APPLICATION FOR PERMIT TO DRILL A GEOHERMAL WELL

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

DATE 7/16/93

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: Trans-Pacific Geothermal Corp. (Company or Operator)


Survey Coordinates Approximately 223 ft S of N line, 2500 ft W of E line, Sec. 33

Elevation of ground above sea level is 2,510 (est) feet. All depth measurements are taken from top of ground surface, which is 0 feet above ground.

Lessee Trans-Pacific Geothermal Corp.
Address 1901 Harrison Street, Suite 1590, Oakland, CA 94612-3501

Lessor U.S. Bureau of Land Management
Address 1300 NE 44th Avenue, Portland, OR 97213

We propose to use the following strings of casing and to land or cement them as here in 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>17-1/2&quot;</td>
<td>13-3/8&quot;</td>
<td></td>
<td>K-55</td>
<td>New</td>
<td>± 30 ft</td>
<td>Sufficient to circulate</td>
</tr>
<tr>
<td>12-1/4&quot;</td>
<td>9-5/8&quot;</td>
<td>36 lb/ft</td>
<td>K-55 Buttress</td>
<td>New</td>
<td>± 400 ft, 52 ft</td>
<td>164 sacks</td>
</tr>
<tr>
<td>8-3/4&quot;</td>
<td>7&quot;</td>
<td>23 lb/ft</td>
<td>K-55 Buttress</td>
<td>New</td>
<td>± 2,000 ft</td>
<td>401 sacks</td>
</tr>
<tr>
<td>6-1/4&quot;</td>
<td>5&quot;</td>
<td>15 lb/ft</td>
<td>K-55 Hydrl FJ</td>
<td>New</td>
<td>± 5,000 ft</td>
<td>Hung liner</td>
</tr>
</tbody>
</table>

Proposed Depth 5,000 ft. Objectives Geothermal exploration well

DOGAMI approved October 06, 1993.
Notify DOGAMI 24 hours prior to any blow-out prevention test. Attached are the October 1993 Stipulations to the permit, and October 6, 1993 letter with conditions to the permit.

by

Dennis Olmstead, Petroleum Engineer

Trans-Pacific Geothermal Corp.

By

Jack Pigott

Address, Trans-Pacific Geothermal Corp.
1901 Harrison St., #1590, Oakland, CA 94612-3501

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.