Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
USA NMNM 120384

1a. Type of Work [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name

1b. Type of Well [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.
Nacks CA

2. Name of Operator
Energen Resources Corporation

8. Lease Name and Well No.
RUBY #200S

3a. Address
2010 Afton Place Farmington, New Mexico 87401

3b. Phone No. *(include area code)*
(505)325-6800

9. API Well No.
30-045-34987

4. Location of Well *(Report location clearly and in accordance with any State equirements)**

At surface 1820'FSL 1980'FWL

At proposed prod. zone

10. Field and Pool, or Exploratory
Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area
K - Sec.21, T27N, R12W NMPM

14. Distance in miles and direction from nearest town or post office*
5 miles south of Bloomfield, NM

12. County or Parish
San Juan

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
1820'	320	W/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
2000'	1455'	
21. Elevations (Show whether DF, KDB, RT, GL, etc.	**22. Approximate date work will start***	**23. Estimated duration**
5798' GL	NOVEMBER 2009	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

OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

RCVD MAR 31'10

OIL CONS. DIV.

DIST. 3

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

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

25. Signature	Name *(Printed/Typed)*	Date
	JASON KINCAID	05/20/09

Title
Drilling Engineer

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Manuel Vargo		3/29/2010
Title	**Office**	
AFM	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 knowlingly 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)

*(Instructions on page 2)

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

RECEIVED
JUN 11 2009
Bureau of Land Management
Farmington Field Office

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

NMOCD

APR 05 2010

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

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

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

RECEIVED
JUN 04 2009
Bureau of Land Management
Farmington Field Office

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	[2] Pool Code	[3] Pool Name
30-045-34987	71629	FC

[4] Property Code	[5] Property Name	[6] Well Number
38099	RUBY	#200s

[7] OGRID No.	[8] Operator Name	[9] Elevation
162928	ENERGEN RESOURCES	5798

[10] Surface Location

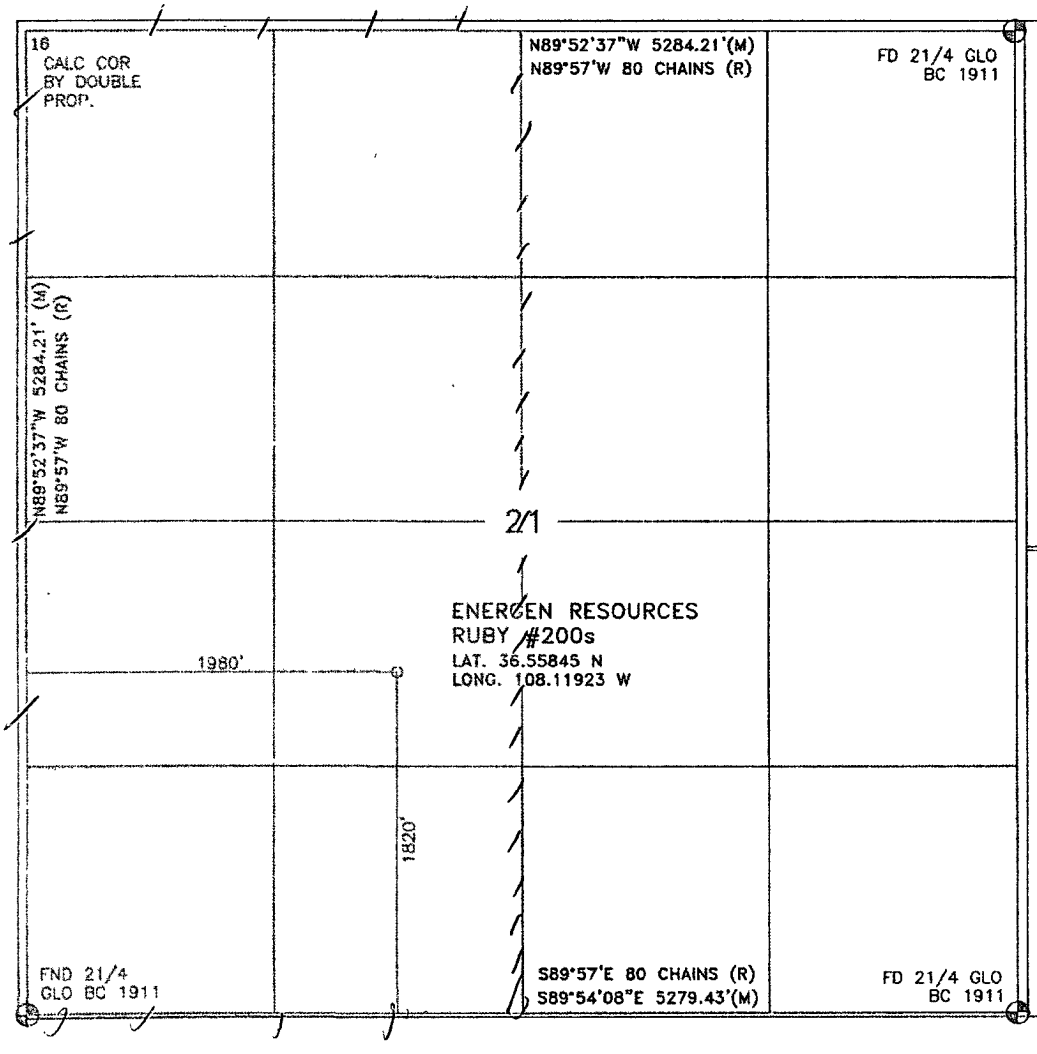
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	21	27-N	12-W		1820'	SOUTH	1980'	WEST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320 W/2			

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.



[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 — Date: 6-3-09

Jason Kincaid
Printed Name

[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.

10-16-08
Date of Survey

Signature and Seal of Professional Surveyor:

NEW MEXICO — 8466 — REGISTERED PROFESSIONAL LAND SURVEYOR

8466
Certificate Number

6/3/2009

ENERGEN RESOURCES

OPERATIONS PLAN

WELL NAME.....Ruby #200S
JOB TYPE.....Vertical Fruitland Coal
DEPT.....Drilling and Completions
PREPARED BY.....Jason Kincaid

GENERAL INFORMATION

Surface Location	1820 FSL 1980 FWL
S-T-R	(K) Sec.21-T27N-R12W
County, State	San Juan, New Mexico
Elevations	5798' GL
Total Depth	1455' +/- (MD)
Formation Objective	Basin Fruitland Coal

FORMATION TOPS

Ojo Alamo Ss	surface
Kirtland Sh	170'
Fruitland Fm	1020'
Top Coal	1145'
Base Coal	1235'
Pictured Cliffs	1255'
Total Depth	**1455'**

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.

6/3/2009

ENERGEN RESOURCES

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	1455	7-7/8"	5-1/2"	15.5 lb/ft	J-55 LT&C
Tubing	0	1455		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 % $CaCl_2$ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft^3/sk ~~59 ft^3~~ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min. V = 125 ft^3

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 125 sks 65/35 with 6.0 % Bentonite, 2.0 % $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.93 ft^3/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^3/sk). (~~572 ft^3~~ of slurry to circulate to surface, 60% excess). 420 ft^3

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

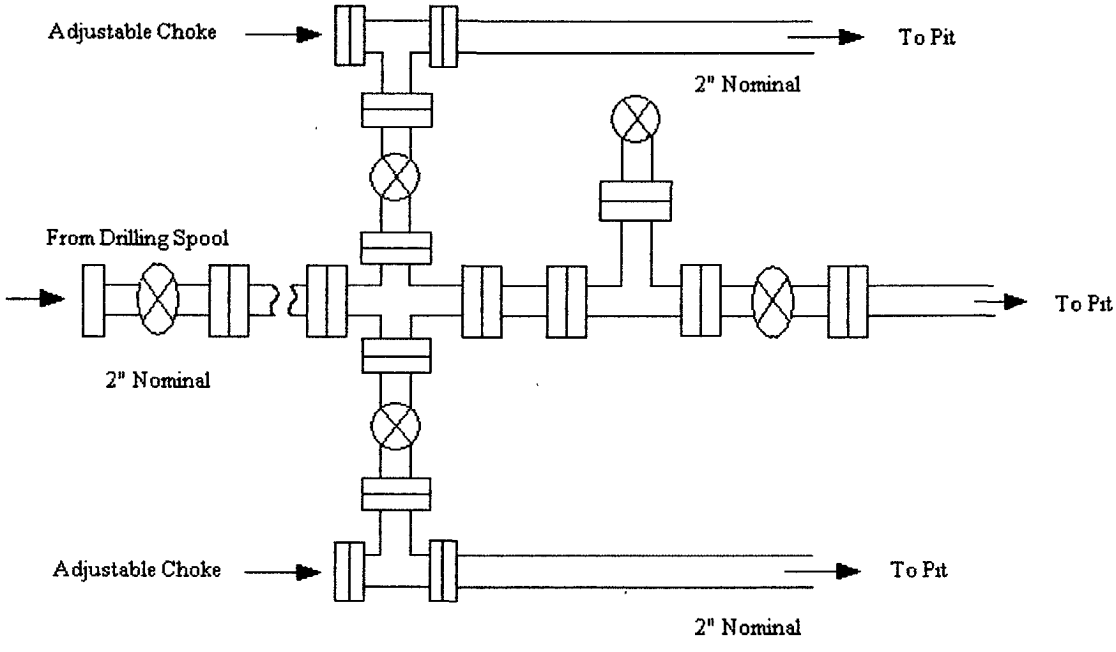
Cement volumes are subject to change if caliper logs are run and dictate otherwise.

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.

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