Form 3160-3
(May 1999)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB 1004-0136
Expires: May 31, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: Jicarilla Contract #101

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache Tribe

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME: 24056

1b. TYPE OF WELL: OIL WELL [ ] [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [X]

8. FARM OR LEASE NAME, WELL NO.: McIntrye #1B

2. NAME OF OPERATOR: Cordillera Energy, Inc. 13252

9. API WELL NO.: 30-039-27316

3. ADDRESS OF OPERATOR: c/o Walsh Engineering, 7415 E. Main St. Farmington, NM 87402 (505) 327-4892

10. FIELD AND POOL OR WILDCAT: Basin Dakota/Blanco MV

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At Surface: 1280' FSL and 660' FWL
At proposed Prod. Zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: M Sec.11, T26N, R4W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 21 miles south of Dulce, NM

12. COUNTY OR PARISH: Rio Arriba

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 320+

17. NO. OF ACRES ASSIGNED TO THIS WELL: W/2 320 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.: 1200'

19. PROPOSED DEPTH: 8025'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6819' GR

22. APPROX. DATE WORK WILL START*: August 1, 2002

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36# J-55	250' +/-	165 cu ft. Cl "B" w/ 2% $CaCl_2$
8-3/4"	7"	20# J-55	3890' +/-	1035 cu.ft. lead & 139 cu.ft. tail
6-1/4"	4-1/2"	11.6#, N-80	8025' +/-	545 cu.ft. lead & 196 cu.ft. tail

Cordillera Energy, Inc. proposes to drill a vertical well to develop the Basin Dakota and Blanco Mesa Verde formations at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by Valarde Energy Service. Copies of their report have been submitted directly to your office. Velarde Energy Service has also performed a T&E survey and prepared an EA. Copies of their reports have been submitted directly to your office.

The wellpad, access road, and pipeline will be located on Jicarilla Apache land. An on-site inspection was held on 6/24/02.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Paul C. Thompson TITLE Paul Thompson, Agent DATE 7/3/02

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

APPROVED BY /s/ Steven W. Anderson TITLE Assistant Field Manager Division of Multi-Resources DATE FEB 12 2003

***See Instructions On Reverse Side**

Title 18 U.S.C. Section 1001, makes 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.

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

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-27316	72319 \ 71599	BLANCO MESAVERDE \ BASIN DAKOTA

[4] Property Code	[5] Property Name	[6] Well Number
24056	McINTYRE	1B

[7] OGRID No.	[8] Operator Name	[9] Elevation
173252	CORDILLERA ENERGY, INC.	6819'

[10] Surface Location

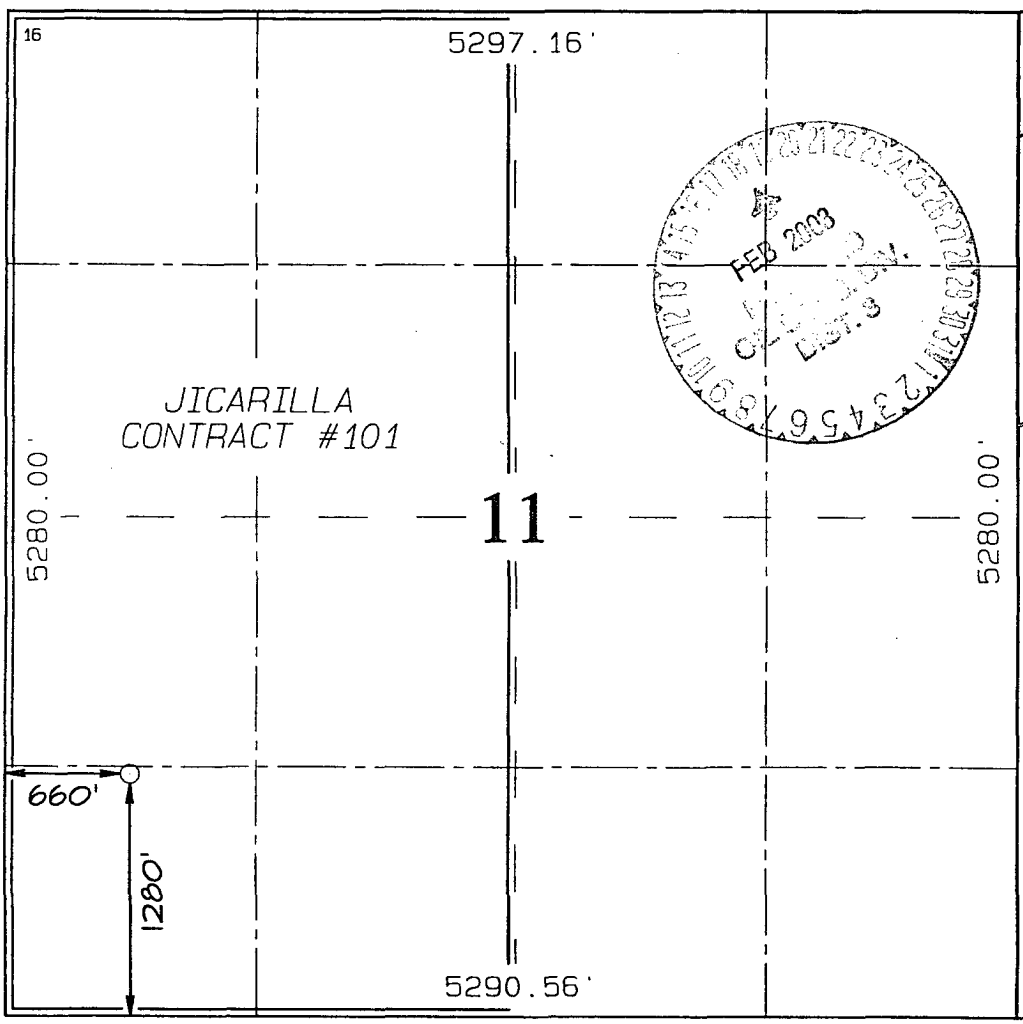
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	11	26N	4W		1280	SOUTH	660	WEST	RIO ARRIBA

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Paul C. Thompson
Printed Name

Agent
Title

7/3/02
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: MAY 8, 2002

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

CORDILLERA ENERGY, INC.
OPERATIONS PLAN
McIntyre #1B

I. Location: 1280' FSL & 660' FWL
Sec 11, T26N, R4W
Rio Arriba County, NM

Date: July 3, 2002

Field: Blanco MV & Basin DK
Surface: Jicarilla Apache Tribe
Minerals: Jicarilla Contract #101

Elev: GL 6819'

II. Geology: Surface formation _ Nacimiento

A.

Formation Tops	Depths
Ojo Alamo	
Kirtland	
Pictured Cliffs	3490'
Cliff House	5185'
Menefee	5320'
Point Lookout	5615'
Greenhorn	7655'
Graneros	7700'
Dakota	7805'
Total Depth	8025'

A. San Jose Surface
Nacimiento - 1272
Ojo Alamo - 2962 -
Mesa Top - 1222'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:
Water and gas - 3490', 5185', 5615', 7805'.

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.

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"	3890'	7"	20# J-55
6-1/4"	8025'	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.

V. Cementing:

Surface casing: 9-5/8" - Use 140 sx (165 cu. ft.) of Cl "B" with 2% $CaCl_2$ (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 495 sx (1035 cu.ft) of Type III 65/35 poz with 8% gel, 1% $CaCl_2$, 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% $CaCl_2$, ¼#/sk. Celloflake. (Yield = 1.39 cu. ft./sk; slurry weight = 14.5 PPG). Total cement volume is 1174 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 275 sx(545 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 741 cu.ft. (70% excess to circulate 100' above the intermediate casing shoe).

Paul C. Thompson

Paul C. Thompson, P.E.