

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

VASTAR RESOURCES, INC.

36619

3. ADDRESS AND TELEPHONE NO.

1816 E. MOJAVE, FARMINGTON NM 87401 (505) 599-4300

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1165' FNL, 1055' FWL

At proposed prod. zone

2822' FNL, 1055' FWL (MIDPOINT COAL)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

43.5 MILES EAST-NORTHEAST OF BLOOMFIELD, NM

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

1319'

16. NO. OF ACRES IN LEASE

2480

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

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

2620'

19. PROPOSED DEPTH

4186' TVD, 5227' MD

20. ROTARY OR CABLE TOOLS

ROTARY

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

7290' GL

22. APPROX. DATE WORK WILL START*

July, 2000

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	400'	300 sx (354 cf.) Circ. to Surf.
7-7/8"	5-1/2"	15.5#	5227' MD	1178 sx (2284 cf.) Circ. to Surf.

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

Directional drilling (see attached directional plan) begins 50' below surface casing at 450' and builds to 49° max then holds before dropping back towards vertical (S shaped) to 10° max through coal to TD.

SHL	1165' FNL	1055' FWL	0' TVD	0' MD
Top of Coal	3782' FNL	1318' FWL	4081' TVD	5120' MD
Midpoint Coal	3784' FNL	1319' FWL	4094' TVD	5123' MD
Bottom of Coal	3786' FNL	1319' FWL	4106' TVD	5125' MD
BHL at TD	3800' FNL	1320' FWL	4186' TVD	5227' MD

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

SIGNED

Charles W. Knight, Jr.
CHARLES W. KNIGHT, JR.

TITLE ENGINEER (505) 599-4308

DATE 6/21/00

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:

NMOCD

APPROVED BY

/s/ Jim Lovato

TITLE

DATE

JUL 11 2000

*See Instructions On Reverse Side

Directional Drilling

District I
191 Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Huanas Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 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

APL Number 30-039-26484		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Culp 26248	Property Name CARRACAS 33B		Well Number 11
OGRID No. 36619	Operator Name VASTAR RESOURCES, INC.		Elevation 7290'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	32N	4W		1165'	NORTH	1055'	WEST	RIO ARriba

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
	33	32N	4W		2822'	NORTH	1107'	WEST	RIO ARriba

Dedicated Acres 320 ac	Joint or Infill	Consolidation Code	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

<p>16</p> <p>N89°57'W</p> <p>5299.80'</p> <p>1165'</p> <p>1055'</p> <p>SHL</p> <p>5280.00'</p> <p>3800'</p> <p>Section 33</p> <p>1107'</p> <p>1320'</p> <p>N00°03'W</p> <p>248'</p> <p>NSL online</p> <p>BHL</p> <p>1480'</p> <p>West</p> <p>5280.00'</p>		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Charles W. Knight, Jr.</i></p> <p>Signature</p> <p>Charles W. Knight, Jr.</p> <p>Printed Name</p> <p>Engineer</p> <p>Title</p> <p>June 21, 2000</p> <p>Date</p>	
<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>06/14/00</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>Henry P. Broadhurst</i></p> <p>Henry P. Broadhurst</p> <p>Professional Surveyor</p>		<p>RECEIVED</p> <p>JUL 2000</p> <p>OIL CON. DIV.</p> <p>DIST. 3</p>	

VASTAR RESOURCES CARRACAS 33B #11

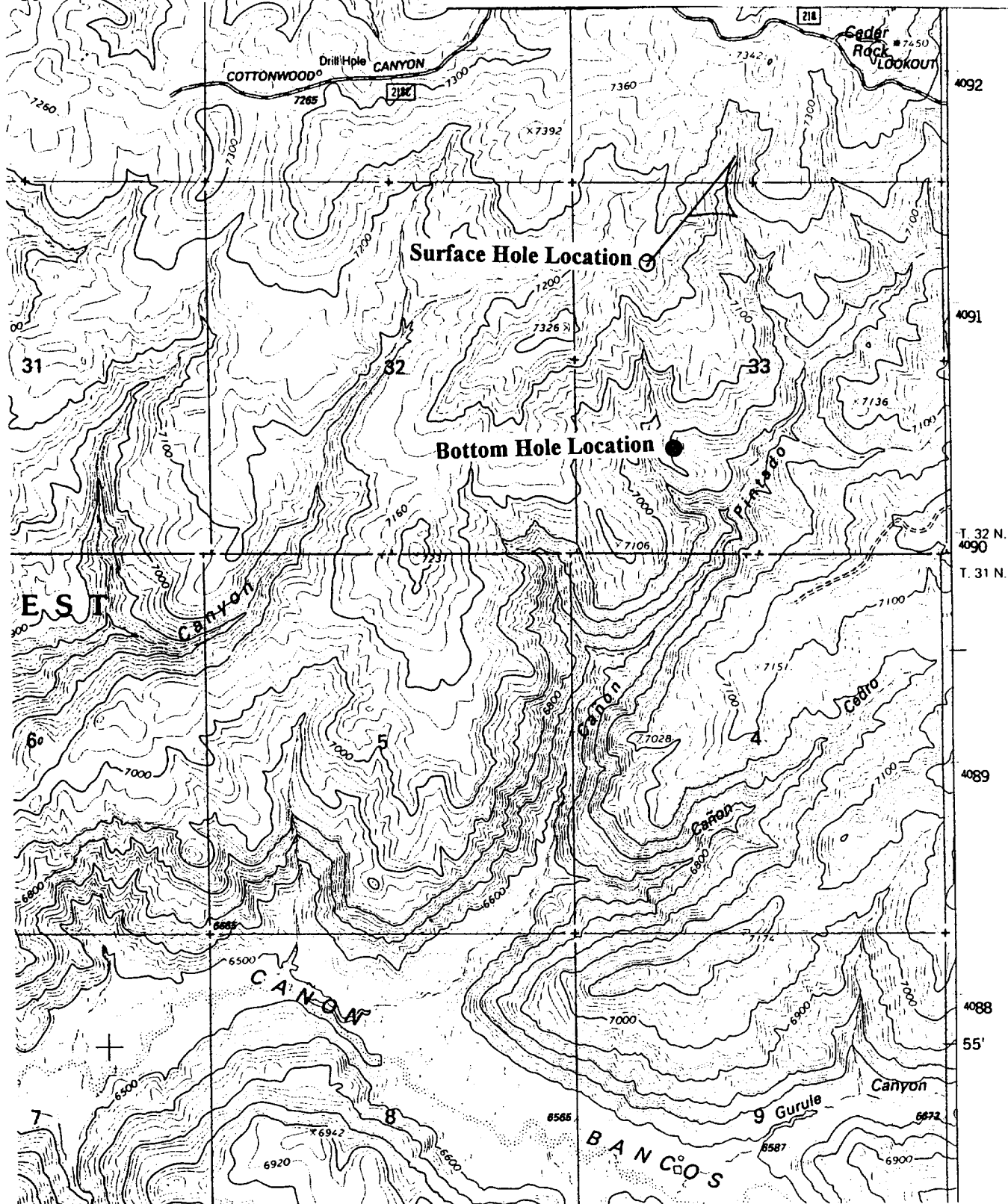
SHL 1165' FNL, 1055' FWL

BHL 3800' FNL, 1320' FWL

NW/4 SEC.33, T-32-N, R-04-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 7290'



Vastar Resources, Inc.

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Carracas 33 B #11

SHL: 1165' FNL, 1055' FWL

BHL: 3800' FNL, 1320' FWL

Sec 33, T32N, R4W

Rio Arriba County, New Mexico

DRILLING PLAN

Directional drilling (**see attached directional plan**) begins 50' below surface casing at 450' and builds to 49° max then holds before dropping back towards vertical (S shaped) to 10° max through coal to TD.

1. **FORMATION TOPS: The estimated tops of geologic markers as follows:**

Ojo Alamo	3480' TVD
Kirkland	3610' TVD
Fruitland	3876' TVD
Top of Coal	4081' TVD, 5120' MD
TD	4186' TVD, 5227' MD

2. **ANTICIPATED DEPTHS OF OIL, GAS, AND WATER:**

Ojo Alamo	3480' TVD - Water
Fruitland	3876' TVD - Gas

All zones capable of oil, gas, or water production will be protected with 8 5/8" or 5 1/2" casing and cemented to surface.

3. **BLOWOUT PREVENTOR REQUIREMENTS:**

<u>Interval</u>	<u>Pressure Control Equipment</u>
Surface - 400'	No equipment necessary
400' - TD	10" 2000 psi Double Ram preventor, rotating head and choke manifold.

All BOPE will be hydraulically pressure tested when nipped up, after well control use and every thirty days. Pressure tests will be to the lesser of 2000 psi or to 70% of the minimum internal yield pressure of the casing.

Blind rams will be functioned on each trip out of the hole. All BOPE checks will be noted on the daily drilling reports. Additional BOPE equipment includes a kelly cock, FO safety valve and an inside BOP.

SEE ATTACHED BOP DIAGRAM