

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GEOHERMAL 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. OR39013	
8. Surface Manager: <input type="checkbox"/> BLM <input checked="" type="checkbox"/> FS <input type="checkbox"/> Other	
9. Unit Agreement Name N/A	
10. Well No. CE-BH-7	11. Permit No.
12. Field or Area Bend Highlands	
13. Sec., T., R., B. & M. Sec. 20, T17S, R10E	
14. County Deschutes	
15. State Oregon	
16. Approx. Starting Date 07/01/90	
17. Acres Assigned (Well Spacing) N/A	
1a. Type of Work: <input checked="" type="checkbox"/> Drill New Well <input type="checkbox"/> Redrill <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Directionally Drill <input type="checkbox"/> Other	
1b. Well Type: <input type="checkbox"/> Production <input type="checkbox"/> Injection <input type="checkbox"/> Heat Exchange <input type="checkbox"/> Observation <input type="checkbox"/> Water Supply <input checked="" type="checkbox"/> Other Temperature Core Hole	
1c. Well Status: N/A	
2. Name of Lessee/Operator California Energy Company, Inc.	
3. Address of Lessee/Operator 601 California St., 10th Floor, San Francisco, CA 94108	
4. Location of Well At surface 5040'E and 1820'S of NW Corner, Section 20 At proposed prod. zone	
5. Distance from Proposed Location to Nearest Property or Lease Line Approx. 1745' North of OR39013 lease boundary	
6. Distance from Proposed Location to Nearest Well, or Previously Applied for Well Location on this Lease. None	

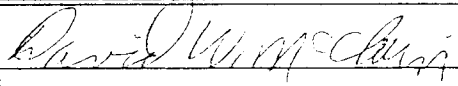
18. Drilling Media and Characteristics: <input checked="" type="checkbox"/> Air <input type="checkbox"/> Water <input checked="" type="checkbox"/> Mud <input type="checkbox"/> Foam <input type="checkbox"/> Other	19. Proposed Depth Measured: 5500' True Vertical:	20. Elevations: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Final 6070' Reference Datum: <input checked="" type="checkbox"/> GR <input type="checkbox"/> MAT <input type="checkbox"/> DF <input type="checkbox"/> KS <input type="checkbox"/> RT <input type="checkbox"/> Casinghead Flange <input type="checkbox"/> Other
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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 7-7/8"	8-5/8"	11.5#	8RD ST&C	K55	Surf.	6-7'	To Surface
Drill out cement plug and resume drilling with 3.782" OD (HQ) wireline coring system.	4-1/2"				Surf.	550'	To Surface
Reduce core size to 2.980" OD (NQ) as mandated by drilling conditions.							

22. Proposed Work Summary

Approximate Kettleman designation: 83-20
See attached Drilling and Coring Procedure.

23.  Manager, Projects & Environmental Affairs 04/16/90
Signed Title Date

(This space for Federal use)
Approved by  Title Acting District Manager Date 5-23-90
Conditions of Approval, If Any:

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.