

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

RECEIVED

JUL 06 2010

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
ENERGEN RESOURCES CORPORATION

3a. Address
2010 Afton Place, Farmington, NM 87401

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
800' FSL, 800' FWL, T30N R10W Sec. 17

5. Lease Serial No.

SF-077764

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
Schumacher 12

9. API Well No.
30-045-94410 09441

10. Field and Pool, or Exploratory Area
Basin Dakota

11. County or Parish, State
San Juan NM

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☒ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

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 shall 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 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 final site is ready for final inspection.)

Energen Resources intends to repair the Schumacher #12 casing leak from 3,706' to 3,800' as follows on the attached procedure:

RCVD JUL 12 '10

OIL CONS. DIV.

DIST. 3

**Notify NMOCD 24 hrs
prior to beginning
operations**

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

Name (Printed/Typed)

Andrew Soto

Title **District Engineer**

Signature

Date **7/2/2010**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

JUL 08 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

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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



***SCHUMACHER LEASE
WELL #12***

**API #: 30-045-94410 / AFE #: SJ10-140 / DP: 50647A
Dakota Field
San Juan County, New Mexico**

**CASING SQUEEZE PROCEDURE
April 2nd, 2010**

A. OBJECTIVE:

1. Squeeze casing leak from 3,706' to 3,800'.
2. Return well to production.

B. WELL DATA:

DATES:	Spud: 5/20/1962	Completed: 7/19/1962
DEPTHS:	TD: 7,541'	PBTD: 7,502' COTD: 7,424'
ELEVATIONS:	GL: 6,457'	KB: 6,467' (10' KBM)
PERFORATIONS:	7,297' - 7,303' w/ 2 SPF & 7,384' - 7,388' & 7,396' - 7,400' @ 3 SPF Shot a total of 44 holes in the 17 intervals over the 104' of gross interval.	
STIMULATION:	Sand frac w/ 71,000 gallons of water carrying 80,000# of 40/60 sand @ 31.5 BPM.	
SURFACE CASING:	9 5/8" J-55 36.00# ST&C casing set @ 301'. Cemented in a single stage w/ 200 sacks, the cement was circulated.	
PRODUCTION CASING:	4 1/2" J-55 11.60# & 10.50 # LT&C casing set @ 7,541'. Cemented in a three stages w/ 715 sacks, the TOC is 6,960' 4,610' & 1,675' per T.S. A CASING PATCH IS @ 1,077'.	
PRODUCTION TUBING:	236 joints of 2 3/8" J-55 4.70# tubing w/ a Model "R" packer set @ 3,884' w/ 4M# tension. The EOT is landed @ 7,373' w/ the SN @ 7,359'.	

C. PROCEDURE:

WATCH FOR EXCESSIVE USE OF THE THREAD COMPOUND.
USE THREAD COMPOUND ONLY ON PIN ENDS. NEVER BOX ENDS.
KEEP A TIW VALVE OPEN & ON THE RIG FLOOR @ ALL TIMES.

1. MIRUPU. Record casing, tubing and bradenhead pressures.
2. MI & set 1-400 barrel lined frac tanks filled w/ enough 2% KCLW to satisfy all of the anticipated fluid requirements for this **casing squeeze** & 1-400 barrel test tank to flow back any fluids & circulated cement during this **CLOSED LOOP OPERATION**.
3. NU relief line and blow down well.
4. ND the wellhead, & NU a 3M# manual BOP w/ 2 3/8" & CSO rams. Function test BOP.
5. Unset the 4 1/2" x 2 3/8" Model "R" packer @ 3,884' in compression w/ 4M# weight on top & 16M # below the packer.
6. POOH, inspect & tally 2 joints of 2 3/8" 4.7# J-55 EUE 8rd production tubing, a 12' x 2 3/8" sub, 122 joints of the 2 3/8" production tubing, the 4 1/2" x 2 3/8" production packer, 112 joints of 2 3/8" production tubing, a 2 3/8" SN, a 3' x 2 3/8" perf sub & a 10' x 2 3/8" tail joint.
7. PU & TIH w/ a 4 1/2" Drillable BP, a shear tool, a 2 3/8" SN & the 2 3/8" tubing workstring. Set BP @ +/- 3,850'. POOH w/ the 2 3/8" tubing, SN & shear tool.
8. PU & TIH w/ a 4 1/2" x 2 3/8" production packer & a 2 3/8" SN on the 2 3/8" tubing down to +/- 3,820'.
9. Set the production packer & pressure test BP to 2,500# for 5 minutes. Release the pressure, unset the packer & PUH to +/- 3,650'.
10. Set the production packer & pressure test the 4 1/2" annulus to 1,000# for 5 minutes.
11. Perform an injection rate test w/ max rate @ 4 BPM & max pressure @ 2,000#. After achieving a steady rate & pressure, SD & record ISIP & 5-minute SI pressure. Contact the office & cement company for casing squeeze proposal. POOH w/ the 2 3/8" tubing, SN & packer.
12. PU & TIH w/ a 4 1/2" x 2 3/8" cement retainer, an on/off tool, a 2 3/8" SN & the 2 3/8" tubing. Set the cement retainer @ +/- 3,650'. Load & pressure annulus to 500#.
13. Pressure test all lines to 2,500#. Mix & pump cement & squeeze according to the service company's proposal. Max pressure **2,000#**.
14. Sting out of cement retainer leaving 1 BBL of cement on top of the retainer & reverse circulate any excess cement to surface. POOH w/ the 2 3/8" tubing, SN & stinger. SION & WOC.

C. PROCEDURE CONTINUED:

15. MIRU an air package.
16. PU & TIH w/ 3 7/8" blade bit, bit sub, 6-3 1/8" drill collars, XO, a 2 3/8 API SN & the 2 3/8" J-55 tubing down to the TOC. Drill out the cement & the cement retainer down to the BP. Circulate one full hole volume. Load & pressure test casing to 500#. Re-squeeze as necessary.
17. Drill out the BP & CO down to COTD @ 7,424'.
FOR 30 MINUTES WITH A CHART RECORDER
18. POOH w/ the tubing, SN, DCs & bit.
19. PU & RIH w/ the 2 3/8 tail joint, the 2 3/8" API SN & the 2 3/8" J-55 tubing. ND the BOP & NU the WH.
Note: Be sure to land SN in the bottom 1/3rd of the perms.
20. Clean the location, RDMO the pulling unit & turn well over to the Production Group to place well on production.

D. ATTACHMENTS:

1. Schumacher #12 Pertinent Well Data Sheet
2. Schumacher #12 Production Graphs
3. Schumacher #12 Wellbore Diagrams
4. Schumacher #12 P&A AFE