Form 3160<sub>v</sub>3 (August<sub>e</sub>1999)

# 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  Ia. Type of Work  Ib. Type of Well  Oil Well  Oil Well  Oil Well  Other  Single Zone  Multiple Zone  Multiple Zone  Ib. Type of Well  Oil Well  Oil Well  Oil Well  Other  Single Zone  Multiple Zone  Multiple Zone  Single Zone  Multiple Zone  Ib. Phone No. (include area code)  Icarilla Apache  Jicarilla Apache			
1a. Type of Work	5. Lease Serial No.  Jic Cont 96		
15. Type of Well			
2. Name of Operator  Energen Resources Corporation  3a. Address  2198 Bloomfield Highway, Farmington, NM 87401  4. Location of Well (Report location clearly and in accordance with any State equirements)  At surface 660' FSL, 2600' FWL  At proposed prod. zone  At proposed prod. zone  At Distance in miles and direction from nearest town or post office*  16 miles northwest of Lindrith, New Mexico  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 plate to nearest well, drilling, completed, applied for, on this lease, ft.  1550'  22. Approximate date work will start*  April 2003  10. Distance duration  12. County or Parish  13. State  17, Spacing Unit dedicated to this well  2530.72  3 2 6 W 1/2  2530.72  20. BLM/BIA Bond No. on file  23. Estimated duration  April 2003  10. Days  24. Attachments  4. Bond to cover the operations unless covered by an existing bond on file (stem 20 above).  5. Operator extification.  4. Bond to cover the operations and/or plans as may be required by the such side specific information and/or plans as may be required by the such such sides specific information and/or plans as may be required by the such such sides specific information and/or plans as may be required by the such such sides specific information and/or plans as may be required by the such such sides specific information and/or plans as may be required by the such such such sides specific information and/or plans as may be required by the such such such such sides specific information and/or plans as may be required by the such such such sides specific information and/or plans as may be required by the such such such sides specific information and/or plans as may be required by the such such such such sides specific information and/or plans as may be required by the such such such such such such such such	Jicarilla Apache		
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25. Signuature Name (Printed/Typed) Date			
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Title Doug Thomas 11/27/02			
Drilling/Completion Foreman			
Approved by (Signautre) Name (Printed/Typed) Date			
/s/ David R. Sitzler FEB 4	2003		
Assistant Field Manager 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 applic conduct operations thereon.  Conditions of approval, if any, are attached.	licant to		
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 of agency of the States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	e United		
*(Instructions on Reverse)			

District I FO Box 1980, Hobbs, NM 83241-1980

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

District III 1000 Rio Brazos Ad., 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

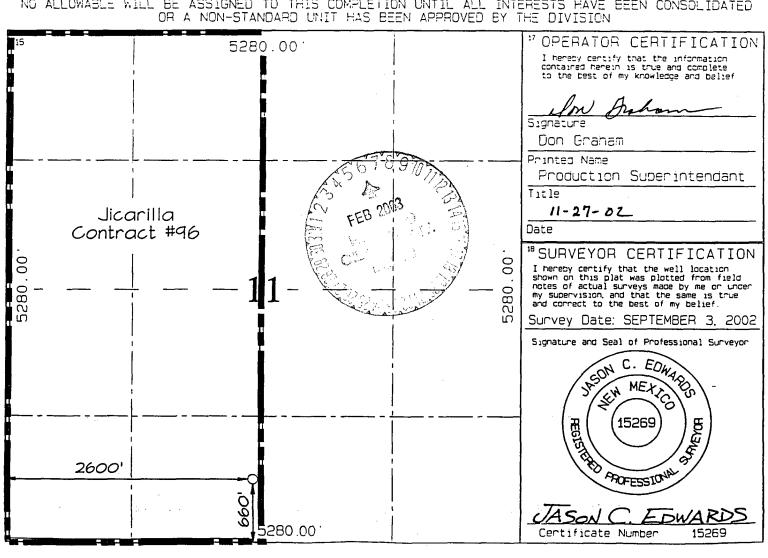
Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-039-27311			/	'Pool Coo 72319	t	'Pool Name BLANCO MESAVERDE				
Property Code				Property Name JICARILLA 96			*Well Number 5C			
OGAID No. 162928				*Operator Name ENERGEN RESOURCES CORPORATION			*Elevation 7151			
<sup>10</sup> Surface Location										
UL or lot no.	Section 11	Township 26N	Range 3W	Lat Ion	Feet from the	North/South line SOUTH	Feet from the 2600	East/We		County RIO ARRIBA
<sup>11</sup> Bottom Hole Location If Different From Surface										
LL or lot no.	Section	Township	Range	Lot Ich	Feet from tre	North/South line	Feet from tre	East/we	st line	County
# Dedicated Acres 320.0 Acres - (W/2)										
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										



# **OPERATIONS PLAN**

WELL NAME: Jicarilla 96 #5C

LOCATION: 660' FSL, 2600' FWL, Section 11, T26N, R3W, Rio Arriba, New Mexico

FIELD: Blanco Mesaverde

ELEVATION: 7151' GL

# **FORMATION TOPS:**

Surface	San Jose	Huerfanito Benonite	4158
Nacimiento	2188	Cliff House	5408
Ojo Alamo	3258	Menefee	5468
Kirtland	3448	Point Lookout	5798
Fruitland	3483	Mancos Sh	6068
Pictured Cliffs	3673		
Lewis	3843	Total Depth	6248

# **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

<u>MUD PROGRAM</u>: Fresh water low solids mud from surface to intermediate TD. Air/mist from intermediate casing point to total depth.

# **CASING PROGRAM:**

<b>HOLE SIZE</b>	<b>DEPTH</b>	CSG SIZE	<u>WT.</u>	<b>GRADE</b>
12-1/4"	200'	9-5/8"	36#	J-55
8-3/4"	4043'	7"	20#	J-55
6-1/4"	3893'-6248'	4-1/2"	10.5#	J-55

#### **TUBING PROGRAM:**

6100' 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.

#### **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 410 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. (912 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 290 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk ( 363 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.