

GEOOTHERMAL DRILLING PERMIT

The U.S. Geological Survey requires this form or other Supervisor approved form to be prepared and filed in triplicate with requisite attachments with the Supervisor. The Supervisor must approve this permit prior to any lease operation.

1a. TYPE OF WORK: DRILL NEW WELL ( ) REDRILL ( ) DEEPEN ( ) PILE BACK ( ) DIRECTIONALLY DRILL ( ) OTHER  Drill/Core Temperature Gradient Core Hole

1b. WELL TYPE: PRODUCTION ( ) INJECTION ( ) HEAT EXCHANGE ( ) OBSERVATION ( ) WATER SUPPLY ( ) OTHER ( )

1c. WELL STATUS:

2. NAME OF LESSEE/OPERATOR  
California Energy Company, Inc. (707) 526-1000

3. ADDRESS OF LESSEE/OPERATOR  
3333 Mendocino Ave., Ste. 100, Santa Rosa, CA 95401

15. LOCATION OF WELL  
At surface Approx. 2,225 feet east and 725 feet north of the SW corner, Sec. 10, T31S, R7½E  
At proposed prod. zone

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE  
Approx. .43 miles SE of MZ I Unit boundary

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE  
Approx. .6 miles north of MZ I-11

4. LEASE SERIAL NO.  
OR 34669

5. SURFACE MANAGER: BLM ( ) FS ( )  
Winema Nat'l Forest

6. UNIT AGREEMENT NAME  
Mazama I

7. WELL NO.  
MZI-11A\*

8. PERMIT NO.

9. FIELD OR AREA

10. SEC. T., R., S. & M.  
SE¼, SW¼, Sec. 10 T31S, R7½E  
Willamette B & M

11. COUNTY  
Klamath

12. STATE  
Oregon

13. APPROX. STARTING DATE  
Sept. 1, 1986

14. ACRES ASSIGNED (WELL SPACING)  
N/A

18. DRILLING MEDIA AND CHARACTERISTICS: AIR  WATER ( ) MUD  FOAM ( ) Other ( )

19. PROPOSED DEPTH MEASURED: 4000'  
TRUE VERTICAL:

20. ELEVATIONS: ESTIMATED  FINAL ( ) 6050'  
REFERENCE DATUM: GR  MAT ( ) DP ( ) KB ( ) 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	
Set 6-7' of	8-5/8" conductor pipe (optional).				Surf.	6-7'	To Surface
7-7/8"	4-1/2	11.5#	8RD ST&C	K55	Surf.	550'	To Surface
Drill out cement plug and resume drilling with 3.782 OD (HQ) wireline coring system.							
Reduce core size to 2.980 OD (NQ), as mandated by drilling conditions.							

22. PROPOSED WORK SUMMARY

\*Approximate Kettleman designation: 47-10.  
See attached Proposed Drilling and Coring Procedure.

23. James L. Moore Senior Vice President Exploration 8/21/86  
(Use additional space on reverse side of form)

SIGNED James L. Moore TITLE DATE

(This space for Federal use)

APPROVED BY [Signature] TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

This permit is required by law (30 U.S.C. 1021); regulations: 30 CFR 270.71; Federal Geothermal Lease Terms and Stipulations and other regulatory requirements. The United States Criminal Code (18 U.S.C. 1001) makes it a criminal offense to make a willfully false statement or representation to any Department or Agency of the United States as to any matter within its jurisdiction.