

RECEIVED

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Farmington Field Office
Bureau of Land Management

OCT 08 2010

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

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. Lease Serial No.
NMSF 078768

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
Rosa Unit

8. Well Name and No.
Rosa Unit SWD #2

9. API Well No.
30-039-30812

10. Field and Pool or Exploratory Area
Entrada

11. Country or Parish, State
Rio Arriba

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other SWD

2. Name of Operator
Williams Production Company, LLC

3a. Address
PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)
505-634-4208

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2460' FNL & 2095' FWL, sec 25, T31N, R5W

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Acidize

☐ Deepen

☐ Production (Start/Resume)

☐ Water Shut-Off

☐ Subsequent Report

☐ Alter Casing

☐ Fracture Treat

☐ Reclamation

☐ Well Integrity

☐ Final Abandonment Notice

☐ Casing Repair

☐ New Construction

☐ Recomplete

☒ Other

Frac and Squeeze

☐ Change Plans

☐ Plug and Abandon

☐ Temporarily Abandon

☐ Convert to Injection

☐ Plug Back

☐ 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 recompleat 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 recompleat 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.)

Williams intends to complete the Rosa SWD 002 in the following intervals and stimulate in 3 stages as follows:

1st Stage – Entrada from 9056' to 9292' continuous interval

2nd Stage – Bluffs from 8746' to 8908' continuous interval

3rd Stage – Morrison Discontinuous interval: 8334'-8358'(24'), 8380'-8392'(12'), 8554'-8620'(66'), 8662'-8686'(24'), 8698'-8716'(18')

The primary cement job was not executed properly resulting in the top of cement being around 8000'. The CBL shows presence of cement at 8030', better bond at 8120', and very obvious bond at 8230' and below.

The top of the 2nd stage is at 8746' which is 516' below the very well bonded cement shown on the CBL.

RCVD NOV 1 '10
OIL CONS. DIV.
DIST. 3

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

Larry Higgins

Title Permit Supervisor

Signature

Larry Higgins

Date 9/13/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Sellers

Title PE

Date 10/27/2010

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.

Office FFO

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.

NMOCD

Rosa Unit SWD #2 – Page 2

It is desired to perforate and frac the 1st and 2nd stages prior to remediating the cement. Once remediation is satisfactorily completed, the 3rd stage interval will be perf'd and frac'd under a packer.

Williams would like to request approval to proceed with the completion of first and second stage intervals at this time prior to cement remediation. The following procedure will apply. E-mail approval to proceed has been received from Jim Lovato, BLM and Kelly Roberts, NMOCD.

Williams Rosa SWD 002 Cement Remediation Procedure

- 1) After Frac shut well in and RD frac crew.
- 2) Set Composite Bridge Plug at 8726' and pressure test to 3000 psi.
- 3) Set Composite Bridge Plug at 8120' and pressure test to 3000 psi.
- 4) Shoot 4 squeeze holes 90 degree phase at 8020'.
- 5) Pump through squeeze holes and attempt to get circulation to surface.
- 6) Cement volume and blend will be determined from results of pump in test.
- 7) If circulation to surface is achieved then attempt to bring cement at least 100' into 9 5/8" csg.
- 8) Set cement retainer at 7910'. TIH w/ 2 7/8" N-80 work string and sting into retainer.
- 9) Pressure annulus to 500 psi, hold and monitor during squeeze job.
- 10) Perform squeeze according to Halliburton procedure and recommendation.
- 11) Run CBL to determine results.
- 12) The minimum required cement coverage is as follows:
 - a. Dakota top at 7993' isolation from 8043' to 7943'
 - b. Gallup top at 6995' isolation from 7045' to 6945'
 - c. Mancos top at 6093' isolation from 6143' to 6043'
 - d. Mesaverde top at 4283' isolation from 4333' to 4233'
- 13) Repeat until results are achieved.

Halliburton Cement Recommendations:

If we get signs of circulation: 40 bbls Mudflush III, 528 sks FracCem w/ 0.8% Halad-9, 0.1% CFR-3, 0.3% D-Air-3000 mixed @ 13.1 ppg. Yield = 1.4 cu.ft/skm, 100 sks Premium w/ 0.2% HR-5 @ 15.6 ppg. Yield = 1.18 cu.ft/sk, -these volumes are based 8 3/4" hole with 30% excess.

If we don't get circulation: 20 bbls Mudflush III, 200-250 sks FracCem w/ 0.8% Halad-9, 0.1% CFR-3, 0.3% D-Air-3000 mixed @ 13.1 ppg. Yield = 1.4 cu.ft/sk., 100 sks Premium w/ 0.2% HR-5 @ 15.6 ppg. Yield = 1.18 cu.ft/sk. Repeat until results are obtained.