

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.

2006 DEC 26 PM 3:17

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ENERGEN RESOURCES CORPORATION

3a. Address

2198 Bloomfield Highway, Farmington, NM 87401

3b. Phone No. (include area code)

505-325-6800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1180' FSL, 1840' FWL, Sec. 14, T29N, R12W, N.M.P.M.

5. Lease Serial No.

SF077710

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Hardie F 1

9. API Well No.

30-045-08237

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

- ☐ Notice of Intent
- ☒ Subsequent Report
- ☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input checked="" type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Change Plans | <input checked="" 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 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 plugged and abandoned the Hardie F #1 on 11/16/06 according to the attached plugging procedure.

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

Name (Printed/Typed)

Vicki Donaghey

Title

Regulatory Analyst

Date 12/21/06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

JAN 03 2007

Approved by

Title

Date

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.

NWOCOD

A-PLUS WELL SERVICE, INC.

P.O. BOX 1979
Farmington, New Mexico 87499
505-325-2627 * fax: 505-325-1211

Energen Resources Corporation
Hardie F #1

November 21, 2006
Page 1 of 2

1180' FSL & 1840' FWL, Section 14, T-29-N, R-12-W
San Juan County, NM
Lease Number: SF 077710
API #30-045-08237

Plug and Abandonment Report

Notified BLM / NMOCD on 11/10/06

Work Summary:

- 11/10/06 Move on location. RU rig. Check well pressures: 15 PSI on tubing and casing; 50 PSI on bradenhead. Lay relief lines to pit. SDFD.
- 11/13/06 Finish laying relief lines to pit. ND wellhead. NU BOP, test. Well unloaded paraffin / drip. TOH with 199 joints 2.375" tubing, SN, 1 joint and saw tooth collar, 6159'. Note: tight joints; had to heat collars on break. RIH with 4.5" gauge ring to 4073'; unable to continue further. Procedure showed squeeze job from 4125' to 3391'. Round trip 4.5" scraper through tight spot at 4073' and to 6096'. TIH with 4.5" DHS CR to 5786'. Rig died. Approximately 400 gallons of diesel stolen over weekend. Notify San Juan County Sherriff. Shut in well. SDFD.
- 11/14/06 TIH with tubing and set 4.5" DHS CR at 6075'. Load tubing with 19 bbls of water. Pressure test to 1500 PSI, held OK. Sting into CR. Load casing and establish circulation with 70 bbls of water. Shut in. Attempt to pressure test casing, establish rate 2 bpm at 750 PSI.
Plug #1 with CR at 6075', spot 12 sxs Type III cement (16 cf) inside the casing above the CR to 5899' to isolate the Dakota perforations and top.
PUH and WOC. Perforate 3 holes at 5332'. TIH with 4.5" DHS CR and set at 5282'. Load casing with 4 bbls of water. Attempt to pressure test casing, establish rate 2 bpm at 750 PSI. Sting into CR and establish rate into squeeze holes 1 bpm at 1000 PSI.
Plug #2 with CR at 5282', mix and pump 46 sxs Type III cement (61 cf), squeeze 35 sxs outside the casing and leave 11 sxs inside the casing up to 5179' to cover the Gallup top.
PUH and WOC. Shut in well. SDFD.
- 11/15/06 TIH with tubing and tag cement at 5163'. TOH with tubing. Load casing with water. Attempt to pressure test casing, establish rate 2 bpm at 750 PSI. Perforate 3 holes at 3264'. TIH with 4.5" DHS CR and set at 3214'. Load casing with water and pressure test to 800 PSI, held OK.
Plug #3 with CR at 3214', mix and pump 46 sxs Type III cement (61 cf), squeeze 35 sxs outside the casing and leave 11 sxs inside the casing up to 3111' to cover the Mesaverde top.
TOH with tubing. Perforate 3 holes at 2607'. TIH with 4.5" DHS CR and set at 2557'. Load casing with water. Establish rate below CR into squeeze holes 1 bpm at 800 PSI.

A-PLUS WELL SERVICE, INC.

P.O. BOX 1979

Farmington, New Mexico 87499

505-325-2627 * fax: 505-325-1211

Energen Resources Corporation

Hardie F #1

November 21, 2006

Page 2 of 2

Work Summary – Continued:

Plug #4 with CR at 2557', mix and pump 46 sxs Type III cement (61 cf), squeeze 35 sxs outside the casing and leave 11 sxs inside the casing up to 2553' to cover the Chacra top.

PUH to 1728'. Load casing with water.

Plug #5 spot 7 sxs Type III cement (10 cf) inside the casing from 1728' up to 1631'.

Need more cement. TOH with tubing. Shut in well. SDFD.

11/16/06 TIH with tubing and tag cement at 1600'. Load casing with water.

Plug #5a spot 10 sxs Type III cement (13 cf) inside the casing from 1600' up to 1453' to cover the Pictured Cliffs top.

TOH with tubing. Perforate 3 holes at 1360'. Establish rate into squeeze holes 2 bpm at 500 PSI. RIH with 4.5" PlugWell CR and set at 1310'. Establish rate into squeeze holes 2 bpm at 500 PSI.

Plug #6 with CR at 1310', mix and pump 46 sxs Type III cement (61 cf) squeeze 35 sxs outside the casing and leave 11 sxs inside the casing up to 1207' to cover the Fruitland top. Establish circulation out bradenhead during plug.

TOH and LD all tubing. Perforate 3 holes at 524'. Establish circulation out the bradenhead with 100 bbls of water.

Plug #7 with 211 sxs Type III cement (279 cf) down the 4.5" casing from 524' to surface to cover the Kirtland, Ojo Alamo and surface shoe. Establish small trace of cement out the bradenhead annulus. Lost circulation. Connect pump to annulus. Mix and pump 153 sxs Type III cement (202 cf) down the annulus until pressured up to 1000 PSI, held. Pumped a total of 364 sxs cement at surface. WOC overnight. Dig out wellhead. Shut in well. SDFD.

11/17/06 ND BOP. Found cement down 8" in the 4.5" casing and at the surface in the annulus. Heard hissing sound from 4.5" casing. Monitored, sound died off. Fill 4.5" casing with water. Establish bubble every few seconds. Check with monitor, no sign of gas. Procedure change approved by BLM to WOC over weekend. SDFD.

11/20/06 No pressure. Wait on BLM representative to witness. ND BOP. No sign of air / gas. Okay by BLM to set P&A marker. Fill out Hot Work Permit. Cut off wellhead. Had to chip out cement from 4.5" casing and annulus to cut off wellhead. Mix 25 sxs Type III cement and install P&A marker. RD. MOL.

R. Snow and C. Ollom, BLM representatives, were on location.

R. Whiteley, A-Plus Rig Superintendent, was on location on 11/17/06 and 11/20/06.