FORM APPROVED Form 3160-3 OMB No. 1004-0136 (August 1999) 03 APR 14 AM 10: 17 Expires November 30, 2000 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT Jicarilla Contract #97 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REPNITER Jicarilla Apache Tribe MAR 2004 7. If Unit or CA Agreement, Name and No. la. Type of Work: 🔀 DRILL REENTER OIL COME DW. DIST. 3 78. Lease Name and Well No. Single Zo Multiple Zone b. Type of Well: Oil Well Gas Well Tribal C #4B 9. API Well No. 2. Name of Operator Cordillera Energy, Inc. 10. Field and Pool, or Exploratory 3A. Address 3b. Phone No. (include area code) (505) 327-4892 Basin DK/Blanco Mesa Verde c/o Walsh Engineering,7415 E. Main, Farmington, NM 87402 11. Sec., T., R., M., or Blk, and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 660' FSL and 1980' FEL Sec. 6, T26N, R3W At proposed prod. Zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish NM 21 miles south of Dulce, NM Rio Arriba Distance from proposed* location to nearest 16. No. of Acres in lease 17. Spacing Unit dedicated to this well property or lease line, ft. (Also to nearest drig. unit line, if any) 660' 320+ 320 acres E/2 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. on file 1100' 8300' 22. Approximate date work will start* 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 23. Estimated duration 7145' GL June 1, 2003 3 weeks 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. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, th 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 office. 25. Signature Name (Printed/Typed) Date Paul C. Thompson, P.E. 4/8/03 Title Agent Approved by (Signature) Name (Printed/Typed) 2004 /s/ David R. Sitzler Acting Assistant Field Manager 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)

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

District Iİ 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

| 70 Box 2088, S | Santa re, | NM 8/504-208 | 38 | | | | | • | | | |
|---|-----------|---------------------------------------|------------------------|---------------------|--------------------------|---|------------|---|--|--|--|
| | | W | VELL | LOCATI | A DNA NO | CREAGE DEDI | ICAT | ION PL | AT | | |
| 30-039-27662 | | | 723 | *Pool Co 319 / 7 | | POO1 Name BLANCO MESAVERDE / BASIN DAKOTA | | | | | |
| Property Code | | <u>, y </u> | Property Name TRIBAL C | | | | | | | *Well Number 4B | |
| OGRID No. | | Operator Name CORDILLERA ENERGY, INC. | | | | | | | | °Elevation 7145 | |
| | | | | | ¹⁰ Surface | Location | | | | | , |
| UL or lot no. | Section | 26N | Range 3W | Lot Idn | Feet from the | North/South line SOUTH | 1 - | t from the | | est line ST | County RIO ARRIBA |
| ¹¹ Bottom Hole | | | | | | | | | | | |
| UL or lot mo. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Fee | t from the | East/We | est line | County |
| 12 Dedicated Acres 320.0 Acres - (E/2) 13 Joint or Infill 14 Consolidation Code 5 Order No. | | | | | | | | | | | |
| NO ALLOV | NABLE W | VILL BE AS | SSIGNE VON-ST | D TO TH | IS COMPLET UNIT HAS E | ION UNTIL ALL EEN APPROVED | INT! BY | ERESTS H THE DIVI | HAVE BE | EEN CON | SOLIDATED |
| 1020 LOT | | 1320. | 00' | | E5678 | 9707 | | I hereb | y certify ed herein best of m | that the i | e and belief |
| LOT | 2 | | | 6 - | | irittà ict #97 | 5280.00' | I hereby shown on notes of my super and corre | EYOR certify t this plat actual si vision, aniect to the | that the we t was ploth urveys made d that the e best of r | FICATION all location led from field by me or under same is true ny belief. CH 21 2002 |

Contract #97

6

Contract #97

B 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 21, 200

Signature and Seal of Professional Surveyor

C. EDMANDS

(15269)

B 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 21, 200

Signature and Seal of Professional Surveyor

TASON C. EDWARDS

Certificate Number 15269

CORDILLERA ENERGY, INC. OPERATIONS PLAN Tribal C #4B

I. Location: 660' FSL & 1980' FEL

Date: April 8, 2003

Sec 6, T26N, R3W

Rio Arriba County, NM

Field: Blanco MV & Basin DK Elev: GL 7145'

Surface: Jicarilla Apache Tribe Minerals: Jicarilla Contract #97

II. Geology: Surface formation San Jose

| Α. | Formation Tops | Depths |
|----|-----------------|---------------|
| | Ojo Alamo | |
| | Kirtland | |
| | Pictured Cliffs | 3675 ' |
| | Cliff House | 5500 ′ |
| | Menefee | 5625 ′ |
| | Point Lookout | 5950 ′ |
| | Greenhorn | 8025 ′ |
| | Graneros | |
| | Dakota | 8105 ′ |
| | Total Depth | 8300 ′ |
| | | |

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 3675', 5500', 5950', 8105'.

- B. Logging Program: Induction/GR and density logs at TD.
- C. No over pressured zones are expected in this well. No H_2S zones will be penetrated in this well. Max. BHP = 2500 psig.

III. Drilling

- A. Contractor:
- B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The intermediate hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.5 ppg.

The production hole will be drilled with air or air/mist.

Tribal C #4B Operations Plan Pg #2

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See the attached Exhibit #1 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

| Hole Size | Depth | Casing Size | Wt. & Grade |
|-----------|---------------|----------------|-------------|
| 12-1/4" | 250 ′ | 9-5/8 " | 36# J-55 |
| 8-3/4" | 4075' | 7 " | 20# J-55 |
| 6-1/4" | 8300 ′ | 4-1/2" | 11.6# N-80 |

B. Float Equipment:

- a) Surface Casing: Notched collar on bottom and 3 centralizers on the bottom 3 joints.
- b) Intermediate Casing: 7" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Ten centralizers spaced every other joint above shoe and ten turbolizers every other joint from 1500'.
- c) Production Casing: 4-1/2" whirler type cement nosed guide shoe and a float collar on top of the bottom joint.

Tribal C #4B Operations Plan Pg #3

V. Cementing:

Surface casing: 9-5/8" - Use 140 sx (165 cu. ft.) of Cl "B" with 2% CaCl₂ (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing: 7" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. Lead with 520 sx (1087 cu.ft) of Type III 65/35 poz with 8% gel, 1% CaCl₂, $\frak{1}{4}$ /sk. Celloflake. (Yield = 2.09 cu.ft./sk; slurry weight = 12.1 PPG). Tail with 100 sx (139 cu.ft.) of Type III with 1% CaCl₂, $\frak{1}{4}$ /sk. Celloflake. (Yield = 1.39 cu. ft./sk; slurry weight = 14.5 PPG). Total cement volume is 1226 cu.ft. (100% excess to circulate cement to surface). WOC for 12 hrs. Pressure test the BOP and casing to 1500 psi.

Production Casing: 4-1/2" - Blow hole clean. Precede cement with 20 bbls of gel water and 10 bbls of water. Lead with 285 sx(564 cu.ft.) of Premium Lite HS with 0.65% FL-52, 0.32% CD-32, $\frac{1}{4}$ #/sk celloflake, and 4% phenoseal. (Yield = 1.98 cu.ft./sk; slurry weight = 12.5 PPG). Tail with 100 sx (196 cu.ft.) of Premium Lite HS with 0.65% FL-52, and 0.32% CD-32. (Yield = 1.96 cu.ft./sk; slurry weight = 12.5 PPG). Total cement volume is 760 cu.ft. (70% excess to circulate 100' above the intermediate casing shoe).

Paul C. Thompson, P.E.