

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**RECEIVED**

APR 10 2009

FORM APPROVED  
OMB NO. 1004-0137  
Expires July 31, 2010

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. USA NMNM 0309374	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No.	
3a. Address 2010 Afton Place Farmington, New Mexico 87401		8. Lease Name and Well No. CJ Holder #200	
3b. Phone No. (include area code) (505)325-6800		9. API Well No. 30-045-34949	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1779' FNL 1452' FWL At proposed prod. zone 1119'		10. Field and Pool, or Exploratory Basin Fruitland Coal	
14. Distance in miles and direction from nearest town or post office* 5 miles south southwest of Farmington, NM		11. Sec., T., R., M., or Blk. and Survey or Area C - Sec.27, T28N, R13W NMPM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 700'		12. County or Parish San Juan	
16. No. of Acres in lease 320		13. State NM	
17. Spacing Unit dedicated to this well W/2		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1000'	
19. Proposed Depth 1789'		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6040' GL		22. Approximate date work will start* APRIL 2009	
23. Estimated duration 15 days		24. Attachments DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED GENERAL REQUIREMENTS.	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the BLM

25. Signature 	Name (Printed/Typed) JASON KINCAID	Date 02/09/09
-------------------	---------------------------------------	------------------

Title Drilling Engineer		
----------------------------	--	--

Approved by (Signature) 	Name (Printed/Typed)	Date 7/28/2010
-----------------------------	----------------------	-------------------

Title AFM	Office FFO
--------------	---------------

Application approval 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.  
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

JUL 28 2010

NMOC

**NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT**

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

District I  
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102  
Revised October 12, 2005

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

OIL CONSERVATION DIVISION Submit to Appropriate District Office  
1220 South St. Francis Dr. State Lease - 4 Copies  
Santa Fe, NM 87505 Fee Lease - 3 Copies

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

Bureau of Land Management  
Farmington Field Office

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30045-34949		2 Pool Code 71629		3 Pool Name FC	
4 Property Code 21180		5 Property Name CJ HOLDER			6 Well Number #200
7 OGRID No. 162928		8 Operator Name ENERGEN RESOURCES			9 Elevation 6040

#### 10 Surface Location

UL or lot no. C	Section 27	Township 28-N	Range 13-W	Lot Idn 11794	Feet from the 1452'	North/South line NORTH	Feet from the 1452'	East/West line WEST	County SAN JUAN
--------------------	---------------	------------------	---------------	------------------	------------------------	---------------------------	------------------------	------------------------	--------------------

#### 11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 320		13 Joint or Infill w/2		14 Consolidation Code		15 Order No.			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

16 CALC COR BY DOUBLE PROP. S89°54'22"W 5279.05'(M) FD 2 1/2 BRASS CAP GLO 1913 N89°52'W 80.08 Chains (R) ENERGEN RESOURCES CJ HOLDER #200 LAT. 36.63729 N LONG. 108.21062 W		1179'	
1452'		27	
N0°01'59"W 2637.66'(M) N0°02'W 80 Chains (R)			
FD 2 1/2 BRASS CAP GLO 1911			
2642.28'(M)			
N0°02'38"W			
FD 3 1/4 BRASS CAP GLO			

#### 17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: [Signature] Date: 2-9-09  
Printed Name: Jason Knevel

#### 18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: 1/30/07  
Signature and Seal of Professional Surveyor: [Signature]  
Certificate Number: 8466

2/10/2009



### OPERATIONS PLAN

WELL NAME.....C.J. Holder #200  
JOB TYPE.....Vertical Fruitland Coal  
DEPT.....Drilling and Completions  
PREPARED BY.....Jason Kincaid

### GENERAL INFORMATION

Surface Location  
S-T-R  
County, State

1179 FNL 1452 FEL  
C Sec.27-T28N-R13W  
San Juan, New Mexico

Elevations  
Total Depth  
Formation Objective

6040' GL  
1789' +/- (MD)  
Basin Fruitland Coal

### FORMATION TOPS

Nacimiento	Surface
Ojo Alamo Ss	399'
Fruitland Fm	969'
Top Coal	1424'
Bottom Coal	1584'
Pictured Cliffs	1589'
<b>Total Depth</b>	<b>1789'</b>

### 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 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: 7-7/8" wellbore induction/gamma ray and density logs.  
Mudlogs: none  
Surveys: Surface and/or every 500' to TD.

2/10/2009

**CASING, TUBING & CASING EQUIPMENT**

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Surface	0	150	12-1/4"	8-5/8"	24.0 lb/ft	J-55 ST&C
Production	0	1789	7-7/8"	5-1/2"	15.5 lb/ft	J-55 LT&C
Tubing	0	1789		2 3/8"	4.7 lb/ft	J-55

**Casing Equipment:**

**Surface Casing:** Depending on wellbore conditions, a Texas Pattern Guide Shoe on first joint with and insert float valve on top. Run standard bow spring centralizers as follows: every other joint from TD to surface.

**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.

**CEMENTING**

**Surface Casing:** 105 sks Std (class B) with 2.0 % CaCl<sub>2</sub> and ¼ #/sk Flocele (15.6 ppg, 1.18 ft<sup>3</sup>/sk 59 ft<sup>3</sup> of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 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 155 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl<sub>2</sub>, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.93 ft<sup>3</sup>/sk) and a tail of 150 sks of Class G cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.4ppg, 1.18 ft<sup>3</sup>/sk). (470 ft<sup>3</sup> of slurry to circulate to surface, 50% excess).

**Pump a 10 bbls water, 20 bbls gelled water, 5 bbls water spacer ahead of cement**

**Cement volumes are subject to change if caliper logs are run and dictate otherwise.**

**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. Anticipated pressure is 300 psi.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

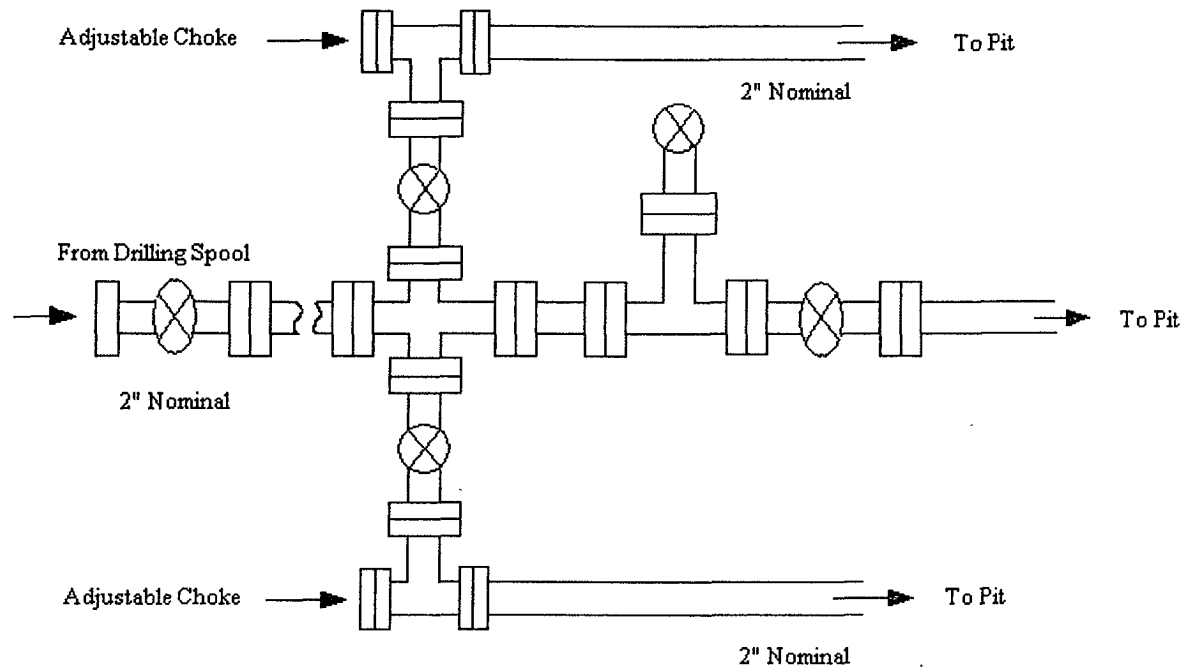
## **DRILLING CONDITIONS OF APPROVAL**

**Operator:** Energen Resources  
**Lease No.:** NMNM-0309374  
**Well Name:** CJ Holder #200  
**Well Location:** Sec. 27, T28N, R13W; 1179' FNL & 1452' FWL

1. Since no BOPE test pressures were proposed, it is recommended that Energen Resources test the BOP and related equipment according to Onshore Order No. 2 *Minimum Standards and Enforcement Provisions For Well Control Equipment Testing.*

## Energen Resources Corporation

### Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

## Energen Resources Corporation

### Typical BOP Configuration for Gas Drilling

