

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

Bureau of Land Management
Farmington Field Office

5. Lease Serial No.
SF-078048

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
Hughes 15

9. API Well No.
30-039-06314

10. Field and Pool, or Exploratory Area
South Blanco Pictured Cliffs

11. County or Parish, State
Rio Arriba NM

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)
1,850' FNL, 1,850' FWL, T26N R7W Sec. 30

12. CHECK 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 checked="" 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 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 recompleate 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 recompleation 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 re-complete the Hughes #15 as follows on the attached procedure:

RCVD JUL 12 '10

OIL CONS. DIV.

DIST. 3

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.



"2010" CAPITAL PROGRAM

***HUGHES LEASE
WELL #15***

**API #: 30-039-06314/ AFE #: SJ10-190 / DP: 51155A
South Blanco Pictured Cliffs Field
Rio Arriba County, New Mexico**

**RE-COMPLETION PROCEDURE
May 28th, 2010**

A. OBJECTIVE:

1. Re-complete the **Pictured Cliffs** intervals w/ a foam frac in 1 stage.
2. Put the well back on production into the existing production facilities.

B. WELL DATA:

DEPTHS: TD: 2,300' COTD: 2,220'

ELEVATIONS: GL: 6,311' KB: 6,320' (9' KBM)

PERFORATIONS: 2,165' - 2,192' w/ 4 spf.
Shot a total of 112 holes in the 28 intervals over the 28' of gross interval.

SURFACE CASING: 8 5/8" J-55 24.00# ST&C casing set @ 102'.
Cemented in a single stage w/ 80 sacks, the cement was circulated.

PRODUCTION CASING: 5 1/2" J-55 14.00# LT&C casing set @ 2,290'.
Cemented in a single stage w/ 100 sacks, the calculated TOC is @ 1,821'.

PRODUCTION TUBING: 67 joints of 1 1/4" IJ J-55 10rd tubing set @ 2,178'.

C. PROCEDURE:

THIS WELL HAS TURN-DOWN COLLARS ON PRODUCTION TUBING.
KEEP A TIW VALVE OPEN & ON THE RIG FLOOR @ ALL TIMES.
WATCH FOR EXCESSIVE USE OF THE THREAD COMPOUND.
USE THREAD COMPOUND ONLY ON PIN ENDS. NEVER BOX ENDS.

1. Test location rig anchors. Record casing, tubing and bradenhead pressures.
2. MI & set 3-400 barrel lined frac tanks & 1-400 barrel test tank, steam clean the inside of the frac tanks & fill the tank w/ enough 2% KCLW w/ Halliburton's GasPerm to satisfy all of the anticipated fluid requirements for this **CLOSED LOOP OPERATION**.
3. MIRUPU & unload/rack 2,250' of 3 1/2" J-55 9.30# EUE 8rd tubing workstring w/ **special clearance couplings**.
4. NU relief line and blow down well.
5. ND the wellhead & NU 3M # manual BOP w/ 1 1/4" & CSO rams. Function test BOP.
6. PU & TIH w/ joints of 1 1/4" 2.33# J-55 tubing to tag fill.
Note: If necessary, clean-out the wellbore before TIH w/ casing scrapers.
7. POOH, inspect & tally the joints picked up as well as 66 joints of 1 1/4" 2.33# IJ J-55 8rd tubing, a 1/4" SN& a 1 1/4" mud anchor.
8. Change out the 1 1/4" rams in the BOP w/ a set of 3 1/2" rams.
9. PU & TIH w/ a 4 3/4" non-skirted TCT bit, BS, 5 1/2" casing scraper, XO & a 3 1/2" API SN on the 3 1/2" J-55 tubing to scrape down to PBTD or top of fill. POOH & LD BHA.
10. RU Basin WL under a pack-off & run a GR/CCL & Neutron log from COTD back up the hole +/- 300'. POOH.
Note: E-mail log to ERC geologist Don Lehman (dlehman@energen.com) for final confirmation of perforation intervals.
11. RIH & re-perforate the Pictured cliffs w/ a 3 1/8" "Select-Fire" or "HSC" gun loaded w/ 4-19 gram (0.42" EHD / 36.7" PD) 90 degree phased JSPF @ the following interval:
2,165' - 2,192' (28 ft / 112 holes)
12. ND the 3M# manual BOP & install a 5M# casing spool on the Rector wellhead w/ a 5M# BOP to frac down. Function test BOP.

C. PROCEDURE CONTINUED:

13. TIH w/ the 5 1/2" fullbore packer, XO, a 3 1/2" API SN on the 3 1/2" tubing to within 100' of the top perforation. Set the packer in compression. If the appropriate compression weight cannot be reached RIH w/ a tension packer. Land the tubing in the casing spool.
14. RU the pump on the casing & pressure test the casing to 1,000# for at least 5 minutes before continuing with procedure. Keep the bradenhead valve open and note any suction or blowing action. Release the pressure & leave casing valve open to monitor any flow from the frac.
15. RU Halliburton to spearhead **1,000** gallons of 15% double-inhibited HCL acid in front of the foamed Delta-140 pad via the 3 1/2" tubing. Continue on to Foam/Sand-Frac the Pictured Cliffs. Plan to pump a 70Q Delta 140 fluid system carrying **100M#** of **20/40 Brady** sand in a **1.0-3.0 PPG** concentration at a rate of **35 BPM** using **5,000#** as your absolute maximum pressure for this job.
Note: Make sure that a "Pre-Job" Safety Meeting is held & that all of Halliburton's treating equipment & lines are tested to a minimum of 6,000# prior to pumping this job.
16. Call the start of the flush when falling off of the **3.0 PPG** sand, then flush the job w/ **2% KCLW** down to within 1-2 barrels of the top perforation, SD & record the Instant through 15-minute tubing pressures.
17. Open the well back up to the test tank ASAP & commence load recovery @ a controlled & monitored rate on a 1/4" choke until the well dies.
18. Once the well is dead, release the packer & POOH w/ the tubing, SN & packer.
19. ND the 5M# BOP, 5M# casing spool & NU the 3#M BOP w/ a set of 3 1/2" rams. Function test BOP.
20. MIRU air/foam reverse unit. PU & RIH w/ a 4 3/4" non-skirted TCT bit, BS, XO & a 3 1/2" API SN on the 3 1/2" tubing.
21. Reverse/wash the sand out back down to the original PBTD w/ remaining 2% FKCLW. Circulate the hole until the returns are clean & free of any sand.
22. POOH/LD w/ the 3 1/2" tubing, SN & bit.
23. Unload/rack 2,200' of 2 3/8" J-55 4.70# EUE 8rd production tubing
24. 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 as close to the top perforation as possible.
25. Clean the location, RDMO the pulling unit & turn well over to the Production Group to place well on production.

D. ATTACHMENTS:

1. Hughes #15 Pertinent Well Data Sheet