Form 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| FORM APPROVED          |
|------------------------|
| OMB NO. 1004-0135      |
| Expires: July 31, 2010 |

BUREAU OF LAND MANAGEMENT
OCD-ARTESIA

5. Lease Serial No. NMNM14845

| SUNDRY   | NMNM14845                                   |  |                    |                                 |                  |  |  |  |
|--|---|--|--------------------|---------------------------------|------------------|--|--|--|
| Do not use thi<br>abandoned we   | 6. If Indian, Allottee or Tribe Name        |  |                    |                                 |                  |  |  |  |
| SUBMIT IN TRI  | 7. If Unit or CA/Agreement, Name and/or No. |  |                    |                                 |                  |  |  |  |
| 1. Type of Well  | 8. Well Name and No<br>LEONARD FEDE         |  |                    |                                 |                  |  |  |  |
| Ø Oil Well ☐ Gas Well ☐ Oth      Name of Operator  |   | JEANIE MCMILLAN  |                    | 9. API Well No.                 |                  |  |  |  |
| BREITBÛRN OPERATING LE   | o contact.                                  |  |                    | 30-015-03220-                   |                  |  |  |  |
| 3a. Address<br>300 TRAVIS STREET SUITE<br>HOUSTON, TX 77002  | ode)  | 10. Field and Pool, of GRAYBURG  | r Exploratory      |                                 |                  |  |  |  |
| 4. Location of Well (Footage, Sec., T  | ., R., M., or Survey Description            | )  |                    | 11. County or Parish, and State |                  |  |  |  |
| Sec 33 T17S R29E SENW 19   | 80FNL 1980FWL                               |  |                    | EDDY COUNTY, NM                 |                  |  |  |  |
| 12. CHECK APPI   | ROPRIATE BOX(ES) TO                         | O INDICATE NATURE C  | OF NOTICE, RI      | EPORT, OR OTHE                  | ER DATA          |  |  |  |
| TYPE OF SUBMISSION   |   | ТҮРЕ   | E OF ACTION        |                                 |                  |  |  |  |
| ☐ Notice of Intent   | ☐ Acidize                                   | □ Deepen   | ☐ Product          | ion (Start/Resume)              | ■ Water Shut-Off |  |  |  |
| _  | ☐ Alter Casing                              | ☐ Fracture Treat   | Reclam             | ation                           | ■ Well Integrity |  |  |  |
| Subsequent Report  | □ Casing Repair                             | ■ New Construction   | ☐ Recomp           | olete                           | □ Other          |  |  |  |
| ☐ Final Abandonment Notice   | ☐ Change Plans                              | Plug and Abandon   | Tempor             | arily Abandon                   |                  |  |  |  |
|  | Convert to Injection                        | Plug Back  | 🛭 Water I          | Disposal                        |                  |  |  |  |
| Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)  Conditions of Approval Operator Change required that we submit some additional information for each lease. Breitburn Operating LP respectfully submits the following regarding these conditions of approval.  Attached hereto is a facility Diagram as per Onshore Order #3 Attached is a water analysis along with Water Production and Disposal information. |   |  |                    |                                 |                  |  |  |  |
| Accepted for Record Purposes.  Approval Subject to Onsite Inspection.  Date: 11.09.2016  NOV 2 2 2016  Stuck  JANES A MAIS STUCKER AND STUCKERS  |   |  |                    |                                 |                  |  |  |  |
| 14. I hereby certify that the foregoing is   | Electronic Submission #<br>For BREITBU      | 344213 veri <b>red GETHV BLM</b><br>RN OPERATING LP, sent to<br>essing by PRISCILLA PERE | the Carlsbad       | _                               |                  |  |  |  |
| Name (Printed/Typed) JEANIE N  | 1CMILLAN                                    | Title REC  | <b>SULATORY MA</b> | NAGER                           |                  |  |  |  |
| Signature (Electronic  | Submission)                                 | Date 07/0  | 08/2016            |                                 |                  |  |  |  |
|  |   | OR FEDERAL OR STA  | ·····              | SE                              |                  |  |  |  |
|  |   |  | <del></del>        |                                 | F :              |  |  |  |
| Approved By  |   | Title  | Accent             | d F= =                          | Date             |  |  |  |
| Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent which would entitle the applicant to conditions.   | uitable title to those rights in th         | s not warrant or<br>e subject lease<br>Office  | N                  | ed For Reco                     | ord              |  |  |  |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## **Leonard Federal Battery**

Elevation: 3567'

Location: 17N 29E Sec. 33

Field State:

<u>Artesia</u> New Mexico

Lease Leonard Federal

Current Status Active

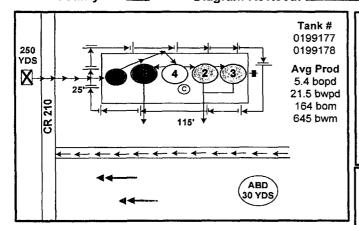
Coordinates: N32.79293

County

Eddy

Diagram Revised: Jimika Reed-Terry (09-07-10)

W104.08406



#### History

8/2008: Jack's hole in water tank. Had water removed cleanup area apply fiberglass patch. New 210 oil tanks on location. Spotted 500 frac tank remove oil from tank. Start taking down old battery. Hauled caliche from Federal 384 PTA to battery for burm. Tear down old battery. Tear down old battery. Remove connections from tank. Wilbanks trucking set old tanks off pad. Note 210 to be used at State 721 had hole in bottom did not leak outside tank. Grando's Backhoe service started clearing out old

## Tank Information

Salt Water

Diameter = 12 ft Helaht = 15 ft Capacity=302 bbls Total Diked Area= Capacity 370 bbls Direction of Flow= W Foundation = Gravel

Type = Molded Material = Fiber Glass Top= Closed Transportation = TR Type of Failure = Rupture, Leak, Overflow

Secondary Containment = Earth & Gravel Min. Recommend Berm Height = 17 in. \_owest point of berm at time of inspection = 18 in.

#### Tank Information





Type = Welded

Height = 15 ft Capacity=210 bbls Total Diked Area=

Material = Steel Top=Closed

Capacity 370 bbls Foundation = Gravel

Transportation = TR Type of Failure = Direction of Flow= W Rupture, Leak, Overflow

Secondary Containment = Earth & Gravel Min. Recommend Berm Height = 17 in. owest point of berm at time of inspection = 18 in.

#### Tank Information

Diameter = 10 ft

Gun Barrel Type = Welded Material = Steel

Top=Closed

Height = 15 ft Capacity=210 bbls Total Diked Area= Capacity 370 bbls Direction of Flow= W

Foundation = Gravel

Transportation = Type of Fallure = Rupture, Leak

Secondary Containment = Earth & Gravel Min. Recommend Berm Height = 17 in est point of berm at time of inspection =

#### **Heater Treater Information**

Heater Treater

Diameter = 4 ft Height = 20 ft

Type = Welded Material = Steel Top=Closed

Capacity=45 bbis Foundation = Cement

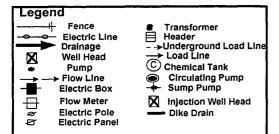
Transportation = Type of Failure =

Total Diked Area= Capacity 370 bbls

Rupture, Leak

Direction of Flow= W

Secondary Containment = Earth & Gravel Min. Recommend Berm Height = 17 in. est point of berm at time of inspection = 18 in



Back



Catalyst Oilfield Services 11999 E Hwy 158 Gardendale, TX 79758 (432) 563-0727 Fax: (432) 224-1038

# Water Analysis Report

Sample #:

| Customer:     | Breitburn Operating |   |  |  |  |
|---------------|---------------------|---|--|--|--|
| Area:         | Permian Basin       |   |  |  |  |
| Lease:        | Leonard Fed         |   |  |  |  |
| Location:     | Battery             | 0 |  |  |  |
| Sample Point: | Heater Treater      |   |  |  |  |

| Analysis ID #: | 34102 |  |  |  |  |  |  |
|----------------|-------|--|--|--|--|--|--|
|                |       |  |  |  |  |  |  |

35845

| Sampling Date:      | 6/22/2016 | Anions                               | mg/l                                 | meq/l   | Cations                               | mg/l            | meq/l   |
|---------------------|-----------|--------------------------------------|--------------------------------------|---------|---------------------------------------|-----------------|---------|
| Analysis Date:      | 6/27/2016 | Chloride:                            | 124728.4                             | 3518.13 | Sodium:                               | 68600.0         | 2983.93 |
| Analyst:            | Catalyst  | Bicarbonate:                         | 48.0                                 | 0.79    | Magnesium:                            | 3678.0          | 302.57  |
| TDS (mg/l or g/m3): | 204421.7  | Carbonate:                           |                                      |         | Calcium:                              | 4559.0          | 227.5   |
| , • • •             | 1.141     | Sulfate:                             | 1200.0                               | 24.98   | Potassium:                            | 1221.0          | 31.23   |
| Density (g/cm3):    | 1.141     | Borate*:                             | 282.6                                | 1.79    | Strontium:                            | 91.4            | 2.09    |
|                     |           | Phosphate*:                          |                                      |         | Barium:                               | 0.0             | 0.      |
| Hydrogen Sulfide:   | 0         |                                      |                                      |         | Iron:                                 | 13.3            | 0.48    |
| Carbon Dioxide:     | 100       |                                      | ased on measured<br>on and phosphore |         | Manganese:                            | 0.000           | 0.      |
|                     |           | pH at time of samp                   | ling:                                | 5.5     |                                       |                 |         |
| Comments:           |           | pH at time of analysis:              |                                      |         |                                       |                 |         |
|                     |           | pH used in Calculation: 5.5          |                                      |         |                                       |                 |         |
|                     |           | Temperature @ lab conditions (F): 75 |                                      |         | Conductivity (mic<br>Resistivity (ohm | 190900<br>.0524 |         |

|            | Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl |        |  |        |                                |        |                                |        |                             |        |
|------------|---|--------|--|--------|--------------------------------|--------|--------------------------------|--------|-----------------------------|--------|
| Temp<br>°F | Calcite<br>CaCO <sub>3</sub>  |        | Gypsum<br>CaSO <sub>4</sub> *2H <sub>2</sub> 0 |        | Anhydrite<br>CaSO <sub>4</sub> |        | Celestite<br>SrSO <sub>4</sub> |        | Barite<br>BaSO <sub>4</sub> |        |
|            | Index   | Amount | Index  | Amount | Index                          | Amount | Index                          | Amount | Index                       | Amount |
| 80         | -1.37   | 0.00   | -0.32  | 0.00   | -0.29                          | 0.00   | -0.37                          | 0.00   | 0.00                        | 0.00   |
| 100        | -1.28   | 0.00   | -0.39  | 0.00   | -0.30                          | 0.00   | -0.40                          | 0.00   | 0.00                        | 0.00   |
| 120        | -1.18   | 0.00   | -0.46  | 0.00   | -0.29                          | 0.00   | -0.41                          | 0.00   | 0.00                        | 0.00   |
| 140        | -1.08   | 0.00   | -0.51  | 0.00   | -0.25                          | 0.00   | -0.42                          | 0.00   | 0.00                        | 0.00   |
| 160        | -0.97   | 0.00   | -0.56  | 0.00   | -0.19                          | 0.00   | -0.42                          | 0.00   | 0.00                        | 0.00   |
| 180        | -0.85   | 0.00   | -0.60  | 0.00   | -0.12                          | 0.00   | -0.41                          | 0.00   | 0.00                        | 0.00   |
| 200        | -0.72   | 0.00   | -0.64  | 0.00   | -0.04                          | 0.00   | -0.40                          | 0.00   | 0.00                        | 0.00   |
| 220        | -0.59   | 0.00   | -0.67  | 0.00   | 0.06                           | 59.27  | -0.38                          | 0.00   | 0.00                        | 0.00   |

#### **WATER PRODUCTION & DISPOSAL INFORMATION**

In order to process your disposal request, the following information must be completed.

| 1. | Name(s) of formation(s) producing water on the lease.<br>Section Rivers, Queen, Graybong, Sin Andres  |
|----|---|
| 2. | Amount of water produced from all formations in barrels per day.  |
| 3. | Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates. (One sample will suffice if water is commingled). |
| 4. | How water is stored on lease. it is Dumped to Book. Tolk from Heiter Treater  |
| 5. | How water is moved to the disposal facility. Than spant bruck   |
| 6. | A. Facility Operators name. Breitbunn Operating   |
|    | B. Name of facility or well name and number. Actor a line twell tool  |
|    | C. Type of facility or well (WDW) (WIW) etc. WDW  |
|    | D. Location by 44 NW Section 26 Township 175 Range 28 E Eddy County HM  |
| 7. | Attach a copy of the State issued permit for the Disposal Facility.   |

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice).

### **BUREAU OF LAND MANAGEMENT**

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

## Disposal of Produced Water From Federal Wells Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

- 1. This agency shall be notified of any change in your method or location of disposal.
- 2. Compliance with all provisions of Onshore Order No. 7.
- 3. This agency shall be notified of any spill or discharge as required by NTL-3A.
- 4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
- 5. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
- 6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 7. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
- 8. Disposal at any other site will require prior approval.
- 9. Subject to like approval by NMOCD.

7/10/14