

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.

5. Lease Serial No.

~~600-514-20-3098~~

6. If Indian, Allottee or Tribe Name

N00-C-14-20-5006

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

8. Well Name and No.

PAH#1

9. API Well No.

30-045-24252

10. Field and Pool, or Exploratory Area

Duffer Point Gallup/Dakota

11. County or Parish, State

San Juan County, New Mexico

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well



Oil Well



Gas Well



Other

2. Name of Operator

ENERGEN RESOURCES

3a. Address

2198 Bloomfield HWY Farmington, NM 87401

3b. Phone No. (include area code)

505-325-6800

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

1,020' FSL, 1,730' FWL Section 6, T25N,R8W, NMPM

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 recomplete 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 recompletion 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 site is ready for final inspection.)

On 9/27/2005 Energen submitted a Sundry to repair the casing on the above listed well - following more in depth analysis the well is un-economic to repair and we are submitting the attached plugging procedure and diagrams. We will proceed to plug and abandon this well.



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

Patricio W. Sanchez

Title **District Engineer**

Signature

Date

Nov. 3, 2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

NOV 16 2005

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, 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.

(Instructions on page 2)

NMOCD

PLUG AND ABANDONMENT PROCEDURE

November 1, 2005

Pah #1

Basin Dakota

1020' FSL & 1730' FWL, SW, Section 6, T25N, R8W
San Juan County, New Mexico, API #30-045-24252

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.
Cement will be ASTM Type III, mixed at 14.8 ppg with a 1.32 cf/sx yield or Class B.

1. Install and test location rig anchors. Prepare blow pit. Comply with all NMOCD, BLM, 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.
2. PU on tubing and release pump. Re-seat pump. Pressure test tubing to 1000#. Release pump and TOH with rods and pump. ND wellhead and NU BOP. Test BOP. TOH and tally 2.375" tubing, total 6501', SN at 6471'. If necessary, LD tubing and use a workstring.
3. **Plug #1 (Dakota perforations and top, 6237' – 6137')**: TIH and set 4.5" CR at 6237'. Load casing with water and circulate well clean. Pressure test casing to 800#. *If casing does not test, then spot or tag subsequent plugs as appropriate.* Mix 11 sxs Type III and spot a balanced plug inside casing above CR to isolate the Dakota perforations. PUH to 5455'.
4. **Plug #2 (Gallup top, 5455' – 5355')**: Mix 11 sxs cement and spot a balanced plug inside casing to cover the Gallup top. PUH with tubing to 3540'.
5. **Plug #3 (Mesaverde top, ³⁵¹⁰3540' - ³⁴¹⁰3440')**: Mix 11 sxs cement and spot a balanced plug inside casing to cover the Mesaverde top. TOH with tubing.
6. **Plug #4 (Chacra top, ^{2775'}2800' – ^{2675'}2700')**: Perforate 3 squeeze holes at 2800'. Attempt to establish rate into squeeze holes if the casing pressure tested prior to perforating. Set 4.5" cement retainer at 2750'. Establish rate into squeeze holes. Mix and pump 46 sxs cement, squeeze 35 sxs outside the casing and leave 11 sxs inside casing to cover Chacra top. PUH to 1950'.
7. **Plug #5 (Pictured Cliffs and Fruitland tops, ¹⁹²²1950' – ¹⁵¹⁸1660')**: Mix 21 sxs cement and spot a balanced plug inside casing to cover Pictured Cliffs and Fruitland tops. PUH with tubing to 1300'.
8. **Plug #6 (Kirtland and Ojo Alamo tops, ^{1272'}1300' – ^{997'}995')**: Perforate 3 squeeze holes at ^{1272'}1300'. Attempt to establish rate into squeeze holes if the casing pressure tested prior to perforating. Set 4.5" cement retainer at 1250'. Establish rate into squeeze holes. Mix and pump 130 sxs cement, squeeze 106 sxs outside the casing and leave 24 sxs inside casing to cover through the Ojo Alamo top. TOH and LD tubing.

9. **Plug #7 (8.625" Surface casing, 263' - Surface):** Perforate 3 squeeze holes at 263'. Establish circulation out the bradenhead valve with water. Mix and pump approximately 80 sxs cement down the 4.5" casing to circulate good cement out bradenhead valve. Shut well in and WOC.
10. 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.

Pah #1

Current

Basin Dakota

1020' FSL & 1730' FWL, Section 6, T-25-N, R-8-W

San Juan County, NM / API #30-045-24252

Today's Date: 11/01/05

Spud: 11/23/80

Comp: 3/25/81

Elevation: 6340' GL

6351' KB

Ojo Alamo @ 1045' *est

Kirtland @ 1250' *est

Fruitland @ 1710' *est

Pictured Cliffs @ 1900' *est

Chacra @ 2750' *est

Mesaverde @ 3490' *est

Gallup @ 5405'

Dakota @ 6358'

12.25" Hole

7.875" Hole

8.625" 24# K-55 Casing set @ 213'
165 cf cement, circulated to surface

Well History

Feb '98: Bradenhead test; 480# tubing and 520# casing. Good test, no problems.

Oct '04: Change out 1 joint tubing; run rods and pump. Land 208 joints 2-3/8" tubing at 6501' with SN at 6471'.

Top of Cmt @ 1450' (TS)

DV Tool @ 2332'
Cemented with 597 cf

2.375" tubing at 6501'
(208 joints, SN at 6471', rods and pump)

Top of Cmt @ 3093' (Calc, 75%)

DV Tool @ 4841'
Cemented with 531 cf

Top of Cmt @ 5318' (Calc, 75%)

Dakota Perforations:
6287' - 6507'

4.5" 10.5#, K-55 Casing @ 6596'
Cemented with 388 cf

TD 7750'
PBTD 6650'

Pah #1

Proposed P&A Basin Dakota

1020' FSL & 1730' FWL, Section 6, T-25-N, R-8-W
San Juan County, NM / API #30-045-24252

Today's Date: 11/01/05

Spud: 11/23/80

Comp: 3/25/81

Elevation: 6340' GL

6351' KB

12.25" Hole

8.625" 24# K-55 Casing set @ 213'
165 cf cement, circulated to surface

Perforate @ 263'

Plug #7: 263' – 0'
Type III Cement, 80 sxs

Ojo Alamo @ 1045' *est

Kirtland @ 1250' *est

Fruitland @ 1710' *est

Pictured Cliffs @ 1900' *est

Chacra @ 2750' *est

Mesaverde @ 3490' *est

Gallup @ 5405'

Dakota @ 6358'

7.875" Hole

Cmt Retainer @ 1250'

Perforate @ 1300'

Top of Cmt @ 1450' (TS)

Plug #6: 1300' – 995'
Type III Cement, 130 sxs:
106 sxs outside casing
And 24 sxs inside.

Plug #5: 1950' – 1660'
Type III Cement, 21 sxs

DV Tool @ 2332'
Cemented with 597 cf

Cmt Retainer @ 2750'

Perforate @ 2800'
Top of Cmt @ 3093' (Calc, 75%)

Plug #4: 2800' – 2700'
Type III Cement, 46 sxs:
35 outside casing
and 11 inside.

DV Tool @ 4841'
Cemented with 531 cf

TOC @ 5318' (Calc, 75%)

Plug #3: 3540' – 3440'
Type III Cement, 11 sxs

Plug #2: 5455' – 5355'
Type III Cement, 11 sxs

Set Cmt Retainer @ 6237'

Dakota Perforations:
6287' – 6507'

Plug #1: 6237' – 6137'
Type III Cement, 11 sxs

4.5" 10.5#, K-55 Casing @ 6596'
Cemented with 388 cf

TD 7750'
PBSD 6650'