

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

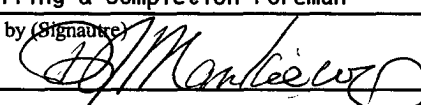
1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Jicarilla Apache	
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No. 30-039-29297	
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401		8. Lease Name and Well No. Jicarilla 98 2C	
3b. Phone No. (include area code) (505)325-6800		9. API Well No.	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1800' FNL. 2120' FEL At proposed prod. zone		10. Field and Pool, or Exploratory Blanco Mesaverde	
14. Distance in miles and direction from nearest town or post office* 12 miles northwest of Lindrith, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area G Sec. 19, T26N, R03W - NMPM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1800'		12. County or Parish Rio Arriba	
16. No. of Acres in lease 2508.2		13. State NM	
17. Spacing Unit dedicated to this well 320 E/2			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1300'		20. BLM/BIA Bond No. on file	
19. Proposed Depth 6272'			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7006'		22. Approximate date work will start* 10/04	
		23. Estimated duration 10 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. |

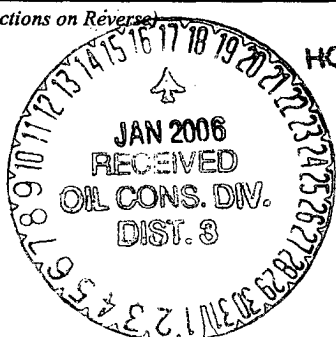
25. Signature 	Name (Printed/Typed) Doug Thomas	Date 12/19/03
--	-------------------------------------	------------------

Title Drilling & Completion Foreman		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 1/18/06
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.

*(Instructions on Reverse)



HOLD C194 FOR NSL

AFMSS
Adj'd 
Engr 
Geol 
Surf 
Appvl

NMOC

RECEIVED
BLM
03 DEC 24 AM 9:52
010 ALBUQUERQUE, N.M.

District I
PO Box 1980, Hobbs, NM 88241-1980

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29297		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 21940	*Property Name JICARILLA 98		*Well Number 2C
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7006'

¹⁰ Surface Location

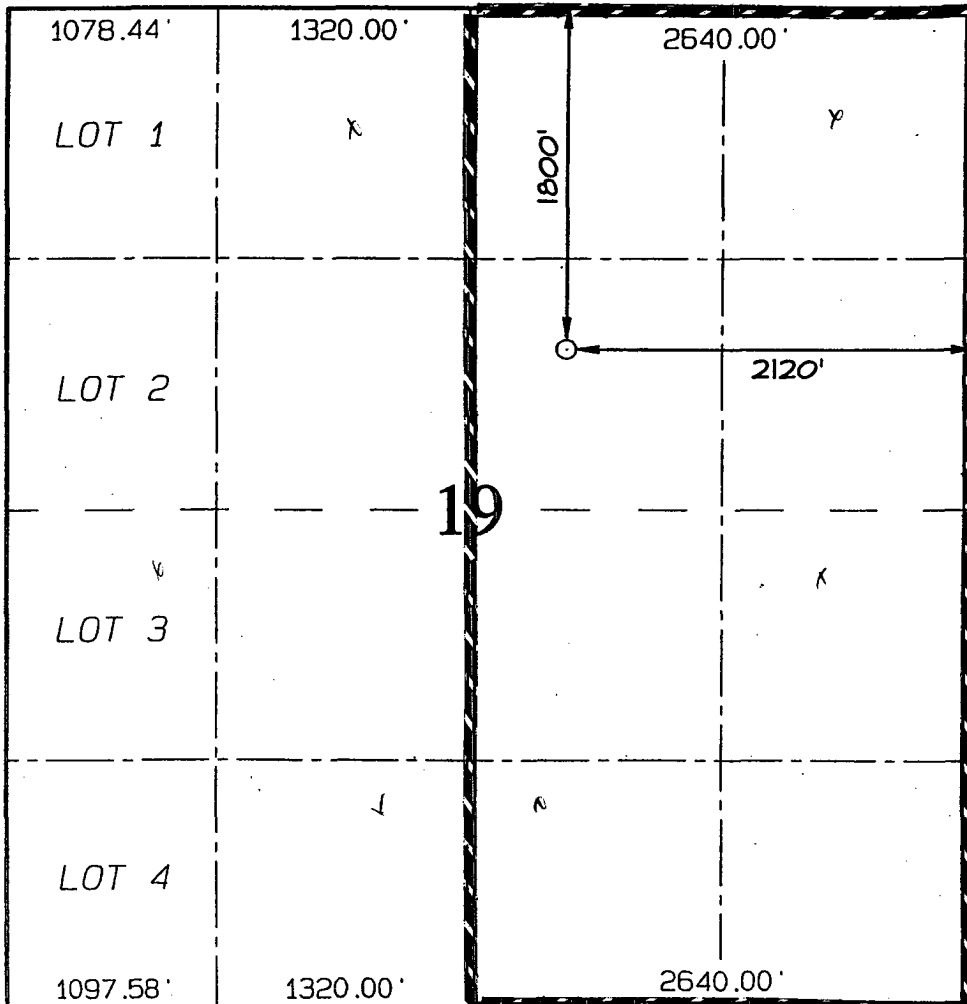
UL or lot no. G	Section 19	Township 26N	Range 3W	Lot Idn	Feet from the 1800	North/South line NORTH	Feet from the 2120	East/West line EAST	County RIO ARriba
--------------------	---------------	-----------------	-------------	---------	-----------------------	---------------------------	-----------------------	------------------------	----------------------

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
*Dedicated Acres 320.0 Acres - (E/2)					*Joint or Infill	*Consolidation Code	*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

16



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

12-16-03
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.

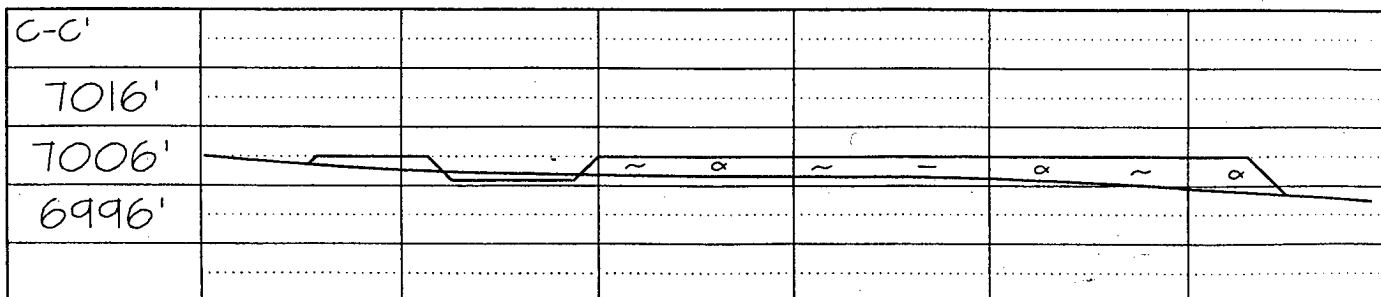
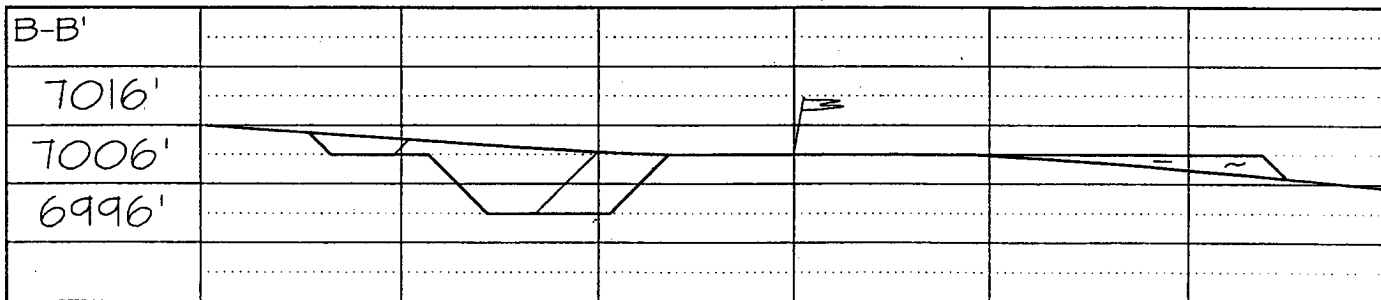
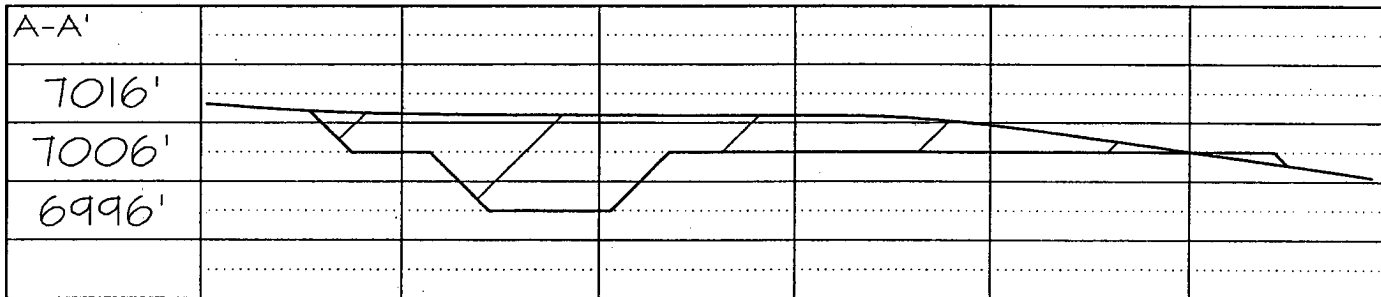
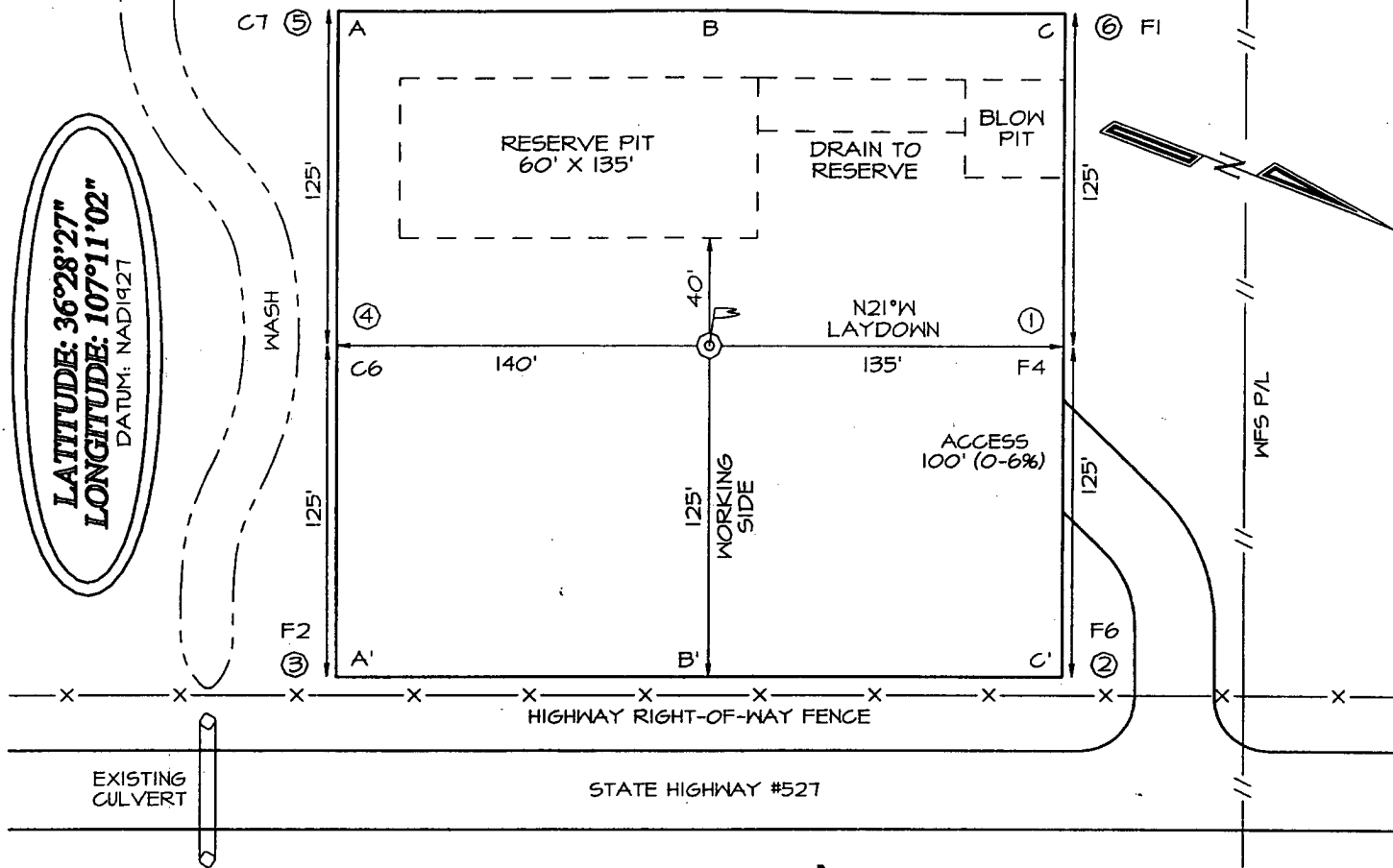
Date of Survey: AUGUST 27, 2003

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

ENERGEN RESOURCES CORPORATION JICARILLA 98 #2C
1800' FNL & 2120' FEL, SECTION 19, T26N, R3W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 7006'



OPERATIONS PLAN

WELL NAME: Jicarilla 98 #2C

LOCATION: 1800' FNL, 2120' FEL, Section 19, T26N, R3W, Rio Arriba, New Mexico

FIELD: Blanco Mesaverde

ELEVATION: 7006'

FORMATION TOPS:

Surface	San Jose ✓	Huerfanito Benonite	4127
Nacimiento ✓	2222	Cliff House	5337
Ojo Alamo ✓	3322	Menefee	5447
Kirtland ✓	3387	Point Lookout	5822
Fruitland	3492	Mancos Shale	6087
Pictured Cliffs	3632		
Lewis	3827		

Total Depth 6272

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: NONE

Inter TD to total depth: None

Mud Logs: None

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 – 9.2 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"	32.3#	H-40 ST&C
8-3/4"	4027'	7"	20#	J-55 ST&C
6-1/4"	3877'-6272'	4-1/2"	10.5#	J-55 ST&C

TUBING PROGRAM:

6200'	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 sxs Class B Cement with 1/4" Flocele/sx 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 with centralizers on the first three joints.

7" intermediate casing - cement with 530 sxs 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sxs Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (1150 cu. Ft. of slurry, 90% 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. 8 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2 Production Liner

Cement with 370 sxs 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk (466 cu. Ft., 90% excess to intermediate casing). WOC 18 hrs prior to completion.

Cement nose guide shoe on bottom with float collar on top of shoe joint. Liner hanger will have a neopreme packoff on top.

OTHER INFORMATION:

- 1) The Blanco Mesaverde and Gallup Dakota will be completed and downhole commingled.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Mesa Verde is 800, Pictured Cliffs is 500 and the Fruitland 400 psi.
- 4) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.