Bratcher, Mike, EMNRD

From:

Chase Settle < CSettle@yatespetroleum.com>

Sent:

Wednesday, February 12, 2014 9:19 AM

To:

Bratcher, Mike, EMNRD

Cc:

jamos@blm.gov; Duncan Whitlock (dwhitloc@blm.gov); Bob Asher

Subject:

Llama ALL Federal #1

Attachments:

Llama ALL Federal #1 (02-12-14 C141 Final & Sundry).pdf

RE:

Llama ALL Federal #1

30-015-28093

Section 7, T22S-R31E

Eddy County, NM

Mr. Bratcher,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on 01/04/2014 (20 bbls of oil and 10 bbls of produced water with 0 bbls of oil and 0 bbls of produced water recovered). The cause of the release was due to a steel flow line experiencing a puncture and releasing oil and produced water. The release area was sampled on 01/23/2014 and sent for analysis (TPH, BTEX, and chlorides for documentation) at an NMOCD approved laboratory. The results for BTEX and Total TPH are below the RRAL's for the site ranking of 0 and depth to groundwater is approximately 150' per the ChevronTexaco trend map. Based on the enclosed analytical sampling results and depth to groundwater, Yates Petroleum Corporation requests closure. The affected soils were excavated and taken to an approved NMOCD facility and we believe the vertical chloride elevation at 4' is due to naturally occurring chlorides since that area has received no precipitation to leach the chlorides deeper into the soil and the 2 sample areas having the same chloride level at 4' even though saturation levels differed between the S1 and S2 sample areas (S1 was much more saturated).

If you have any questions, please call me at 575-748-4171.

Thank you,

Chase Settle

Environmental Regulatory Agent Yates Petroleum Corporation 105 S. 4th Street Artesia, NM 88210 575-748-4171 (Office) 575-703-6537 (Cell)

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Form 3160-5 (March 2012)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| FORM APPRO |)VE | D |
|----------------|------|----|
| OMB No. 100 | 4-01 | 37 |
| Eunigas Oataba | - 21 | 20 |

5. Lease Serial No. NM-81952

| | | | | NM-81952 | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Do not use this f | OTICES AND REPORTS orm for proposals to dri Use Form 3160-3 (APD) | ill or to re-en | ter an | 6. If Indian, Allottee or | Tribe Name |
| SÜBMI | T IN TRIPLICATE - Other instru | ctions on page 2 | 2. | 7. If Unit of CA/Agree | ment, Name and/or No. |
| I. Type of Well | · · · · · · · · · · · · · · · · · · · | | and the statement | | |
| Oil Well Gas W | √éll ✓ Other | | | 8. Well Name and No: Llama ALL Federal # | #1 |
| Name of Operator Yates Petroleum Corporation | | | | 9. API Well No. 30-015-28093 | |
| 3a. Address 105 S. 4th St., Artesia, NM 88210 | 3b _i . P | hone No. (include | area code) | 10. Field and Pool or E | xploratory Area |
| | | 748-4171 | | | |
| 4. Location of Well (Footage, Sec., T., 330 FSL & 950 FWL, Section 7, 1228-R31E | R.,M., or Survey Description) | | | 11. County or Parish, S Eddy County, New M | ** * |
| 12. CHEC | CK THE APPROPRIATE BOX(ES) |) TO INDICATE | NATURE OF N | OTICE, REPORT OR OTHE | ER DÁTA |
| TYPE OF SUBMISSION | | · · · · · · · · · · · · · · · · · · · | TYPE OF A | ACTION | ······································ |
| Notice of Intent | Acidize | Deepen | - | Production (Start/Resume) | Water Shut-Off |
| • | Alter Casing | Fracture Treat | | Reclamation | Well Integrity |
| Subsequent Report | Casing Repair | New Construc | | Recomplete | Other Completion of |
| | Change Plans | Plug and Abai | | Temporarily Abandon | clean-up actions. |
| Final Abandonment Notice | Convert to Injection | Plug Back | | Water Disposal | |
| determined that the site is ready for Steel flow line developed a leak release after 50°N of the berm, along a line 110° berm. The affected berm is to be edelineation samples will be taken at RRAL's (site ranking is 0) a Final R be submitted to the OCD. TPH & E approved facility. Depth to Ground Surface Water Body: > 1000°, SITE Corporation requests closure. | easing 20 B crude oil and 10 B pocted approximately 5' of the berlie W, then follow a line 60' S, then was and removed, along with analysis ran for TPH & BTEX teport, C-141 will be submitted to BTEX analytical results are under Water: >100' (approximately 15 | m and an area of a line 75' SE both the area off of the OCD requer RRAL's (site recover). | outside of the beack to the berm of location to be ocumentation), esting closure, anking is 0). Im 2S-R31E, per | erm flowing NW of the loc at a point approximately excavated and back drag If initial analytical results If the analytical results an pacted soils were excava Trend Map), Wellhead Pro | ation. The outside area affected is 5 feet from the NW corner of the gged. Vertical and horizontal for TPH & BTEX are under e above the RRAL a work plan will ted and hauled to a NMOCD otection Area: No, Distance to |
| 14. Thereby certify that the foregoing is Chase Settle | true and correct. Name (Printed/Type | · · | | | |
| | | Title | NM Environme | ental Regulatory Agent | ······································ |
| Signature | | Date | 02/11/2014 | | |
| | THIS SPACE FOR | R FEDERAL | OR STATE | OFFICE USE | |
| Approved by | | | | | True run ' transmin |
| Conditions of approval, if any, are attached that the applicant holds legal or equitable entitle the applicant to conduct operation | title to those rights in the subject least thereon. | warrant or certify se which would | Fitle Office | | Date |
| Title 18 U.S.C. Section 1001 and Title 4. | 3 U.S.C. Section 1212, make it a crim | ie for any person ki | nowingly and will | fully to make to any departme | nt or agency of the United States any false, |

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

FEB 1 2 2014

RECEIVE

Form C-141 Revised October 10, 2003

NMOCD ARTERIAGORIES to appropriate
District Office in accordance
with Rule 116 on back

| 1220 S. St. Fran | ncis Dr., Sant | a Fe, NM 8750: | 5 | ; | Santa 1 | Fe, NM 8750 | 5 | | | v | vitii Atu | side of form |
|------------------------|----------------|----------------|---------|---------------|------------|----------------------|--------------------|---------------------------------------|-----------|------------|-----------|--------------|
| | | | | Release Not | | on and Corr RATOR | ective Action | · · · · · · · · · · · · · · · · · · · | ☐ Initia | al Report | Ø | Final Repor |
| Name of Co | ompany | | | OGRID Nun | | Contact | | | | | | |
| Yates Petro | | oration | | 25575 | | Chase Settle | e | | | | | |
| Address | | | | | | Telephone l | No. | | | | | |
| 104 S. 4 TH | Street | | | | | 575-748-41 | | | | | | |
| Facility Na | me | | | API Number | | Facility Typ | oe | | | | | |
| Llama ALL | | 1 Battery | | 30-015-2809 | 3 | Battery | | | | | | |
| Surface Ow | | | | Mineral C |) | | | | Lease 1 | I. | | |
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| Federal | | | | rederal | | | | | NM-81 | 932 | | |
| | | | | LOCA | \TIO | N OF RE | LEASE | | | | | |
| Unit Letter | Section | Township | Range | Feet from the | North | /South Line | Feet from the | East/V | Vest Line | County | | |
| M | 7 | 22S | 31E | 330' | | South | 950' | ' | Vest | Eddy | | |
| | <u> </u> | <u> </u> | <u></u> | Latitude 32.3 | 9957 | _ Longitude | -103.82199 | _ | | I, | | |
| | | | | NAT | URE | OF REL | EASE | | | | | |
| Type of Relo | ease | | | | | Volume of | Release | | Volume I | Recovered | | |
| Crude Oil/ P | roduced Wa | ater | | | | 20 B/O 1 | 0 B/PW | | 0 B/O 0 | B/PW | | |
| Source of Re | | | | | | | lour of Occurrence | ce | | Hour of Di | scovery | <i>'</i> |
| Rupture of fl | | | | | | 01/04/2014 | | | 01/04/20 | 14; PM | | |
| Was Immedi | ate Notice (| | | | | If YES, To | | | | | | |
| | | × | Yes _ | No 🔲 Not Re | equired | Mike Brate | cher, Randy Dade | , Jim Ar | nos | | | |
| By Whom? | | | | | | Date and I | lour | | | | | |
| Robert Ashe | r · | | | | | 01/05/2014 | 1 7:41 am | | | | | |

N/A Describe Cause of Problem and Remedial Action Taken.*

🗌 Yes 🛛 No

Steel flow line developed a leak releasing crude oil and produced water, new connection and line were installed to alleviate the problem.

Describe Area Affected and Cleanup Action Taken.*

If a Watercourse was Impacted, Describe Fully.*

Was a Watercourse Reached?

Release affected approximately 5' of the berm and an area outside of the berm flowing NW of the location. The outside area affected is 50' N of the berm, along a line 110' W, then follow a line 60' S, then a line 75' SE back to the berm at a point approximately 5 feet from the NW corner of the berm. The affected berm is to be excavated and removed, along with the area off of location to be excavated and back dragged. 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 (site ranking is 0) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL a work plan will be submitted to the OCD. TPH & BTEX analytical results are under RRAL's (site ranking is 0). Impacted soils were excavated and hauled to a NMOCD approved facility. Depth to Ground Water: >100' (approximately 150', Section 7, T22S-R31E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: > 1000', SITE RANKING IS 0. Based on analytical results, impacted soils excavated and depth to groundwater, Yates Petroleum Corporation requests closure.

If YES, Volume Impacting the Watercourse.

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 CONS | SERVATION DIVISION |
| Printed Name: Chase Settle | Approved by District Superviso | or: |
| Title: NM Environmental Regulatory Agent | Approval Date: | Expiration Date: |
| E-mail Address: csettle@yatespetroleum.com | Conditions of Approval: | Attached |
| Date: Tuesday, February 11, 2014 Phone: 575-748-4171 | 2RP- | |

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3.1

Release Area

X.

S1 Sample Location

X

S2 Sample Location

| Analytical Report- | | | | | | | W.V. | |
|------------------------------------------------------|--------------|-------------|---------------|---------|--------|--------------|---------------|-------------------------------|
| H400297 (Cardinal) | Sample Area | Sample Date | Sample Type | - Depth | *BTEX* | GRO | DRO | Chlorides |
| \$1/1 | Release Area | 1/23/2014 | * Backhoe : * | 1', | .<0.3⁵ | <10.0 | < 10.0 | 208 |
| J. 3. 1812 | Release Area | 1/23/2014 | Backhoe - | 2' | ÇO:3 | ≥10.0 | ≪10,0 | 336 |
| \$1.8° | Release Area | 1/23/2014 | Backhoe | . 3' | √Ö:3 | <100 | ©10.0 | 416 |
| # S14" | Release Area | 1/23/2014 | Backhoe | 4' | <0.3 | ≤ 100 | ≪100 | 480 |
| S2.15-6 | Release Area | 1/23/2014 | . Backhoe | | <0.3 | ≪10.0 | <0.000 | 80 |
| ***S2 2(\$ | Release Area | 1/23/2014 | Backhoe | 2!, | <0.3 | ≪ 100 | \$10.0 | 96 |
| # 1 - 1 - S2 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | Release Area | 1/23/2014 | Backhoe | 3' | <0.3 | <10.0 | €100 0 | 128 |
| \$2.4 - F | Release Area | 1/23/2014 | Backhoe | 4' | ≲0:3 | <10.0 | <10.0 | 480 |

Site Ranking is Zero (0). DTGW >100' (approx 150', Section 7, T22S-R31E, Trend Map)
All results are ppm, Chlorides for documentation.

Released: 20 B/O, 10 B/PW; Recovered: 0 B/O, 0 B/PW Release Date: 1/4/2014



February 07, 2014

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: LLAMA ALL FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 01/30/14 11:06.

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.

Cardinal Laboratories is accreditated 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.

Celey & Keine

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



YATES PETROLEUM CORPORATION **CHASE SETTLE** 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

01/30/2014

Sampling Date:

01/23/2014

Reported:

02/07/2014.

Sampling Type:

Soil

Project Name:

LLAMA ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Sample Received By:

Kathy Perez

Project Location:

LLAMA ALL FEDERAL #1

Sample ID: S1 1' (H400297-01)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|--------|-----------------|------------|--------------|------|------------|---------------|------|----------------------------------------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.30 | 115 | 2.00 | 1.86 | |
| Toluene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.23 | 112 | 2.00 | 1.91 | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.21 | 111 | 2.00 | 2.01 | |
| Total Xylenes* | <0.150 | 0.150 | 02/05/2014 | NĎ, | 6.38 | 106 | 6.00 | 1.74 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND. | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIC | 113,9 | 6 89.4-12 | 6 | | | | | | |
| Chloride, SM4500Cl-B | mg/ | kg. | Analyze | d By: AP | | | | | ······································ |
| Analyte · | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 208 | 16.0 | 02/05/2014 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | kg . | Analyze | d By: ms | | | | | |
| Analyte. | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO_C6-C10 | <10.0 | 10.0 | 02/01/2014 | ŅD | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 82:4 | % 65.2-14 | 10 | | | ., | | | |
| Surrogate: I-Chlorooctadecane | 94.4 | % 63.6-15 | 4 | | | | | | |

Cardinal Laboratories

*=Accredited Analyte

Celeg & Keene



YATES PETROLEUM CORPORATION CHASE SETTLE 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

01/30/2014

Sampling Date:

01/23/2014

Reported:

02/07/2014

Sampling Type:

Sóil

Project Name:

LLAMA ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Sämple Received By:

Kathy Perez

Project Location:

LLAMA ALL FEDERAL #1

Sample ID: S1 2' (H400297-02)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|---------|-----------------|------------|--------------|------|------------|---------------|------|-----------------------------------------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.30 | 115 | 2.00 | 1.86 | |
| Toluene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.23 | 112 | 2.00 | 1.91 | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.21 | 111 | 2.00 | 2.01 | |
| Total Xylenes* | < 0.150 | 0.150 | 02/05/2014 | ND | 6.38 | 106 | 6.00 | 1.74 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIC | 115,9 | 6 89.4-12 | 6 | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | *************************************** |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 336 | 16.0 | 02/07/2014 | ND . | 416 | 104 | 40Ô | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: ms | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND: | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 85.4 | % 65.2-14 | 0 | | | • | | | |
| Surrogate: 1-Chlorocetadecane | 94.5 | % 63.6-15 | 4. | | | | | | |

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YATES PETROLEUM CORPORATION CHASE SETTLE 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

01/30/2014

Sampling Date:

01/23/2014

Reported:

02/07/2014

Sampling Type:

Soil

Project Name:

LLAMA ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Project Location:

LLAMA ALL FEDERAL #1

Sample Received By:

Kathy Perez

Sample ID: S1 3' (H400297-03)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|--------|-----------------|------------|--------------|------|------------|----------------------------------------------------------------------------------------------------------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.30 | 115 | 2.00 | 1.86 | |
| Toluene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.23 | 112 | 2.00 | 1.91 | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ÑD | 2.21 | 111 | 2.00 | 2.01 | |
| Total Xylenes* | <0.150 | 0.150 | 02/05/2014 | ND | 6:38 | 106 | 6.00 | 1.74 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PID | 113.9 | 6 89.4-12 | 6 | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 416 | .16.0 | 02/07/2014 | ND | 416 | 104- | 400 | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: ms | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD. | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chloroociane | 81.0 | % 65:2-14 | 10 | | | | ettati dige e ne per majori di anti di | | |
| Surrogate: 1-Chlorooctadecane | 82.4 | % 63.6-15 | i <i>4</i> | | | | | | |

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In no event shall Cardinal be liable for incidental or consequential damages

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Fax To:

Received:

01/30/2014

Reported: Project Name: 02/07/2014

LLAMA ALL FEDERAL #1

Project Number: Project Location: NOT GIVEN

LLAMA ALL FEDERAL #1

Sampling Date: Sampling Type:

Sampling Condition:

Sample Received By:

01/23/2014

Soil Cool & Intact

Kathy Perez

Sample ID: S1 4' (H400297-04)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|---------|-----------------|------------|--------------|------|----------------------------------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.30 | 115 | 2.00 | 1.86 | |
| Toluene* | <0.050 | 0.050 | 02/05/2014 | ND. | 2.23 | 112 | 2:00 | 1.91 | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.21 | 111 | 2.00 | 2.01 | |
| Total Xylenes* | < 0.150 | 0.150 | 02/05/2014 | ND | 6.38 | 106 | 6.00 | 1.74 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIE | 1149 | 6 89.4-12 | 6. | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 480 | 16.0 | 02/07/2014 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: ms | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| 'GRO-C6:-C10: | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 85.3 | % 65.2-14 | 10 | | | ************************************** | | ///WW | |
| Surrogate: 1-Chlorooctadecane | 84.5 | % 63.6-15 | i <i>4</i> | | | | | | |

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usive remedy for any claim anking, whether based in contract or tord, shall be limited to the amount paid by Chent for analyses. All chaims, including those for neglig bing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential any other cause whistspewer shall be deemed watered unless made in writing and received by Cardinal within theirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without similation, business interruptions, loss of use, or loss of use, or loss of profits incurred by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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Fax To:

(505) 748-4635

Received:

01/30/2014

Reported:

02/07/2014

Project Name:

LLAMA ALL FEDERAL #1

Project Number:

NOT GIVEN

Project Location:

LLAMA ALL FEDERAL #1

Sampling Date:

01/23/2014

Sampling Type:

Soil

Sampling Condition:

Sample Received By:

Cool & Intact

Kathy Perez

Sample ID: S2 1' (H400297-05)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|---------|-----------------|------------|--------------|------|-----------------------------------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.54 | 127 | 2.00 | 0.915 | |
| Toluene* | < 0.050 | 0.050 | 02/05/2014 | ND | 2,49 | 125 | 2.00 | 0.516 | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.49 | 124 | 2.00 | 0.462 | |
| Total Xylenes*: | <0.150 | 0.150 | 02/05/2014 | ND. | 7.18 | 120 | 6.00 | 0.427 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 113 9 | 6 89.4-12 | б | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 80.0 | 16.0 | 02/07/2014 | ND: | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | 'kg | Analyze | d By: ms | | *************************************** | 10.500 | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS. | % Recovery | True Value QC | ŖPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 02/01/2014 | ND. | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28. | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 91.4 | % 65.2-14 | 10 | | | | | | |
| Surrogate: 1-Chlorooctadecane | 99.2 | % 63.6-15 | ī4 | | | | | | |

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YATES PETROLEUM CORPORATION CHASE SETTLE 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

01/30/2014

Sampling Date:

01/23/2014

Reported:

02/07/2014

Sampling Type:

Soil

Project Name:

LLAMA ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Sample Received By:

Kathy Perez

Project Location:

LLAMA ALL FEDERAL #1

Sample ID: S2 2' (H400297-06)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|---------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.54 | 127 | 2.00 | 0.915 | |
| Toluené* | < 0.050 | 0,050 | 02/05/2014 | ND | 2.49 | 125 | 2.00 | 0.516 | |
| Ethylbenzene* | < 0.050 | 0.050 | 02/05/2014 | - ND | 2.49 | 124 | 2.00 | 0:462 | |
| Total Xylenes* | <0.150 | 0.150 | 02/05/2014 | ND | 7.18 | 120 | 6.00 | 0.427 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND · | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 114 % | % 89.4-12 | 6 | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 02/07/2014 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | 'kg | Analyze | d By: ms | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD. | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28. | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 90.8 | % 65.2-14 | IÒ. | | | ····· | | | |
| Surrogate: 1-Chlorooctadecane | 97.9 | % 63.6-15 | i <i>d</i> | | | | | | |

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Fax To:

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Received:

01/30/2014

717

Sampling Date:

01/23/2014

Reported:

02/07/2014

Sampling Type:

Soil

Project Name:

LLAMA, ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Sample Received By:

Kathy Perez

Project Location:

LLAMA ALL FEDERAL #1

Sample ID: S2 3' (H400297-07)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | |
|--------------------------------------|------------------------|-----------------|------------|--------------|------|------------|---------------|-------|-----------|
| .Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 0.050 | | 02/05/2014 | ND | 2.54 | 127 | 2.00 | 0.915 | |
| Toluene* | < 0.050 | 0.050 | 02/05/2014 | ND | 2.49 | 125 | 2.00 | 0.516 | |
| Ethylbenzene* | < 0.050 | 0.050 | 02/05/2014 | ND | 2:49 | 124 | 2.00 | 0.462 | |
| Total Xylenes* | <0.150 | 0.150 | 02/05/2014 | ND | 7.18 | 120 | 6.00 | 0.427 | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | |
| Surrogate: 4-Bromofluorobenzene (PIL | 116% 89.4-1 | | 6 | | | | | | |
| Chloride, SM4500CI-B | mg/ | kg | Analyze | d By: AP | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 16.0 | | 02/07/2014 | ND | 416 | 104 | 400 | 0.00 | |
| TPH 8015M | mg/ | kg | Analyze | d By: ms | | | | | |
| Analyte | Result Reporting Limit | | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.09 | |
| Surrogate: 1-Chlorooctane | 95,3 | % 65.2-14 | 10 | | | | | | |
| Surrogate: 1-Chloroociadecane | 95.6 | % 63.6-15 | 4 | | | | | | |

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YATES PETROLEUM CORPORATION CHASE SETTLE 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

01/30/2014

Sampling Date:

01/23/2014

Reported:

02/07/2014

Sampling Type:

Soil

Project Name:

LLAMA ALL FEDERAL #1

Sampling Condition:

Cool & Intact

Project Number:

NOT GIVEN

Sample Received By:

Kathy Perez

Project Location:

LLAMA ALL FEDERAL #1

Sample ID: S2 4' (H400297-08)

| BTEX 8021B | mg/ | kg | Analyze | d By: MS | | | | | | | |
|--------------------------------------|------------------------|-----------------|------------|--------------|-------|------------|---------------|------------------|-----------|--|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD: | Qualifier | | |
| Benzene* | <0.050 0.050 | | 02/05/2014 | ND | 2.54 | 127 | 2.00 | 0.915 | | | |
| Toluene* | <0.050 0,050 | | 02/05/2014 | ND | 2.49 | 125 | 2.00 | 0.516 | | | |
| Ethylbenzene* | <0.050 | 0.050 | 02/05/2014 | ND | 2.49 | 124 | 2.00 | 0:462 | | | |
| Total Xylenes* | <0.150 | 0.150 | 02/05/2014 | ND | 7.18 | 120 | 6.00 | 0.427 | | | |
| Total BTEX | <0.300 | 0.300 | 02/05/2014 | ND | | | | | | | |
| Surrogate: 4-Bromafluorobenzene (PIL | 11,5 9 | % 89.4-12 | 6 | | | | | , | | | |
| Chloride, SM4500Cl-B | mg/ | kg | Analyze | d By: AP | | | | | | | |
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BŞ | % Recovery | True Value QC | RPD | Qualifier | | |
| Chloride | 480 16.0 | | 02/07/2014 | ND | 416 | 104 | 400 | 0.00 | | | |
| TPH 8015M | mg/ | kg | Analyze | d By: ms | | | | | | | |
| Analyte | Result Reporting Limit | | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD ⁻ | Qualifier | | |
| GRO C6-C10 | <10.0 | 10.0 | 02/01/2014 | ND | 214 | 107 | 200 | 2.00 | | | |
| DRO >C10-C28 | <10.0 | 10.0 | 02/01/2014 | ND | , 214 | 107 | 200 | 2.09 | | | |
| Surrogate: 1-Chlorooctane | 99.8 | % 65.2-1- | 10 | | | | | | | | |
| Surrogate: 1-Chlorooctadecane | 99.7 | % 63.6-15 | 54 | | | | | | | | |

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Celey & Keene



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-8 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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| ARDINAL LABORATORIES 10 | | | * | | | | | 1 1 | | | : | | | | | | · 4* | A. | | | | <u> </u> | | | | | - | | | P |
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| Project Manager: Chase Settle Compu (SGS) 393-2324 Yates Petroleum Corporation Company Address: 105 South 4th Street City/State/Zip: Artesia, NM 88210 Feax No: 575-748-4131 Feax No: 575-748-4131 Report Format: X Standard TRSP NoCES Sampler Signature: X Standard TRSP NoCES S | Ø | | | | ę | \$* | rener and and | n mass smàith bha | 9.47 | | | | CH | AIN C |)FC | US | TODY | REC | OR. | D A | ND) | ANA | LYS | is f | ₹EQ | UES | ST | | | of 11 |
| Company Address: 105 South 4th Street Project Loc | | | | A 8824U | | | (505) 393-2320 | 5 FAX (505) 39. | 3-24/ | | | | • | | | Y | F | roje | :t Na | me: | | | | áma | ı AL | L,F,c | edera | il #1 | | 11, |
| City/State/Zip: Arissian NM 88210 | | Comp. (505) 393-232 | 26.Yates Petrolei | um Corporati | on: | | | | | , | | | | | | | | P | rojec | :t #: | 15) | į, , | | | | | | | | ď |
| Telephone No: 575-748-4171 Sampler Signature: e-mail: csettle@yatespetroleum.com Comparison Comparison | | Company Address | : 105 South 4th | n Street | | | · · · · · | Two | | | | 7 K 7 B | | ************************************** | | , | | Proj | ect L | .oc: | | | | ama | ı AL | LÉ | dera | l #1 | | |
| Telephone No: 575-748-4171 Sampler Signature: | • | City/State/Zip: | Artesia, NM | 88210 | | -: | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | | | P |) #: | 2057 | 50 | er | | ** - | erteka. | f., | | : : | erio rus |
| Caption Capt | t _e | | 575-748-4171 | 1 | | | and the second s | Fax No: | | 575- | 748 | 4131 | 9 N | | Ϊ., | | Repo | art Fo | rmat | t: | × s | Stand | ard | • | | TRR | p | | NPDE | ES |
| CROER #: | e No. | 4, 4, 7, 4, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, | | | | الاست | | # ## ## ## ## ## ## ## ## ## ## ## ## # | ٠ | . 41 | | | | petro | olei | um. | com | 3.7 | **. | | , j. | | ,• | .: | | g v | | | 7 1 1 7 4 | |
| Preservation 5 of Continents Total | · Dan Service | | | | | | | : | | 77 | | 7 | | | | | ; | | | · · · | 70 | | naly | ze F | or: | Ť | | | 丁 | ٦ |
| ### PRILID COOK Fried Page Page | | | 20-7 | | , | | * * | \$ * * | | r | ei • | | A 0 4 | 90 4 1 | i. Den 1 | | , , | | 7 E | | | | # | | 口 | | | | 2 E | |
| St 1' 1/23/2014 2:25 PM 1 X S X X X X X X X | ORDE | | <u>esterje s</u> | | | | | | | | | reserva | Non & # | or Cont | ainers | | e 등 | 8015B | 900 | | | eS BH c | | | X 8260 | | ľ | | lal 24.48. | - |
| St. 1 | (Vino | | ٤ | | gg. | 2. | | | | ars | I | | | | | | SL=Stur S=Soll/S | Specify of 15M | ¥ | ζa, Κ) | Vikalinity | G Cy S | | | OWBTE | 7 7 | | | Rohadu | |
| S1 1' | esn q | | | ir is | ng De | Depth |)eldmr | ample | 28 | Contain | . | 2 - 2 | | | 21 23 | pacify) | ng Water | 3.1 8 | 1005 | a, Mg, I | .804./ | A B | | 88 | ĕ | | | - | AT (Pro | |
| S1 1' | ~ | FIE | LD CODE | | 3eginnii | nding l | Date S | Time S | ield Filter | otal #. of | <u>83</u> | € 5 | H ₂ SO, | NaOH Na ₂ S ₂ O ₃ | None | Other (Sp | DW=Drinkir GW = Grou | ō i | | Cations (C | Antons (Cl | Metals: As | Volatilles | Semivolati | BTEX 802 | RCI | N.O.R.M. Chlorides | SAR | RUSH T | |
| Signature Sign | 1 | | | | | | 1/23/2014 | 2:25 PM | | e - 8 | | | | . 2 | | | | _ | + | Ü | | 3 | | | | | | | : | Ĭ |
| S1 4' | ြာ | S1 2' | | ļ, | | | 1/23/2014 | 2:25 PM | | 1 | X | | | 1 | | | S. | <u> x</u> | | : | | şi | 1_ | Ш | X | | <u> x</u> | | L | |
| S2 1' | 3 | S1.3' | A COLUMN | - A. | | | 1/23/2014 | 2:25 PM | - 5 | - | | | | | | | S | <u> x</u> | | | <u>.</u> | 1 | 1 | | X | | _ <u>x</u> | \sqcup | <u>l</u> 2 | |
| S2 2' | 4 | S1 4' | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 7 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | 1/23/2014 | 2:25 PM | Ш | 1 | X | | | | | | S | <u> </u> x | |) } | | 1 2.5 | | Ш | X | | <u>x</u> | 11 | | 1 |
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