APPLICATION FOR PERMIT TO DRILL A GEOTHERMAL WELL

(To be accompanied by a $25.00 permit fee for new wells only and a surety bond conditioned as provided by law.)

Portland, Oregon May 3, 1979

In compliance with rules and regulations pursuant to ORS 522 (Chapter 776 OL 1971) application is hereby made for permit to drill:

a (new well / prospect well): Northwest Natural Gas Company U.S. Forest Service

Well No. 1 in SE 1/4 of NE 1/4 of sec. 30, T. 35 N., R. 9 E., W. B. & M., Clackamas County.

This well is 2,500 feet (S) of the north line and 1,000 feet (W) of the east line of Section 30.

Elevation of ground above sea level is 3,600 feet. All depth measurements are taken from top of Rotary table, which is 3.0' above ground.

The lessee is

Address U.S. Forest Service, Mt. Hood District

The lessor is

Address

LOCATE WELL CORRECTLY

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. of sacks cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>8-5/8</td>
<td>22</td>
<td>F-25</td>
<td>New</td>
<td>100</td>
<td>Surface</td>
</tr>
</tbody>
</table>

Method of drilling: rotary X, cable ___, other ___.

Proposed objectives:

Drill 6" hole to a depth of 1,000 ft.
Install 2" tubing to 1,000 ft., capped on lower end and filled with water
Monitor earth temperature

Northwest Natural Gas Company

By ______________________________ Project Manager

Send communications regarding well to:

Name ______________________________
Address ______________________________

(Submit in triplicate)