

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

b. TYPE OF WELL  
 OIL WELL       GAS WELL       OTHER Geothermal       SINGLE ZONE       MULTIPLE ZONE

2. NAME OF OPERATOR  
 Wy'East Exploration and Development Co.

3. ADDRESS OF OPERATOR  
 852 N.W. Albemarle Terr., Portland, Ore. 97210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface: NW<sub>1</sub> of NE<sub>1</sub>, Sec. 7, T3S, R9E  
 At proposed prod. zone: Vertical hole

5. LEASE DESIGNATION AND SERIAL NO.  
 OR15686

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Timberline Lodge

9. WELL NO.  
 1

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 NW<sub>1</sub> NE<sub>1</sub> Sec 7, T3S, R9E

12. COUNTY OR PARISH  
 Clackamas

13. STATE  
 Oregon

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 4 miles north of Government Camp

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  
 589

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 Vertical

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.  
 First well 2000'

19. PROPOSED DEPTH  
 2000'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5775' Ground

22. APPROX. DATE WORK WILL START\*  
 July 10, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11-7/8"	12-3/4"	51 lb	10-30'	no cement, drive to refusal
11-7/8"	8-5/8"	22 lb	300-400'	as required
7-7/8"	6-5/8"	19 lb	as required	as required

12-3/4" conductor pipe fitted with a drive shoe will be driven to refusal, estimated by be 10 to 30'. If drilling contractor is not equipped to drive casing a larger diameter hole will be drilled and conductor set and cemented as required. Drilling with an 11-7/8" bit will continue to the first competent formation, estimated at 300-400'. 8-5/8" surface casing will then be set and cemented to the surface. Drilling will then proceed with 7-7/8" bit to 2000'. If hole conditions require a 6-5/8" intermediate casing will be set and cemented. Blowout prevention equipment will be installed as specified in the Plan of Operation Supplement and Clarification, Page 2.

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 Richard C. Bower TITLE President DATE June 13, 1978

(This space for Federal or State office use)

PERMIT NO. 0064 APPROVAL DATE July 21, 1978

APPROVED BY [Signature] TITLE Area Geothermal Supervisor DATE July 21, 1978

CONDITIONS OF APPROVAL, IF ANY:

APPROVED  
SUBJECT TO THE ATTACHED CONDITIONS