

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

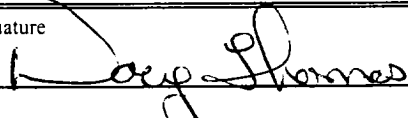

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. Lease Serial No. SF-079487A	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" 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. 21185	
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87402		8. Lease Name and Well No. Carson 208	
3b. Phone No. (include area code) (505)325-6800		9. API Well No. 3003927027	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1635' FNL, 860' FWL At proposed prod. zone		10. Field and Pool, or Exploratory Basin Fruitland Coal	
14. Distance in miles and direction from nearest town or post office* 9 miles Northeast of Gobernador, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area F Sec. 19, T30N, R4W, N.M.P.M.	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 860'		12. County or Parish Rio Arriba	
16. No. of Acres in lease 1819.52		13. State NM	
17. Spacing Unit dedicated to this well 219.52 W/2		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 100'	
19. Proposed Depth 4093'		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7385' GL		22. Approximate date work will start* OCT 2002	
23. Estimated duration 7 Days			

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Doug Thomas	Date 05/21/02
Title Drilling & Completion Foreman		
Approved by (Signautre) 	Name (Printed/Typed) David J. Mankiewicz	Date JUL - 1
Title 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 Reverse)

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

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

HOLD C104 FOR NSP order, - NSL order

District II
PO Drawer 00, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District III
1000 Rio Brazos Rd., Aztec, NM 87410

☐ AMENDED REPORT

District IV
PO Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27027		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 21185	*Property Name CARSON		*Well Number 208
*OGRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7385'

¹⁰ Surface Location

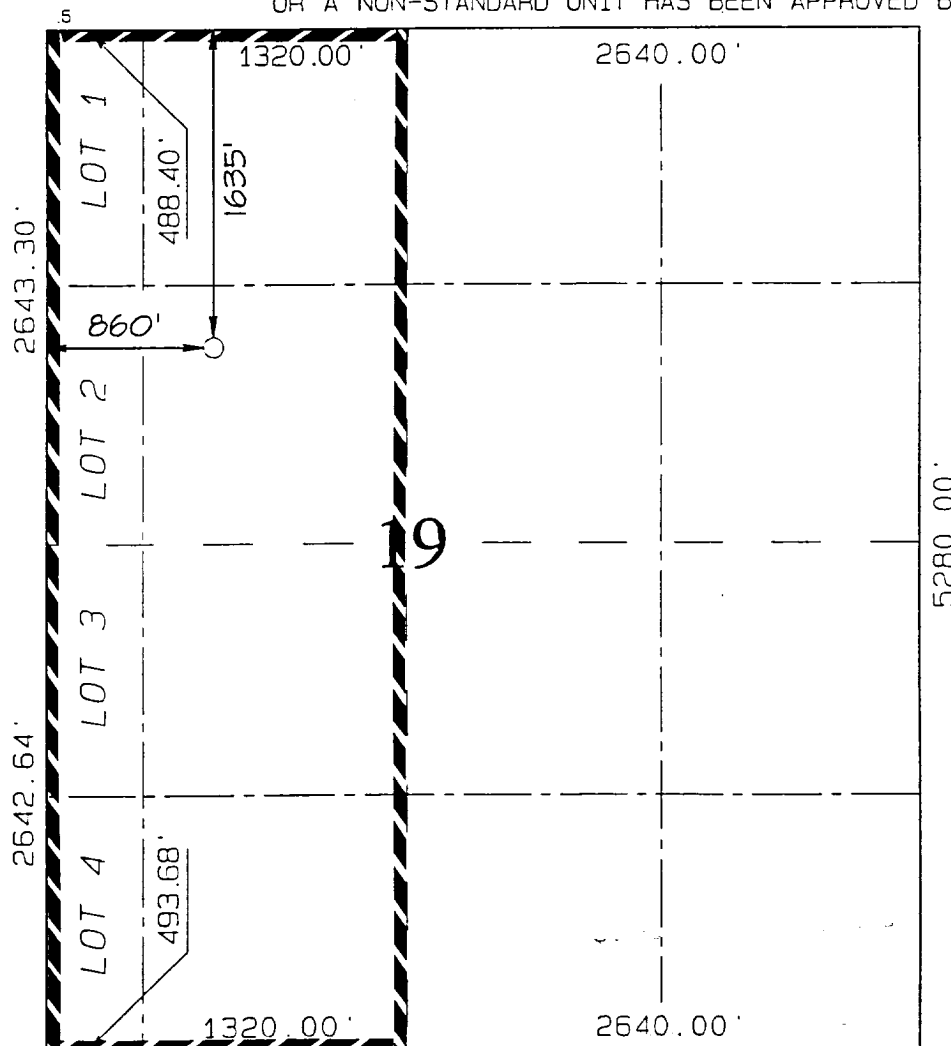
UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
F	19	30N	4W		1635	NORTH	860	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	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.

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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Don Graham
Signature

Don Graham

Printed Name

Production Superintendent

Title

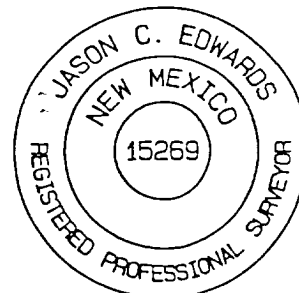
5-14-02
Date

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: MARCH 5, 2002

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

ENERGEN RESOURCES CORPORATION CARSON #208

1635' FNL & 860' FNL, SECTION 19, T30N, R4W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



OPERATIONS PLAN

WELL NAME: Carson #208

LOCATION: 1635' FNL, 860' FWL, Section 19, T30N, R4W, Rio Arriba County, NM

FIELD: Basin Fruitland Coal

ELEVATION: 7385' GL

FORMATION TOPS:

Surface San Jose

Nacimiento

Ojo Alamo 3690

Kirtland 3830

Fruitland 3990

Total Depth 4093

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate- None

Inter TD to total depth: None

Mud Logs: Intermediate to total depth

Coring: None

Natural Gauges: Every 500' from intermediate TD to total depth

MUD PROGRAM: Fresh water low solids mud from surface to intermediate TD (9.0 PPG).

Air/mist from intermediate casing point to total depth.

CASING PROGRAM:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG SIZE</u>	<u>WT.</u>	<u>GRADE</u>
12 1/4"	200'	9 5/8"	36#	J-55 – ST&C
8 3/4"	3990'	7"	20#	J-55 – ST&C
6 1/4"	4093'			

TUBING PROGRAM:

4000'	2 3/8"	4.7#	J-55
-------	--------	------	------

WELLHEAD: 11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" 3000 xmas tree.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be

available on the rig floor during drilling operations.

CEMENTING:

9 5/8" surface casing - cement with 110 sks Class B Cement with 1/4" flocele/sk and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom. 3 bow type centralizers spaced throughout the string.

7" intermediate casing – cement with 400 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (900 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC. Test casing to 1200 psi for 30 minutes.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

OTHER INFORMATION:

- 1) The Basin Fruitland Coal will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) If lost circulation is encountered sufficient LCM will be added to the mud system to maintain well control.
- 4) This gas is dedicated.
- 5) Anticipated pore pressure for the Fruitland is 700 psi.