

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1005 State Office Building Portland, Oregon 97201

APPLICATION FOR PERMIT TO DRILL A GEOTHERMAL WELL

(To be accompanied by a \$100.00 permit fee for new wells only and a surety bond conditioned as provided by law.)

DATE JANUARY 20, 1987

In compliance with rules and regulations pursuant to ORS 522 (Chapter 552 OL 1975) application is hereby made for permit to drill a geothermal well: GEO-NEWBERRY CRATER, INC., NEWBERRY FLANK UNIT
(company or operator) (lease)

Well No. N-5 in SE 1/4 of sec. 8, T. 22S, R. 12E W.B.&M.,

NEWBERRY CRATER Field, DESCHUTES County.

Survey Coordinates 2100' NORTH and 500' WEST OF THE SOUTHEAST CORNER

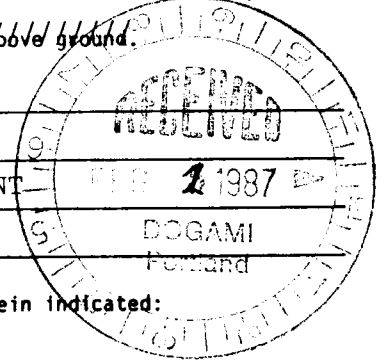
Elevation of ground above sea level is 5680 feet. All depth measurements are taken from top of GROUND LEVEL // which is // above ground.

Lessee GEO-NEWBERRY CRATER, INC.

Address 61419 SOUTH HIGHWAY 97, #A, BEND, OR 97702

Lessor DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT

Address 825 N. E. MULTNOMAH STREET, PORTLAND, OR 97208



We propose to use the following strings of casing and to land or cement them as herein indicated:

Size of hole	Size of casing	Weight in pounds per foot	Grade and type	New or second hand	Depth	Landed or cemented No. sacks cement
7-7/8"	4-1/2"	10.7	A-53	NEW	Surf to 500'	114 Cu Ft
3-25/32"	1-1/2"	2.9	J-55	NEW	Surf to 5000'	320 Cu Ft Shur-Gel or Comparable
						Product

Proposed Depth 5000' Objectives CORE SAMPLES & GEO-PHYSICAL LOGS

Approved February 12, 19 87
except as follows:
The June 1986 stipulations approved by the State Geologist are conditions of this permit. Notify DOGAMI to witness BOP test.
DEPARTMENT OF GEOLOGY & MINERAL INDUSTRIES
By Dennis F. Olmstead
Petroleum Engineer
Dennis Olmstead

GEO OPERATOR CORPORATION
Company or operator
By Michael J. Cale
MICHAEL J. CALE position SR. ENV. COORD.
Send communications regarding well to:
Name MICHAEL J. CALE
Address 1330 NORTH DUTTON AVENUE, SUITE A
SANTA ROSA, CA 95401

NOTE: This permit expires 180 days from date of issue. Land use approval must be obtained from the county or city in which the drilling takes place. Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan.