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

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]	5. LEASE DESIGNATION AND SERIAL NO.: SF 078244
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	7. UNIT AGREEMENT NAME: 24050
1b. TYPE OF WELL: OIL WELL [ ] [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]	8. FARM OR LEASE NAME, WELL NO.: Lea #1B
2. NAME OF OPERATOR: Cordillera Energy, Inc.	9. API WELL NO.: 30045311 00
3. ADDRESS OF OPERATOR: c/o Walsh Engineering, 7415 E. Main St. Farmington, NM 87402 (505) 327-4892	10. FIELD AND POOL OR WILDCAT: Blanco Mesa Verde/ Basin Dakota
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At Surface: 1840' FNL and 660' FWL; At proposed Prod. Zone: Same	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 30, T31N, R12W
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 6 miles northwest of Aztec, NM	12. COUNTY OR PARISH: San Juan; 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 ~~E/2~~ 298.02 acres
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT.: 1900'	19. PROPOSED DEPTH: 6985'
	20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5862' GR	22. APPROX. DATE WORK WILL START*: June 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	3950' +/-	1055 cu.ft. lead & 139 cu.ft. tail
6-1/4"	4-1/2"	11.6#, N-80	6985' +/-	356 cu.ft. lead & 196 cu.ft. tail

...ARE ...ED

...action is subject to technical and ... 43 CFR 3165.3

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

This location has been archaeologically surveyed by La Plata Archealogical Service. Copies of their report have been submitted directly to your office. Nelson Consulting performed a T&E survey 5/15/02. Copies of their report have been submitted directly to your office.
The wellpad, access road, and pipeline will be located on BLM surface land. An on-site inspection was held with the BLM on 4/25/02.

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 5/16/02

(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/ David J. Mankiewicz TITLE _____ DATE _____

***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.

NMOCD

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 Depart

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
30-045-31100	72319 \ 71599	BLANCO MESAVERDE \ BASIN DAKOTA

[4] Property Code	[5] Property Name	[6] Well Number
24050	LEA	1B

[7] OGRID No.	[8] Operator Name	[9] Elevation
173252	CORDILLERA ENERGY, INC.	5862'

[10] Surface Location

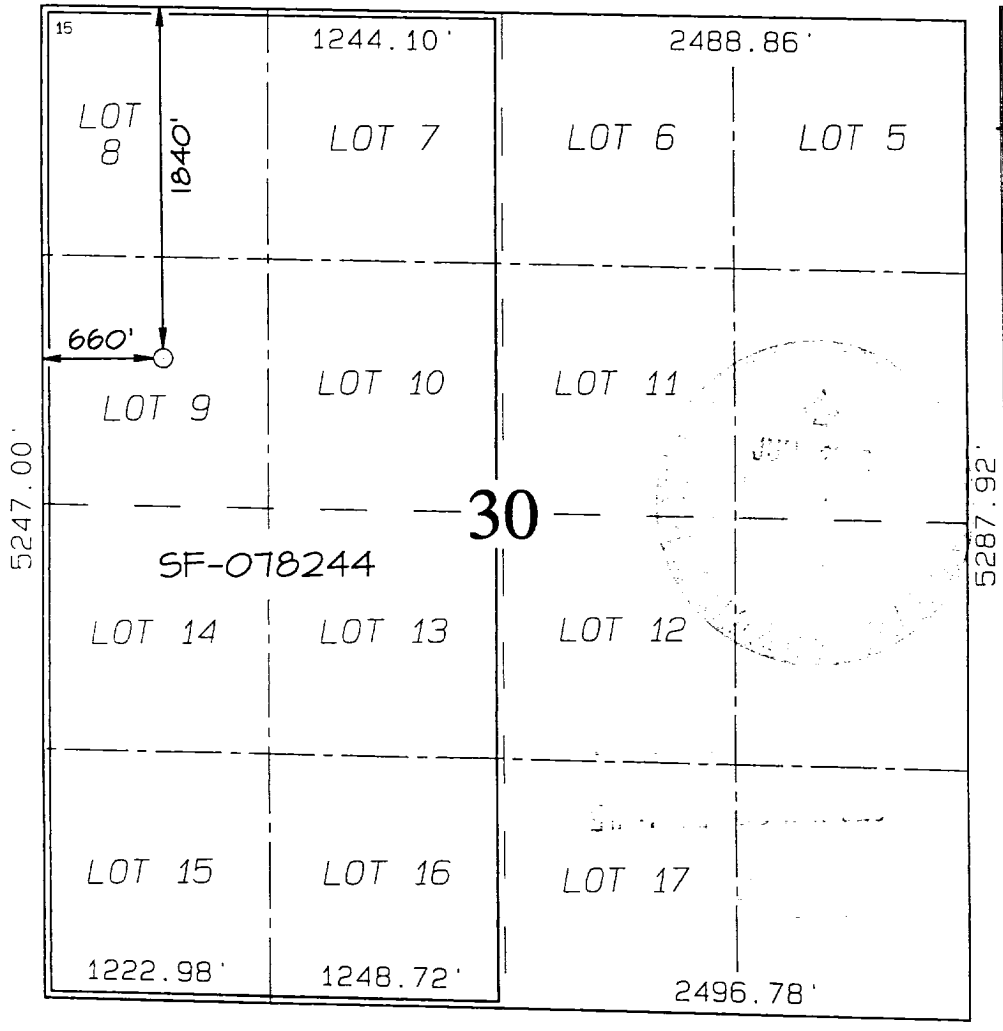
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	30	31N	12W		1840	NORTH	660	WEST	SAN JUAN

[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.
298.02 Acres - (W/2)	Y		

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: Paul C. Thompson

Title: Agent

Date: 5/17/02

[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: APRIL 3, 2002

Signature and Seal of Professional Surveyor

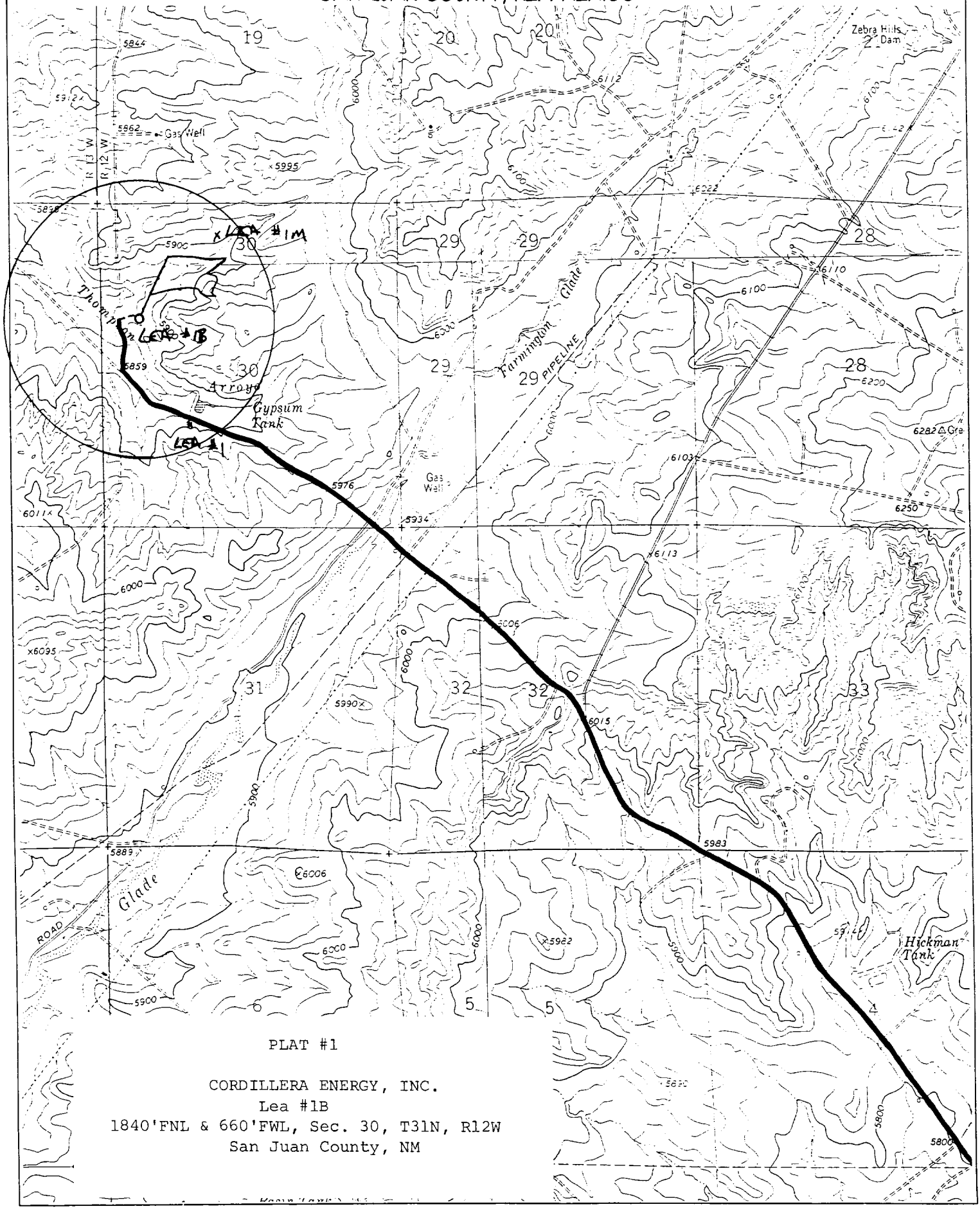
JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS

Certificate Number 15269

CORDILLERA ENERGY, INC. LEA #1B

1840' FNL & 660' FWL, SECTION 30, T31N, R12W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



PLAT #1

CORDILLERA ENERGY, INC.
Lea #1B
1840'FNL & 660'FWL, Sec. 30, T31N, R12W
San Juan County, NM

CORDILLERA ENERGY, INC.
OPERATIONS PLAN
Lea 1B

I. Location: 1840 FNL & 660' FWL
Sec 30 T31N R12W
San Juan County, NM

Date: May 16,2002

Field: Blanco MV & Basin DK
Surface: BLM
Minerals: SF 078244

Elev: GL 5862'

II. Geology: Surface formation _ Nacimiento

A.

Formation Tops	Depths
Ojo Alamo	465'
Fruitland	1840'
Pictured Cliffs	2160'
Cliff House	3780'
Menefee	3940'
Point Lookout	4530'
Dakota	6685'
Total Depth	6985'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:
Water and gas - 3780'; gas - 2160', 3940', 4530', 6685'.

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: Key Energy

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"	3950'	7"	20# J-55
6-1/4"	6985'	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 505 sx (1055 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 1247 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 180 sx (356 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 552 cu.ft. (70% excess to circulate 100' above the intermediate casing shoe).

Paul C. Thompson

Paul C. Thompson, P.E.