UNITED STATES FORM APPROVED orm 3160-3 DEPARTMENT OF THE INTERIOR OMB NO. 1004-0136 ugust 1999) Expires: November 30, 2000 BUREAU OF LAND MANAGEMENT 5. Lease Serial No. APPLICATION FOR PERMIT TO DRILL OR REENTER NM 28812 Type of Work 6. If Indian, Allotee or Tribe Name X DRILL ☐ REENTER 1b. Type of Well 7. Unit or CA Agreement Name and N Oil Well X Gas Well Other Multiple Zone X Single Zone 2. Name of Operator 8. Lease Name and Well No Energen Resources Corporation Carracas Canyon Unit 3a. Address 3b. Phone No. (include area code) 9. API Well No. (505) 325-6800 2198 Bloomfield Highway Farmington, New Mexico 8740 30 O Location of Well (Report location clearly and in accordance with any State equirements) 10. Field and Pool, or Exploratory Carracas Pictured Cliffs 1775' FNL, 1840' FEL Sec., T., R., M., or Blk. and Survey or Area At proposed prod. zone Sec. 26, T32N, R4W, N.M.P.M. 13. State 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish Řio Arriba 18 miles North of Gobernador New Mexico 16. No. of Acres in lease 17. Spacing Unit dedicated to this well 15. Distance from proposed\* location to nearest 1775' property or lease line, ft. 160A NE MATA 2680 (Also to nearest drg. unit line, if any) 19. Proposed Depth 20.BLM/BIA Bond No. on file 18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. 2000 3884 21. Elevations (Show whether DF, KDB, RT, GL, etc. 22. Approximate date work will start\* 23. Estimated duration 6604' GL August 2003 5 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: Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan Item 20 above). A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification. SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer 25. Signuature Name (Printed/Typed) Date Don Graham 5/30/03 Title Production Superintendent Approved by (Signautre) /s/ David J. Mankiewicz Name (Printed/Typed) 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 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.

\*(Instructions on Reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165.4

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

RECEIVED

703 JUN 12 M II: 05

070 Farmington, NM

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

District II 'PO Drawer DD, 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

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7000							ator Name				*Elevation		
162928 ENERGEN RESOURCE											6604		
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## **OPERATIONS PLAN**

WELL NAME: Carracas Canyon Unit 26B #7

LOCATION: 1775' FNL, 1840' FEL, Section 26, T32N, R4W, Rio Arriba County, NM FIELD: Carracas Pictured Cliffs ELEVATION: 6604' GL

#### FORMATION TOPS:

Surface San Jose
Nacimiento 1609
Ojo Alamo 2919
Kirtland 3089
Fruitland 3374
Pictured Cliffs 3584

Total Depth 3884

## **LOGGING PROGRAM:**

Open Hole Logs:

Surface to intermediate: None

Inter TD to total depth: GR/Temp/HRI: GR/Spec Den/Dual Spaced Neutron: MRIL

Mud Logs:

Intermediate to total depth

Coring:

Coal section

Natural Gauges:

Every 500' from intermediate TD to total depth

<u>MUD PROGRAM</u>: Fresh water low solids mud from surface to intermediate TD (9.0 PPG). Air/mist from intermediate casing point to total depth.

### **CASING PROGRAM:**

HOLE SIZE	<u>DEPTH</u>	CSG SIZE	$\underline{\text{WT.}}$	<u>GRADE</u>
12 ¼"	200'	9 5/8"	32.3#	H-40-ST&C
7 7/8"	3884'	5 ½"	15.5#	J-55 - LT&C

### **TUBING PROGRAM:**

3800' 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 ¼" 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.

5 1/2" Production casing — cement with 580 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and ¼# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and ¼# flocele/sk. (1278 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. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

## **OTHER INFORMATION:**

- 1) The Carracas Pictured Cliffs 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 and the Pictured Cliffs is 800 psi.