

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. Jic Cont 98
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 Jicarilla Apache
2. Name of Operator Energen Resources Corporation 162928		7. Unit or CA Agreement Name and No. 21940
3a. Address 2198 Bloomfield Highway, Farmington, NM 87401	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. Jicarilla 98 3B
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1980' FSL, 2350' FWL At proposed prod. zone		9. API Well No. 30039-26915
14. Distance in miles and direction from nearest town or post office* 13 miles northwest of Lindrith, New Mexico		10. Field and Pool, or Exploratory Blanco Mesaverde
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1980'	16. No. of Acres in lease 2560	11. Sec., T., R., M., or Blk. and Survey or Area K Sec. 20, T26N, R3W, N.M.P.M.
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1700'	19. Proposed Depth 6451'	12. County or Parish Rio Arriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7188' GL		13. State NM
22. Approximate date work will start* Mar 2002		17. Spacing Unit dedicated to this well 320 S/2
23. Estimated duration 10 Days		20. BLM/BIA Bond No. on file

24. Attachments

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

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| 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 <i>Don Graham</i>	Name (Printed/Typed) Don Graham	Date 1/8/02
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Title

Production Superintendent

Approved by (Signautre) <i>S/SW Anderson</i>	Name (Printed/Typed)	Date JAN 29 2002
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Title

*Asst. Field Mgr.*

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)

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 <b>30-039-26 915</b>	*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code <b>21940</b>	*Property Name JICARILLA 98	*Well Number 3B
*OGRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 7188'

<sup>10</sup> Surface Location

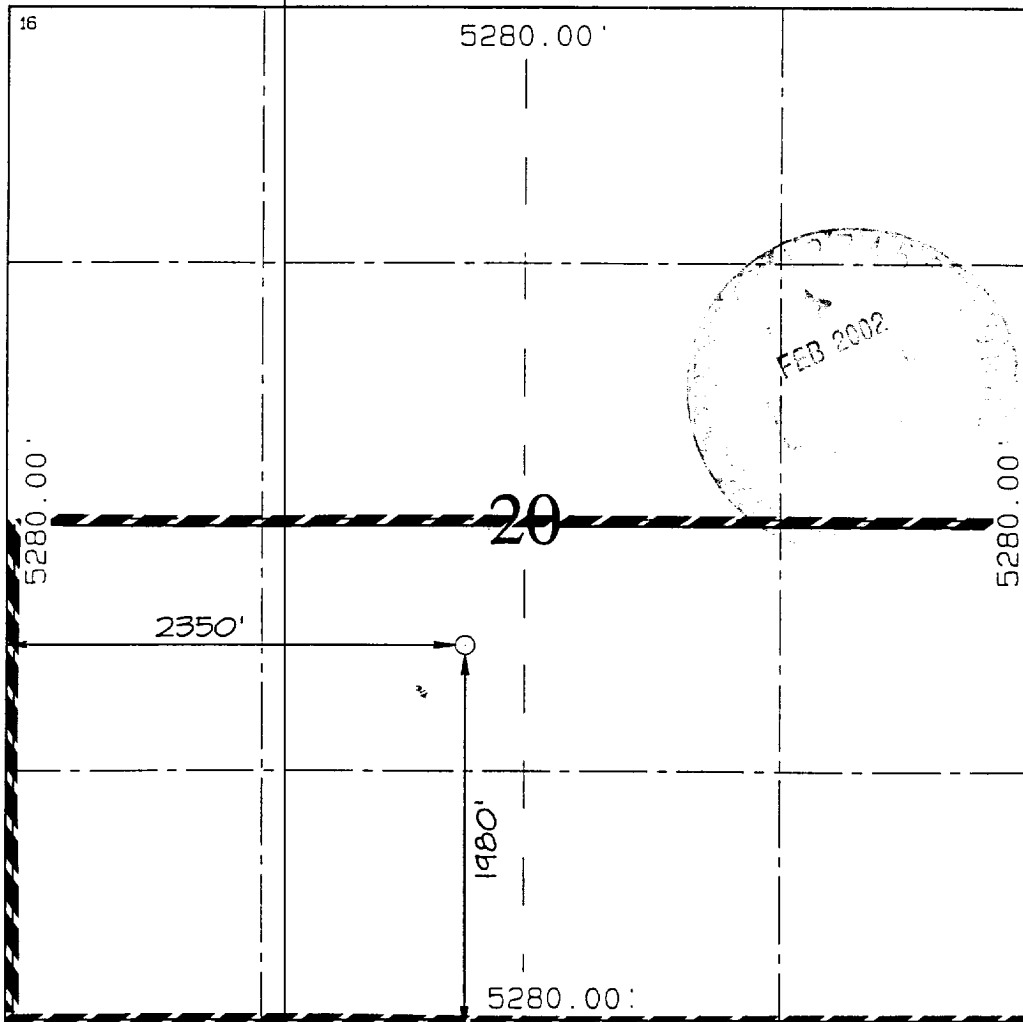

UL or lot no. K	Section 20	Township 26N	Range 3W	Lot Ion	Feet from the 1980	North/South line SOUTH	Feet from the 2350	East/West line WEST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 320	Acres - (S/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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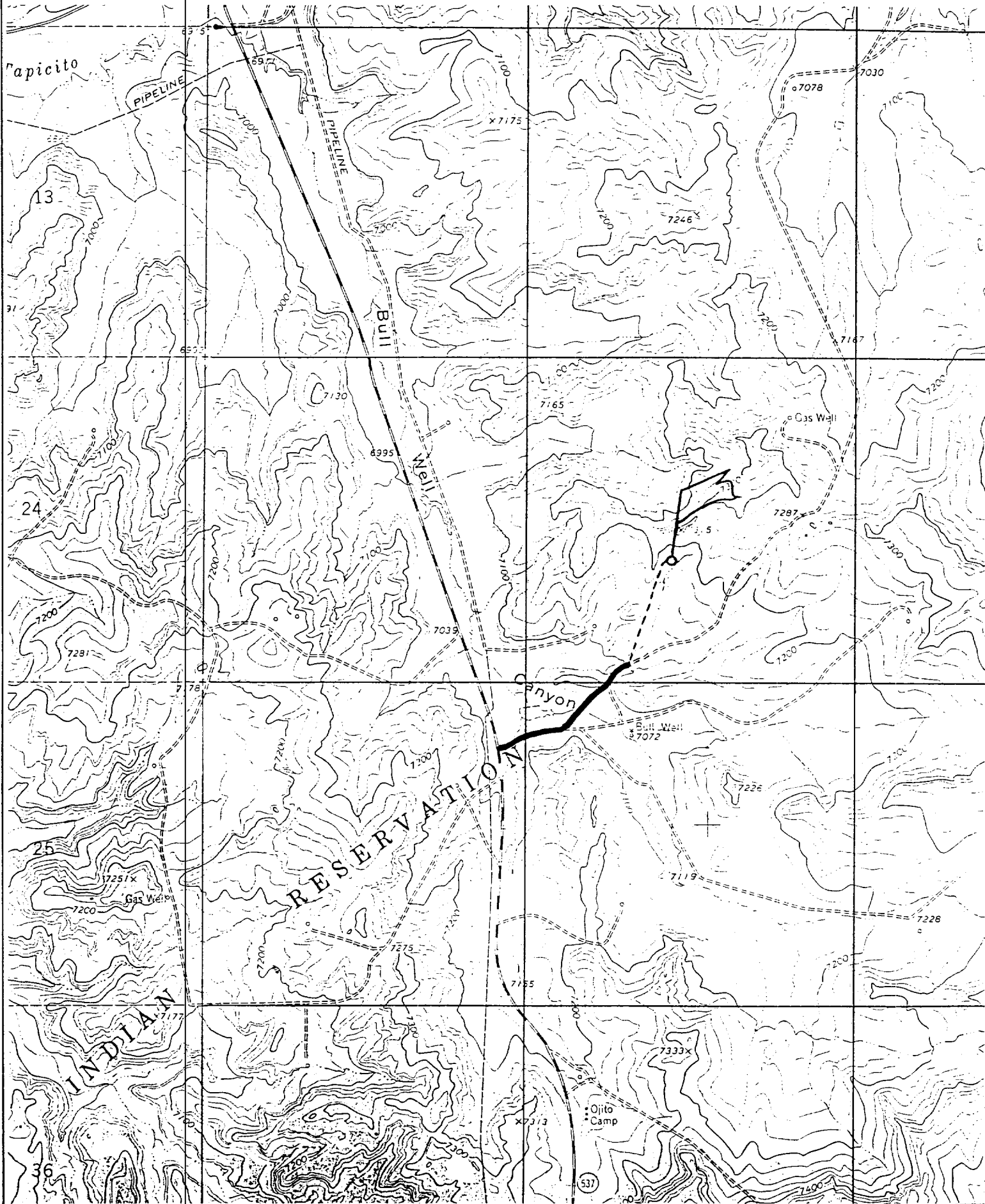
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup> 	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature <i>Don Graham</i> Don Graham Printed Name Production Superintendant Title 11-8-01 Date
	<sup>18</sup> 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. Survey Date: SEPTEMBER 24, 2001 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269

ENERGEN RESOURCES CORPORATION JICARILLA 98 #3B

1980' FSL & 2350' FWL, SECTION 20, T26N, R3W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO



## OPERATIONS PLAN

WELL NAME: Jicarilla 98 #3B

LOCATION: 1980' FSL, 2350' FWL, Section 20, T26N, R3W, Rio Arriba, New Mexico

FIELD: Blanco Mesaverde

ELEVATION: 7188' GL

### FORMATION TOPS:

Surface	San Jose	Huerfanito Benonite	4323
Nacimiento	2279	Cliff House	5555
Ojo Alamo	3211	Menefee	5642
Kirtland	3591	Point Lookout	6001
Fruitland	3699		
Pictured Cliffs	3859		
Lewis	3972	Total Depth	6451

### LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: None

Inter TD to total depth: Temp/HRI/CNT, LDT/GR

Mud Logs: 3600' 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. 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
8-3/4"	4022'	7"	20#	J-55
6-1/4"	4022'-6451	4-1/2"	10.5#	J-55

### TUBING PROGRAM:

6300'	2 3/8"	4.7#	J-55
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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.

### CEMENTING:

9 5/8 surface casing - Cement with 110 sks 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 405 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. (907 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. 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 300 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk ( 374 cu. ft., 50% excess to circulate liner top). 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 completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Mesa Verde is 800, Pictured Cliffs is 600 and the Fruitland 500 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.