/2014 | ND              | 2.32 | 116        | 2.00          | 3.68 |           |  |
| Ethylbenzene*   | <0.050       | 0.050           | 02/11/2014 | ND              | 2.30 | 115        | 2.00          | 4.18 |           |  |
| Total Xylenes*  | <0.150       | 0.150           | 02/11/2014 | ND              | 6.76 | 113        | 6.00          | 3.04 |           |  |
| Total BTEX      | <0.300       | 0.300           | 02/11/2014 | ND              |      |            |               |      |           |  |

*Surrogate: 4-Bromofluorobenzene (PIE) 120 % 89.4-126*

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>4400</b> | 16.0            | 02/11/2014 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: ms |     |            |               |       |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 02/10/2014 | ND              | 214 | 107        | 200           | 0.383 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 02/10/2014 | ND              | 198 | 99.1       | 200           | 3.57  |           |  |

*Surrogate: 1-Chlorooctane 114 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 118 % 63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

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 LUPE CARRASCO  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

|                   |                    |                     |                |
|-------------------|--------------------|---------------------|----------------|
| Received:         | 02/06/2014         | Sampling Date:      | 02/03/2014     |
| Reported:         | 02/12/2014         | Sampling Type:      | Soil           |
| Project Name:     | LOTUS ALT STATE #9 | Sampling Condition: | Cool & Intact  |
| Project Number:   | NONE GIVEN         | Sample Received By: | Celey D. Keene |
| Project Location: | NOT GIVEN          |                     |                |

**Sample ID: S4-10' (H400380-04)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: MS |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 02/11/2014 | ND              | 2.34 | 117        | 2.00          | 4.12 |           |  |
| Toluene*       | <0.050 | 0.050           | 02/11/2014 | ND              | 2.32 | 116        | 2.00          | 3.68 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 02/11/2014 | ND              | 2.30 | 115        | 2.00          | 4.18 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 02/11/2014 | ND              | 6.76 | 113        | 6.00          | 3.04 |           |  |
| Total BTEX     | <0.300 | 0.300           | 02/11/2014 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PIC) 119 % 89.4-126

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 1420   | 16.0            | 02/11/2014 | ND              | 400 | 100        | 400           | 3.92 |           |  |

| TPH 8015M    |        | mg/kg           |            | Analyzed By: ms |     |            |               |       |           |  |
|--------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte      | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |  |
| GRO C6-C10   | <10.0  | 10.0            | 02/10/2014 | ND              | 214 | 107        | 200           | 0.383 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 02/10/2014 | ND              | 198 | 99.1       | 200           | 3.57  |           |  |

Surrogate: 1-Chlorooctane 110 % 65.2-140

Surrogate: 1-Chlorooctadecane 117 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

|     |  |
|-----|--|
| ND  | Analyte NOT DETECTED at or above the reporting limit   |
| RPD | Relative Percent Difference  |
| **  | Samples not received at proper temperature of 6°C or below.  |
| *** | Insufficient time to reach temperature.  |
| -   | Chloride by SM4500Cl-B does not require samples be received at or below 6°C<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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