Form 3160-5 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| FORM APPROVED          | in and | DEC  | 12   | 06 |
|------------------------|--------|------|------|----|
| FORM APPROVED          |        |      |      |    |
| OMB NO. 1004-0137      | 1      | DNS. | . OI |    |
| Expires March 31, 2007 |        |      |      |    |

5. Lease Serial No. DIST. 3

NMNM 0606

| 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.

| 6. | If Indian, | Allottee | or Trib | e Name | ; |
|----|------------|----------|---------|--------|---|
|    |            |          |         |        |   |

| SUBMIT IN TRIPLICATE - C   | Other instruction   |   | 1 01           | 7. If Unit or CA/Ag   | greement, Name and/or N             |
|--|---|---|----------------|---|-------------------------------------|
| Type of Well Oil Well X Gas Well Other  Name of Operator   |   | RECEIVE<br>070 FARMING  |                | 8. Well Name and I  | No. 211A                            |
| Energen Resources Corporation  Address  2198 Blocmfield Highway, Farmington Location of Well (Footage, Sec., T., R., M., or Survey E |   | 3b. Phone No. ( <i>include ar</i> (505) 325–680                   | •              | 9. API Well No. 30-045-33822 10. Field and Pool Basin Fruitle | or Exploratory Area                 |
| 835' FNL, 705' FWL, Sec.29, T31N,<br>(D) NW/NW   | , R10W, N.M.P.N   | 1.<br>  |                | 11. County or Part  | ish, State                          |
| 12. CHECK APPROPRIATE  | BOX(ES) TO IN   | DICATE NATURE OF I  | NOTICE, RE     | PORT, OR OTHER  | R DATA                              |
| TYPE OF SUBMISSION   |   | TYI   | PE OF ACTIO    | N   |                                     |
| X Notice of Intent  Subsequent Report  Final Abandonment Notice  | Acidize  Alter Casing  Casing Repair  Change Plans  Convert to Inject | Deepen Fracture Treat New Construction Plug and Abandon Plug Back | Reclama Recomp | elete   | Water Shut-Off Well Integrity Other |

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 final site is ready for final inspection.)

Due to formation tops being deeper than anticipated, Energen Resources would like to request that the TD of the well be increased to 2960' from the original 2810'. A revised operations plan with formation tops is attached.

| <ol> <li>I hereby certify that the foregoing is true and correct<br/>Name (Printed/Typed)</li> </ol>  | Title                               |                   |
|---|-------------------------------------|-------------------|
| Vicki Donaghey  | Regulatory Analy                    | rst               |
| Vici Maskey   | Date 12/06/06                       |                   |
| () () THIS SPACE FO   | R FEDERAL OR STATE OFFICE USE       |                   |
| Approved by Original Signed: Stephen Mason  | Title                               | Date DEC 1 1 2006 |
| Conditions of approval, if any, are attached. Approval of this notice doe certify that the applicant holds legal or equitable title to those rights in which would entitle the applicant to conduct operations thereon. | es not warrant or the subject lease |                   |

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.

## **Operations Plan**

Revised December 5, 2006

#### Atlantic A #211S

### **General Information**

Location 0835' fnl, 0705' fwl

nwnw S29, T31N, R10W

San Juan County, New Mexico

Elevations 6059' GL

Total Depth 2960' (MD)

Formation Objective Basin Fruitland Coal

## **Formation Tops**

| Nacimiento         | Surface |
|--------------------|---------|
| Ojo Alamo Ss       | 1365'   |
| Kirtland Sh        | 1460'   |
| Fruitland Fm       | 2385'   |
| Top Coal           | 2545'   |
| Bottom Coal        | 2760'   |
| Pictured Cliffs Ss | 2765'   |
| Total Depth        | 2960'   |

## Drilling

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 7 7/8" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg. Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

## Logging Program:

Open hole logs: Induction/Gamma Ray and Density Logs

Coring: None

Surveys: Surface and/or every 500' to TD

#### **Tubulars**

### Casing, Tubing, & Casing Equipment:

| String     | Interval   | <b>Wellbore</b> | <b>Casing</b> | <b>Csg Wt</b> | <b>Grade</b> |
|------------|------------|-----------------|---------------|---------------|--------------|
| Surface    | 0'-300'    | 12 ½"           | 8 5/8"        | 24.0 ppf      | J-55 ST&C    |
| Production | 300'-2960' | 7 7/8"          | 5 ½"          | 15.5 ppf      | J-55 LT&C    |
| Tubing     | 0'-2900'   |                 | 2 3/8"        | 4.7 ppf       | J-55         |

#### Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Production Casing: Depending on wellbore conditions, a Cement nose guide shoe with self fill insert float collar on top of bottom joint and casing centralization with standard bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

#### Wellhead

8 5/8" 2000 x 5 ½" Larkin casing head. 5 ½" 2000 x 2" tubing head.

### Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl<sub>2</sub> and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 247 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Production Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 425 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl<sub>2</sub>, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of 145 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (1000 ft³ of slurry, 100 % excess to circulate to surface).

Pump 20 bbis gelled water and 10 bbls fresh water spacer ahead of lead cement.

#### Other Information

- 1) This well will be cased and the Basin Fruitland Coal fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.