

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
GEOTHERMAL DRILLING PERMIT

FORM APPROVED  
OMB NO. 1004-0132  
Expires: September 30, 1990

The Bureau of Land Management (BLM) requires this form or other BLM approved forms to be prepared and filed in triplicate with requisite attachments with the authorized officer. The authorized officer must approve this permit prior to any lease operation.

7. Lease Serial No.  
OR 45505

8. Surface Manager:  BLM  FS  
 Other

9. Unit Agreement Name  
Deschutes

10. Well No.  
86-21

11. Permit No.  
050-95-03

12. Field or Area  
Newberry KGRA

13. Sec., T., R., B. & M.  
Sec 21, T21S, R12E

14. County  
Deschutes

15. State  
California

16. Approx. Starting Date  
August 1995

17. Acres Assigned (Well Spacing)

1a. Type of Work:  Drill New Well  Redrill  Deepen  Plug Back  Directionally Drill  Other

1b. Well Type:  Production  Injection  Heat Exchange  Observation  Water Supply  Other

1c. Well Status:  
Not yet drilled

2. Name of Lessee/Operator  
C.E. Exploration

3. Address of Lessee/Operator  
34 NW First St., Ste. 302, Portland OR 97209

4. Location of Well  
At surface 1000' N & 200'W of SE Corner Section 21  
At proposed prod. zone

5. Distance from Proposed Location to Nearest Property or Lease Line  
800' N of lease boundary

6. Distance from Proposed Location to Nearest Well, or Previously Applied for Well Location on this Lease.  
2200' S & 300' W of Well 23-22

18. Drilling Media and Characteristics:  Air  
 Water  Mud  Foam  Other

19. Proposed Depth  
Measured: 10,000±  
True Vertical:

20. Elevations:  Estimated  Final  
6600  
Reference Datum:  GR  MAT  DF  KS  RT  
 Casinghead Flange  Other

21. Existing and/or Proposed Casing and Cementing Program (List existing program first, followed by proposed program, and separate by a sufficient space to clearly distinguish the two programs)

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	COUPLING (Collars & Threads)	GRADE	SETTING DEPTH		QUANTITY OF CEMENT
					Top	Bottom	
36"	30"	.328 wall		X65	GL	85'±	To surface
26"	20"	94#	Buttress	K-55	GL	800'±	To surface
17-1/2"	13-3/8"	68# & 72#	Buttress	K-55/L-80	GL	4500'±	To surface
12-1/4"	9-5/8"	36#	Slotted liner	K55	4300±	TD	

22. Proposed Work Summary

See attached drilling program. All operations will be completed in accordance with the Geothermal Resource Operational Orders, CECI's Plan of Operation and Detailed Drilling and Testing Plan, and stipulations/conditions of permits.

23. David McClain  
*[Signature]*  
Signed \_\_\_\_\_ Title Project Manager Date 8/23/95

(This space for Federal use) STATE

Approved by Dennis D. Woodard Title Petroleum Engineering Specialist Date 8/28/95

Conditions of Approval, if Any:

Follow Oct. 1993 stipulations and letter of Aug. 28, 1995.  
Provide 24-hour notice to DOGAMI for BOP tests.

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.

(See instructions on reverse side)