

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 reverse side

RECEIVED

DEC 21 2007

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ENERGEN RESOURCES CORPORATION

Bureau of Land Management

3a. Address

2010 Afton Place, Farmington, NM 87401

3b. Phone No. (include area code)

505.325.6800

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

1650' ENL, 790' FWL, Sec. 12, T25N, R3W, N.M.P.M.

(EO SW/NW)

5. Lease Serial No.

MM 014856

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

McCroden 7

9. API Well No.

30-039-23555

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

Rio Arriba 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

☐ 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 recomple 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 recomple 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.)

Energien Resources intends to plug and abandon the McCroden #7 according to the attached procedure.

RCVD JAN 9 '08

OIL CONS. DIV.

DIST. 3

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Vicki Donaghey

Title

Regulatory Analyst

Date

12/19/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

JAN 07 2008

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.

NMOC 86

PLUG AND ABANDONMENT PROCEDURE

November 30, 2007

McCroden #7

Basin Fruitland Coal

1650' FNL & 790' FEL, Section 12, T25N, R3W

Rio Arriba County, New Mexico, API #30-039-23555

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Type III, mixed at 14.8 ppg with a 1.32 cf/sx yield.

1. Project will require a Pit Permit (C103) from the NMOCD.
2. Install and test location rig anchors. Prepare and line a waste fluid pit. Comply with all BLM, NMOCD, and Energen safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with water as necessary.
3. PU on tubing and release pump. Reseat pump. Pressure test tubing to 1000 PSI. TOH and LD rods and pump. TOH and tally 2.375" tubing, total 3854'. LD tubing and PU a workstring. **NOTE: per discussion with Steve Mason, BLM, on 12/11/07 and 12/12/07, drill out CIBP set at 3870' (2004) but leave CIBP set at 4000' (1999) and spot cement across top of CIBP. This will issue proper control over the Mesaverde zone.** PU drill bit, collars and TIH. Tag existing CIBP (set 2004) at 3870'. Drill out CIBP. Continue to TIH with tubing and tag existing CIBP (set 1999) at 4000'. Circulate well clean.
4. **Plug #1 (Mesaverde interval, Pictured Cliffs perforations, top, Fruitland Coal perforations and top, Kirtland and Ojo Alamo tops, 4000' – ^{3382'}~~3525'~~):** Tag existing CIBP at 4000' (1999)'. Mix and pump 65 sxs Type III cement, cover the CIBP at 4000' to further isolate the Mesaverde interval and fill the Pictured Cliffs and Fruitland Coal perforations through the Ojo Alamo top. PUH and WOC. TIH and tag cement. Cement should be at 3525' or higher. If necessary re-spot Plug #1. PUH.

2192' 2092'
5. **Plug #2 (Nacimiento top, ~~1795'~~ – ~~1695'~~):** Mix 11 sxs Type III cement and spot a plug inside the casing to cover the Nacimiento top. PUH to 363'.
6. **Plug #3 (8.625" Surface Casing, 363' – Surface):** Attempt to pressure test the bradenhead annulus to 300 PSI; note the volume to load. If the BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 30 sxs Type III cement and spot a balanced plug from 363' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut well in and WOC. If the BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the casing and the bradenhead annulus.
7. ND BOP and cut off casing below surface casing flange. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

McCroden #7 Proposed P&A

Basin Fruitland Coal

1650' FNL & 790' FEL, Section 12, T-25-N, R-3-W
Rio Arriba County, NM / API #30-039-23555

Today's Date: 11/30/07

Spud: 11/11/84

DK Comp: 2/9/85

PC Comp: 10/18/99

FtC Comp: 11/28/04

Elevation: 7345' GI

12.25" Hole

Nacimiento @ 1745'

Ojo Alamo @ 3575'

Kirtland @ 3630'

Fruitland @ 3650'

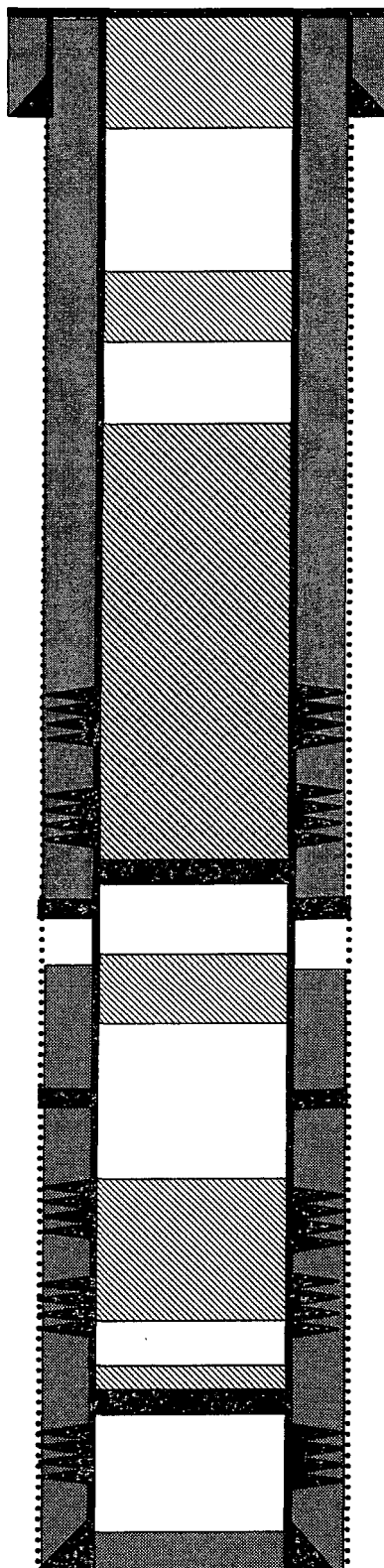
Pictured Cliffs @ 3842'

Mesaverde @ 5520'

Gallup @ 6770'

Dakota @ 8085'

7.875" Hole



Top of Cmt @ Surface, circulated

8.625" 24# K-55 Casing set @ 313'
295 cf cement, circulated to surface

Plug #3: 363' – 0'
Type III cement, 30 sxs

Plug #2: 1795' – 1695'
Type III cement, 11 sxs

Plug #1: 4000' – 3525'
Type III cement, 65 sxs

Fruitland Coal Perforations.
3752' – 3840'

Pictured Cliffs Perforations:
3878' – 3898'

Set CIBP @ 4000' (1999)

DV Tool @ 4007'
Stage 3: Cemented with 1697 cf

Top of Cmt unknown, lost circ.

Spot 8 sxs (1999)

DV Tool @ 6350'
Stage 2: Cemented with 1517 cf
(lost circulation at 75 bbls)

Top of Cmt @ 6100' (CBL)

Spot 33 sxs (1999)

Gallup Perforations:
7103' – 7696'

Greenhorn Perforations:
7992' – 8044'

Set CIBP @ 7900' and capped with 8 sxs (1999)

Dakota Perforations:
8100' – 8264'

4.5" 11.6# K-55 Casing @ 8413'
Stage #1: Cemented with 1122 cf

TD 8413'

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
1235 LA PLATA HIGHWAY
FARMINGTON, NEW MEXICO 87401**

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: 7 McCroden

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 599-8907.
3. The following modifications to your plugging program are to be made:
 - a) Bring the top of the Pictured Cliffs/Fruitland/Kirtland/Ojo Alamo plug to 3382'.
 - b) Place the Nacimiento plug to 2192' – 2092'.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.