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 520 OL 1975) application is hereby made
for permit to drill a geothermal well: GEO-NEWBERRY CRATER, INC., NEWBERRY FLANK UNIT

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

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:

<table>
<thead>
<tr>
<th>Size of hole</th>
<th>Size of casing</th>
<th>Weight in pounds per foot</th>
<th>Grade and type</th>
<th>New or second hand</th>
<th>Depth</th>
<th>Landed or cemented No. sacks cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-7/8&quot;</td>
<td>4-1/2&quot;</td>
<td>10.7</td>
<td>A-53</td>
<td>NEW</td>
<td>Surf to 500'</td>
<td>114 Cu Ft</td>
</tr>
<tr>
<td>3-25/32&quot;</td>
<td>1-1/2&quot;</td>
<td>2.9</td>
<td>J-55</td>
<td>NEW</td>
<td>Surf to 5000'</td>
<td>320 Cu Ft Shur-Gel</td>
</tr>
</tbody>
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Proposed Depth 5000' Objectives CORE SAMPLES & GEO-PHYSICAL LOGS

Approved February 12 1987 except as follows:
The June 1986 stipulations approved by the State Geologist are conditions of this permit.
Notify DOGAMI to witness BOP test.

GEO OPERATOR CORPORATION
By 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.