Form 3160-3 FORM APPROVED 03 AUG 15 (August 1999) OMB No. 1004-0136 **UNITED STATES** Expires November 30, 2000 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 REENTER Jicarilla Apache Tribe 7. If Unit or CA Agreement, Name and No. la. Type of Work: DRILL REENTER Lease Name and Well No. b. Type of Well: Oil Well X Gas Well Single Zone Multiple Zone Tribal C #2B 2. Name of Operator APLWell No. 1-05 Cordillera Energy, Inc. 3A. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory c/o Walsh Engineering,7415 E. Main, Farmington, NM 87402 (505) 327-4892 Basin DK/Blanco Mesa Verde 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T., R., M., or Blk, and Survey or Area 660' FNL and 660' FWL Sec.6, T26N, R3W At proposed prod. Zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State 21 miles south of Dulce, NM Rio Arriba NM Distance from proposed' 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660 320+ 320 acres W/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 1500' 8200' +/-21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 7048' GL September 15, 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 5. Operator certification. 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 office. 25. Signature Name (Printed/Typed) Date Paul C. Thompson, P.E. 8/13/03 Title Agent Approved by (Signature) Name (Printed/Typed) Date /s/ David R. Sitzler SEP 2 7 2004 Title Office Assistant Field Manager 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)

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District I PO 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 Departs

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	LOCATI	ON AND AC	CREAGE DEDI				
30-039-19254			723	*Pool Co 319 / 7	· · · · · · · · · · · · · · · · · · ·	POOL NAME BLANCO MESAVERDE / BASIN DAKOTA				
Property Code		,	*Property Name TRIBAL C						*Well Number 2B	
'OGRID No. 173252		*Operator Name CORDILLERA ENERGY, INC.							°Elevation 7048	
¹⁰ Surface Location										
UL or lot no.	Section	Township 26N	Range 3W	Lot Idn	Feet from the	North/South line	Feet from the		st line ST	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/We	est line	County
¹² Dedicated Acres 284.84 Acres			s - (W	/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.			·
1020.	36	NO ALI BEEN C	LOWABLE	WILL B	E ASSIGNED R A NON-STA	TO THIS COMPI NDARD UNIT HA	LETION UNTIL S BEEN APPF	_ ALL ROVED E	INTERES 3Y THE	STS HAVE DIVISION
16 0999 660'		1320.00] - 	2640	.00 '	I hereb contains to the Taul Signatur Printed	y certify ed herein best of my	that the is true any knowledge	FICATION information and complete e and belief
H		1		11	SEA	·	1 - 7 - 4 - 4	MI	- · <u>- · · · · · · · · · · · · · · · · ·</u>	

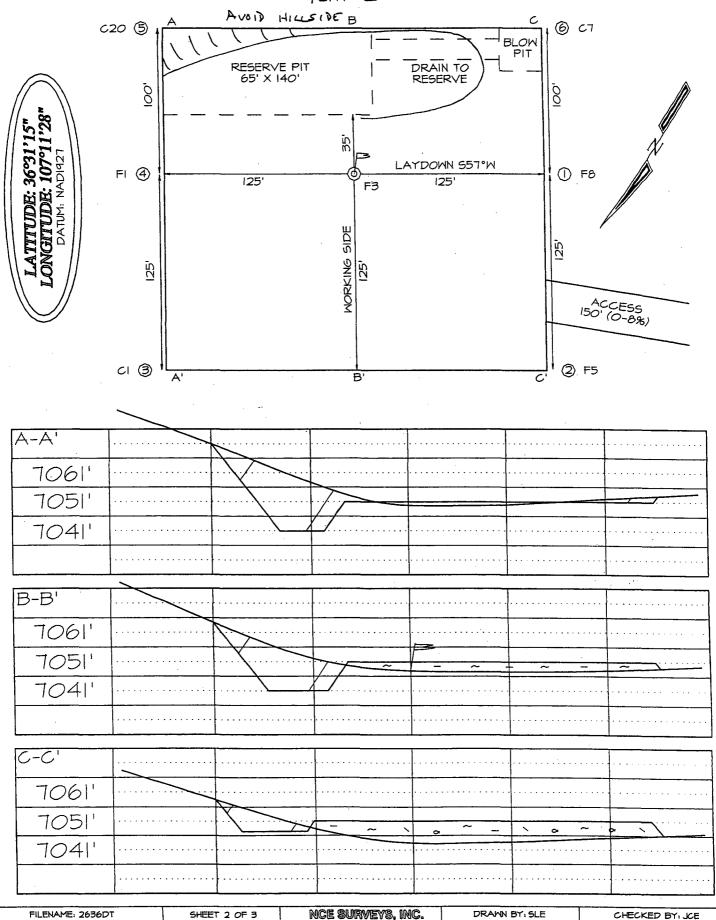
Jicarilla Contract #9 LOT 2 5280.00 5280.00 LOT 3 LOT 4 1039.50 1320.00 2640.00'

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
Paul C. Thomas— Signature
PAUL C. THOMPSON
Printed Name
Title
P/13/03
Date
*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: FEBRUARY 24, 2003
Signature and Seal of Professional Surveyor
RECH C. EDWARDS RECH MEXICO 15269 B ADFESSION APPRISSION APPRISO APPRISSION APPRISON AP

Certificate Number

CORDILLERA ENERGY, INC. TRIBAL C #2B 660' FN2 & 660' FWL, SECTION 6, T26N 3W, NMPM RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7048'





CORDILLERA ENERGY, INC. OPERATIONS PLAN Tribal C #2B

I. Location: 660' FNL & 660' FWL

Date: August 13, 2003

Sec 6, T26N, R3W

Rio Arriba County, NM

Field: Blanco MV & Basin DK
Surface: Jicarilla Apache Tribe

Elev: GL 7048'

Surface: Jicarilla Apache Tribe Minerals: Jicarilla Contract #97

II. Geology: Surface formation _ San Jose

Α.	Formation Tops	Depths
	Ojo Alamo	
	Kirtland	
	Pictured Cliffs	3570 '
	Cliff House	5405 ′
	Menefee	5530 ′
	Point Lookout	5855 ′
	Greenhorn	7930 ′
	Graneros	
	Dakota	8010'
	Total Depth	8200 ′

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

Water and gas - 3570', 5405', 5855', 8010'.

- 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 #2B 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"	3980′	7"	20# J-55
6-1/4"	8200 ′	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 2000'.
- c) Production Casing: 4-1/2" whirler type cement nosed guide shoe and a float collar on top of the bottom joint.

Tribal C #2B 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 510 sx (1066 cu.ft) of Type III 65/35 poz with 8% gel, 1% $CaCl_2$, $\frac{1}{4}$ /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% $CaCl_2$, $\frac{1}{4}$ /sk. Celloflake. (Yield = 1.39 cu. ft./sk; slurry weight = 14.5 PPG). Total cement volume is 1205 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. Tho

Paul C. Thompson, P.E.

Cordillera Energy, Inc.

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Typical BOP setup

