

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 02 2008

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

Bureau Office of Management
Farmington Field Office

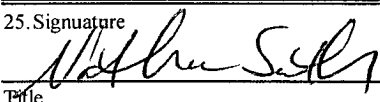
1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. USA NMM 113432
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> 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 2198 Bloomfield Highway Farmington, New Mexico 87401	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. CJ Holder #600
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 387 FSL, 499 FWL SE/SW At proposed prod. zone		9. API Well No. 30-045-34752
14. Distance in miles and direction from nearest town or post office* 5 miles south southwest of Farmington, NM		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 387'	16. No. of Acres in lease 172.10	11. Sec., T., R., M., or Blk. and Survey or Area N - Sec. 30, T29N, R13W NMEM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 75'	19. Proposed Depth 1773'	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5791'	22. Approximate date work will start* August 1, 2008	13. State NM
23. Estimated duration 15 days		

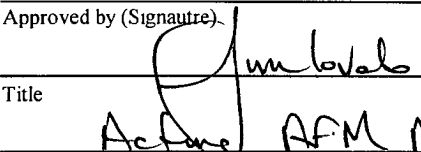
This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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, shall 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 shall 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 authorized officer.

25. Signature 	Name (Printed/Typed) Nathan Smith	Date 07/02/08
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Title Drilling Engineer		
Approved by (Signature) 	Name (Printed/Typed) AFM Minerals	Date 8/4/08
Title Acting AFM Minerals		Office

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

*(Instructions on page 2)

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

AUG 06 2008 

NMOCD 

RCVD AUG 5 '08
OIL CONS. DIV.
DIST. 3

Blm OK 3-5-08
Per ARCH

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1361 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30045-34752	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 21180	⁵ Property Name C.J. HOLDER	⁶ Well Number # 600
⁷ OGRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION	⁹ Elevation 5911'

¹⁰ Surface Location

U.L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	30	29N	13W		387	SOUTH	499	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

U.L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 252.1	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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5/2-24.

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

¹⁶ FD. 3 1/4" ALUM. CAP BLM 1984 R14W R13W 30 NAD 83 N 36.69139° W 108.25098° ENERGEN RESOURCES C.J. HOLDER #600 499' 387' CHA CHA #6 DRY HOLE	FD. 3 1/4" ALUM. CAP BLM 1984	FD. 3 1/2" BRASS CAP BLM 1984	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, mineral or undeveloped 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 this division. Signature: <i>Nathan Smith</i> 7/2/08 Printed Name: <i>Nathan Smith</i>
	5238.70' (M) 5241.19' (R)	5238.70' (M) 5241.19' (R)	

(CALC. COR.
BY SGL PROP)

S89°31'37"E
S89°54'00"E (1880 PLAT)

4130 23' (M)
4158.00' (R)

FD. 1 1/2" ALUM. CAP
HCS LS#9672

Operations Plan

June 16, 2008

CJ Holder #600

General Information

Location	387' fsl, 499' fwl swse S30, T29N, R13W San Juan County, New Mexico
Elevations	5791' GL
Total Depth	1653' (MD)
Formation Objective	Basin Fruitland Coal

Formation Tops

Kirtland Sh	Surface
Fruitland Fm	1218'
Top Coal	1453'
Bottom Coal	1573'
Pictured Cliffs Ss	1573'
Total Depth	1773'

Drilling

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

The 8 3/4" wellbore will be drilled with a low solids non-dispersed 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 3000 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. Choke manifold will be tested to 1000 psi. BOP will be tested to 250 psi for 15 min and 1500 psi for 15 min after casing is set and cemented.

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	Wellbore	Casing	Csg Wt	Grade
Surface	0'-150'	12 1/4"	8 5/8"	24.0 ppf	J-55 ST&C
Production	150'-1773'	7 7/8"	5 1/2"	15.5 ppf	J-55 LT&C
Tubing	0'-1400'		2 3/8"	4.7 ppf	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a 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.

Cementing

Surface Casing: 125 sks Type V with 2.0 % CaCl₂ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk 145 ft³ of slurry). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min. Test BOP as outlined in the drilling section.

Production Casing: Before cementing, circulate hole at least 1 1/2 hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 250 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and 1/2 #/sk Flocele (12.3 ppg, 1.93 ft³/sk) and a tail of 150 sks of Class G cement with 5.0 #/sk Gilsonite, and 1/4 #/sk Flocele (15.4ppg, 1.18 ft³/sk). (660 ft³ of slurry to circulate to surface).

Cmt to surface both strings

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

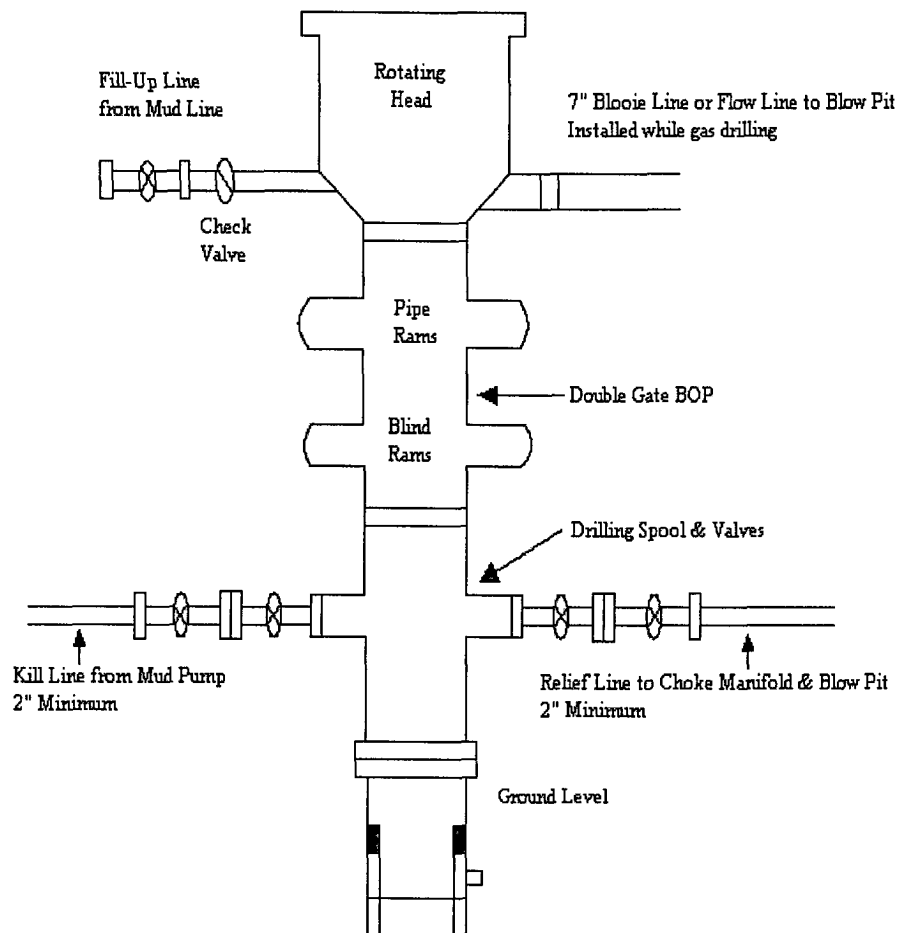
Cement volumes are subject to change if caliper logs are run and dictate otherwise.

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.

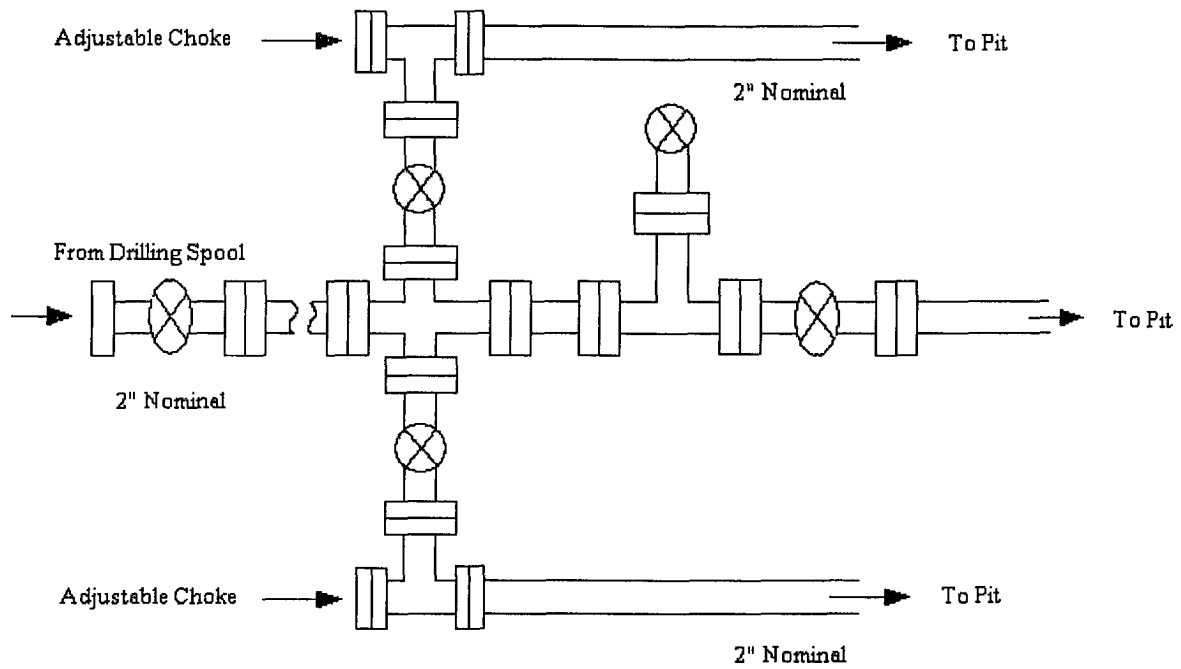
Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD