

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR 18 2010
HOBBSSUCP

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**


| | | |
|--|--|--|
| SUBMIT IN TRIPLICATE – Other instructions on page 2. | | 5 th Lease Serial No NM-0631 |
| 1 Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other | | 6 If Indian, Allottee or Tribe Name |
| 2 Name of Operator Samson Resources Company | | 7 If Unit of CA/Agreement, Name and/or No |
| 3a Address 200 N LORAIN SUITE 1010 MIDLAND, TX 79701 | | 8 Well Name and No FEDERAL 11-20-34 #8 |
| 3b Phone No (include area code) 432-683-7063 | | 9 API Well No 30-025-38611 |
| 4 Location of Well (Footage, Sec., T, R, M., or Survey Description) UNIT LETTER - D 510' FNL & 810' FWL SECTION 11 T20S R34E | | 10 Field and Pool or Exploratory Area LEA PENN |
| | | 11 Country or Parish, State LEA COUNTY, NM |

12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA



| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input type="checkbox"/> Other |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input checked="" type="checkbox"/> Water Disposal | |

13 Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Water is stored in tank battery on lease and hauled off lease by Key Energy Services. Please see attached.

| | |
|--|------------------------------------|
| 14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) KENNY KRAWIETZ | Title OPERATIONS MANAGER |
| Signature  | Date 02/09/2010 |

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

| | | |
|---|---|----------------------------|
| Approved by  | PETROLEUM ENGINEER Title  | Date MAR 22 2010 |
| Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. | | |

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.

The following information is needed before your disposal of produced water can be approved, per Onshore Oil & Gas Order #7.

You may attach this information to your Sundry Notice (3160-5). Submit all required information as per this attachment, submit a Sundry Notice(3160-5), one original and five copies to this office within the required time.

1. Name(s) of all formation(s) producing water on the lease. Morrow
2. Amount of water produced from all formations in barrels per day 4 (Average)
3. 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.
4. How water is stored on the lease.
water tank battery
5. How water is moved to the disposal facility. Trucked out by Key Energy Services
6. Identify the Disposal Facility by:
 - A. Operators' Name Samson Resources
 - B. Well Name Federal 11
 - C. Well type and well number gas #8
 - D. Location by quarter/quarter, section, township, and range 510' FNL & 810' FWL
11 - T20S - R34E
7. A copy of the Underground Injection Control Permit - issued for the injection well by the Environmental Protection Agency or New Mexico Oil Conservation Division where the State has achieved primacy.

N/A

Multi-Chem Group, LLC

Multi-Chem Analytical Laboratory

349 PR 4473

Sonora, TX 76950



Water Analysis Report

Production Company: **SAMSON RESOURCES (114)**

Sample ID: **WA-35407**

Well Name: **FED 11 #8**

Sample Date: **11/23/2009**

Sales Rep: **Jeff Lindsey**

Lab Tech: **Courtney Cline**

| Sample Specifics | | Analysis @ Properties in Sample Specifics | | | |
|--|------------|---|----------|----------------------------------|----------|
| | | Cations | mg/L | Anions | mg/L |
| Test Date: | 11/23/2009 | Calcium (Ca): | 1160.00 | Chloride (Cl): | 30000.00 |
| Temperature (°F): | 62 | Magnesium (Mg): | 219.60 | Sulfate (SO ₄): | 350.00 |
| Sample Pressure (psig) | 250 | Barium (Ba): | 0.01 | Dissolved CO ₂ : | 250.00 |
| Specific Gravity (g/cm ³): | 1.0360 | Strontium (Sr): | - | Bicarbonate (HCO ₃): | 366.00 |
| pH | 5.6 | Sodium (Na): | 17166.00 | Carbonate (CO ₃): | - |
| Turbidity (NTU): | - | Potassium (K): | - | H ₂ S: | 0.01 |
| Calculated TDS (mg/L): | 49793 | Iron (Fe): | 277.61 | Phosphate (PO ₄): | - |
| Molar Conductivity (µS/cm): | 75443 | Manganese (Mn): | 3.35 | Silica (SiO ₂): | - |
| Resistivity (Mohm): | 0.1326 | Lithium (Li): | - | Fluoride (F): | - |
| | | Aluminum (Al): | - | Nitrate (NO ₃): | - |
| | | Ammonia NH ₃ : | - | Lead (Pb): | - |
| | | | | Zinc (Zn): | - |
| | | | | Bromine (Br): | - |
| | | | | Boron (B): | - |

| Test Conditions | | Scale Values @ Test Conditions - Potential Amount of Scale in lb/1000bbl | | | | | | | | | | |
|-----------------|---------------------|--|-------|--|----------|--------------------------------------|----------|--|-------|-------------------------------------|--------|-------------------------------|
| | | Calcium Carbonate CaCO ₃ | | Gypsum CaSO ₄ ·2H ₂ O | | Calcium Sulfate CaSO ₄ | | Strontium Sulfate SrSO ₄ | | Barium Sulfate BaSO ₄ | | Calculated CO ₂ |
| Temp °F | Gauge Press. psi | Sat Index | Scale | Sat Index | Scale | Sat Index | Scale | Sat Index | Scale | Sat Index | Scale | psi |
| 62 | 250 | 0.01 | -0.65 | 0.06 | -3039.10 | 0.03 | -4094.70 | - | - | 0.02 | -0.76 | 6.80 |
| 80 | 0 | 0.01 | -0.55 | 0.06 | -1.94 | 0.03 | -3946.60 | - | - | 0.01 | -1.13 | 2.01 |
| 100 | 0 | 0.02 | -0.46 | 0.05 | -1.41 | 0.04 | -3606.60 | - | - | 0.01 | -1.72 | 2.67 |
| 120 | 0 | 0.03 | -0.40 | 0.06 | -1.06 | 0.04 | -3145.80 | - | - | 0.01 | -2.58 | 3.14 |
| 140 | 0 | 0.03 | -0.36 | 0.07 | -0.81 | 0.05 | -2626.90 | - | - | 0.00 | -3.82 | 3.70 |
| 160 | 0 | 0.04 | -0.33 | 0.08 | -0.65 | 0.07 | -2101.70 | - | - | 0.00 | -5.58 | 4.35 |
| 180 | 0 | 0.05 | -0.31 | 0.08 | -0.53 | 0.10 | -1608.60 | - | - | 0.00 | -8.08 | 4.98 |
| 200 | 0 | 0.05 | -0.29 | 0.09 | -0.44 | 0.14 | -1172.00 | - | - | 0.00 | -11.56 | 5.25 |
| 220 | 2.51 | 0.05 | -0.29 | 0.09 | -0.38 | 0.19 | -827.71 | - | - | 0.00 | -16.69 | 5.53 |
| 240 | 10.3 | 0.05 | -0.29 | 0.09 | -0.34 | 0.28 | -528.12 | - | - | 0.00 | -23.48 | 5.82 |
| 260 | 20.76 | 0.05 | -0.30 | 0.09 | -0.30 | 0.42 | -296.23 | - | - | 0.00 | -32.73 | 6.13 |
| 280 | 34.54 | 0.05 | -0.31 | 0.09 | -0.27 | 0.65 | -123.71 | - | - | 0.00 | -45.19 | 6.45 |
| 300 | 52.34 | 0.05 | -0.32 | 0.09 | -0.25 | 1.00 | 0.44 | - | - | 0.00 | -61.79 | 6.80 |

Conclusions:

Calcium Carbonate Scaling Index is negative from 80°F to 300°F

Gypsum Scaling Index is negative from 80°F to 300°F

Calcium Sulfate Scaling Index is negative from 80°F to 300°F

Strontium Sulfate scaling was not evaluated

Barium Sulfate Scaling Index is negative from 80°F to 300°F

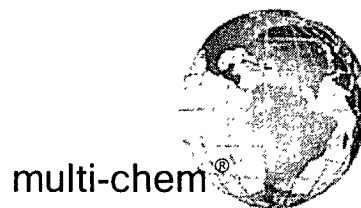
Notes:

Multi-Chem Group, LLC

Multi-Chem Analytical Laboratory

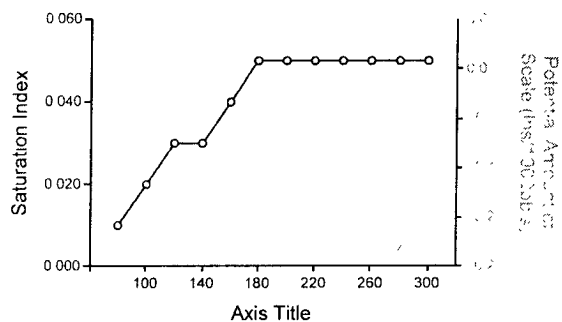
349 PR 4473

Sonora, TX 76950

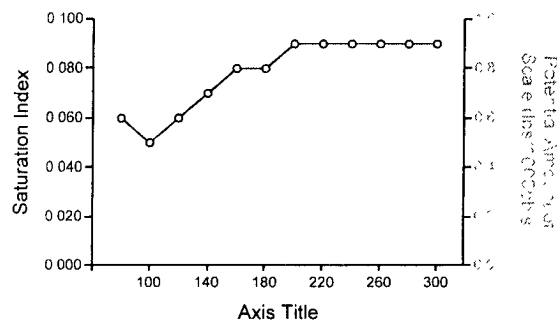


Water Analysis Report

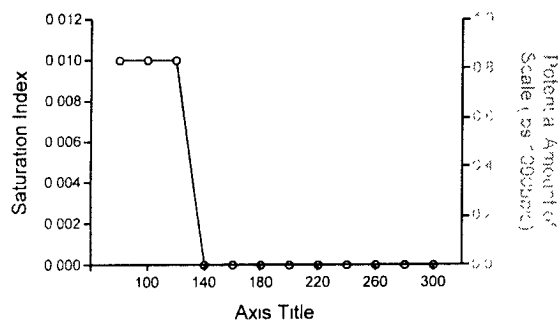
Calcium Carbonate CaCO_3



Gypsum $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



Barium Sulfate BaSO_4



Calcium Sulfate CaSO_4

