

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator *Refina* **Cordillera Energy, Inc.**

3a. Address **c/o Walsh Engineering, 7415 E. Main, Farmington, NM 87402**
3b. Phone No. (include area code) **(505) 327-4892**

4. Location of Well (Report location clearly and in accordance with any State requirements. *)
At surface **1700' FSL and 1680' FEL**
At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office*
21 miles south of Dulce, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **956'**

16. No. of Acres in lease **320+**

17. Spacing Unit dedicated to this well **320 acres E/2**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **550'**

19. Proposed Depth **8080' +/-**

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **6940' GL**

22. Approximate date work will start* **September 1, 2003**

23. Estimated duration **3 weeks**

11. Sec., T., R., M., or Blk, and Survey or Area

J Sec. 13, T26N, R4W

12. County or Parish **Rio Arriba** ✓

13. State **NM**

5. Lease Serial No.

Jicarilla Contract #105

6. If Indian, Allottee or Tribe Name

Jicarilla Apache Tribe

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Jenny #1C

9. API Well No.

30-039-29257

10. Field and Pool, or Exploratory

Basin DK/Blanco Mesa Verde

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.
2. A Drilling Plan.
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.

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature *Paul C. Thompson*
Title

Name (Printed/Typed) **Paul C. Thompson, P.E.**

Date **8/6/03**

Agent

Approved by (Signature) **/s/ David R. Sitzler**

Name (Printed/Typed)

Date **SEP 27 2004**

Title **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 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 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

*API Number 30-039-29257		*Pool Code 72319 \ 71599	*Pool Name BLANCO MESAVERDE \ BASIN DAKOTA
*Property Code 34078	*Property Name JENNY		*Well Number 1C
*GRID No. 173252	*Operator Name CORDILLERA ENERGY, INC.		*Elevation 6940'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	13	26N	4W		1700	SOUTH	1680	EAST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

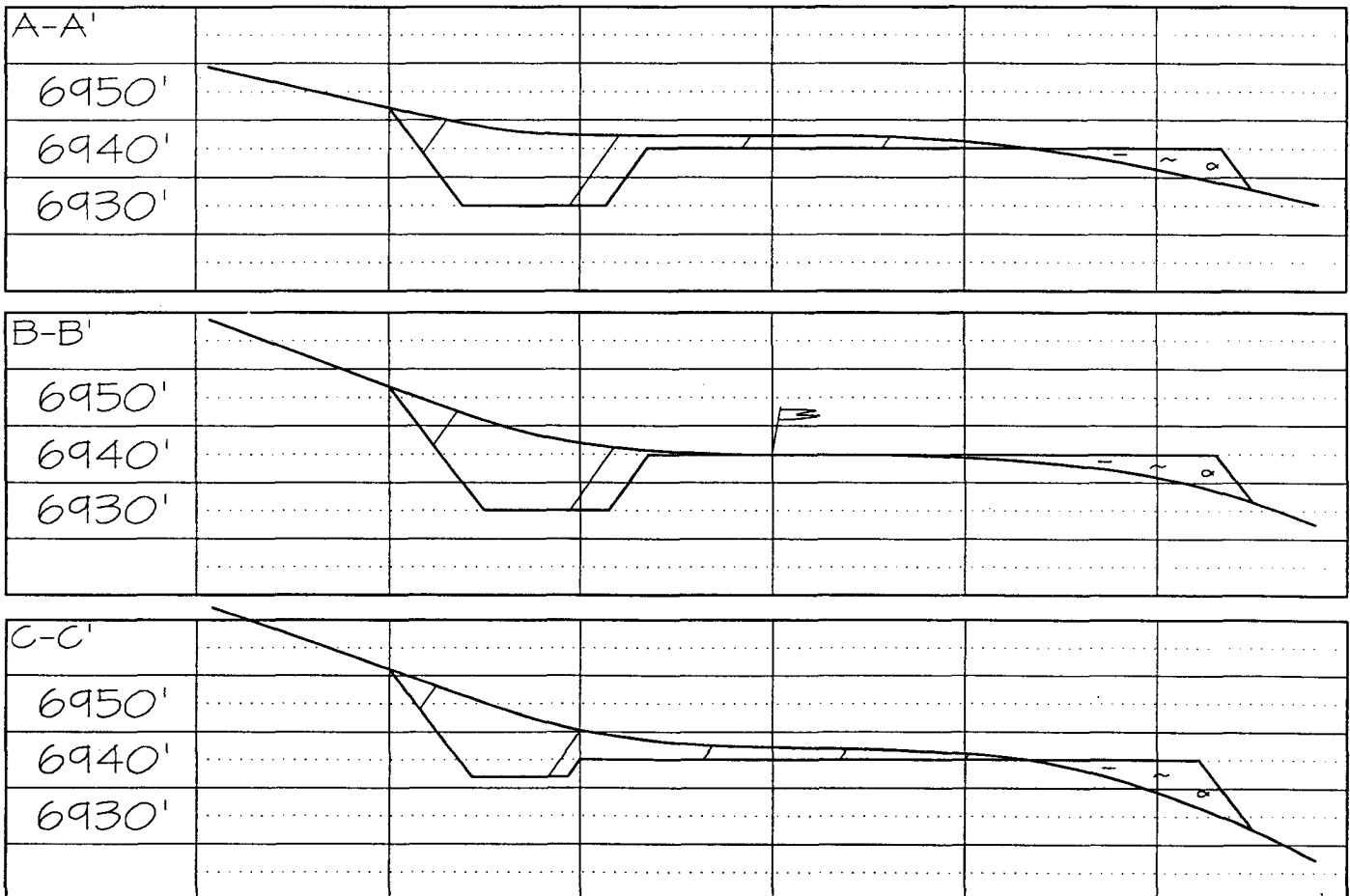
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 320.0 Acres - (E/2)	¹³ Joint or Infill Y	¹⁴ Consolidation Code	¹⁵ 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

¹⁶ 5276.70' 5280.00' 13 5270.76' 1700' 1680'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <u>Paul C. Thompson</u> Signature <u>PAUL C. THOMPSON</u> Printed Name <u>AGENT</u> Title <u>8/6/03</u> Date
	¹⁸ 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 20, 2003 Signature and Seal of Professional Surveyor <u>JASON C. EDWARDS</u> Certificate Number 15269

PLAT 2



CORDILLERA ENERGY, INC.
OPERATIONS PLAN
Jenny #1C

I. Location: 1700' FSL & 1680' FEL Date: August 6, 2003
 Sec 13, T26N, R4W
 Rio Arriba County, NM

Field: Blanco MV & Basin DK Elev: GL 6940'
Surface: Jicarilla Apache Tribe
Minerals: Jicarilla Contract #105

II. Geology: Surface formation _ Nacimiento

<u>A. Formation Tops</u>	<u>Depths</u>
Ojo Alamo	
Kirtland	
Pictured Cliffs	3415'
Cliff House	5335'
Menefee	5485'
Point Lookout	5700'
Greenhorn	7740'
Graneros	
Dakota	7830'
Total Depth	8080'

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

Water and gas - 3415', 5335', 5700', 7830'.

B. Logging Program: Induction/GR and density logs at TD.

C. No over pressured zones are expected in this well. No H₂S 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.

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"	3715'	7"	20# J-55
6-1/4"	8080'	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.

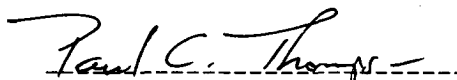
Jenny #1C
Operations Plan
Pg #3

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 470 sx (982 cu.ft.) of Type III 65/35 poz with 8% gel, 1% CaCl₂, ¼#/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, ¼#/sk. Celloflake. (Yield = 1.39 cu. ft./sk; slurry weight = 14.5 PPG). Total cement volume is 1121 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 295 sx (584 cu.ft.) of Premium Lite HS with 0.65% FL-52, 0.32% CD-32, ¼ #/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 780 cu.ft. (70% excess to circulate 100' above the intermediate casing shoe).


Paul C. Thompson, P.E.

Cordillera Energy, Inc.

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Typical BOP setup

EXHIBIT #1

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson

