STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
800 NE Oregon Street #28, Portland OR 97232

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

O&G Permit #: 36-009-00353

(To be accompanied by a $250 permit fee, a surety bond conditioned as provided by law, and evidence of mineral owners' rights or lease.) This application becomes a permit to drill when signed and dated by DOGAMI in box below.

In compliance with rules and regulations pursuant to ORS 520, application is hereby made for permit to drill (a gas well) (an oil well) to be known as: IW 14dH-23-65

<table>
<thead>
<tr>
<th>Company or Operator</th>
<th>Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW Natural</td>
<td>(Lease)</td>
</tr>
<tr>
<td>Northwest Natural Gas Company</td>
<td>(Well No.)</td>
</tr>
</tbody>
</table>

Sec. 23 T. 6N R. 5W Surveyed Coordinates (if directional, BHL & SHL):
BHL: 1° North & 1176° East
of the SW corner, sec. 23; T6N; R5W SHL: 976.5' North & 1256.3' East from the SW corner Sec. 23; T6N; R5W

Wildcat: (or) Field Name: Calvin Creek-Reichhold Pool
Wildcat: County: Columbia
Elevation of ground above sea level: 905 feet. All depth measurements are taken from Kelly Bushing which is 16' above ground.

Lessor (Mineral Owner): Longview Fibre Co.
Address: P. O. Box 667 Longview, WA 98630
Surface Owner: Longview Fibre Co.
Address: P. O. Box 667 Longview, WA 98630
Lessee: Northwest Natural Gas Company
Address: 220 Northwest Second Ave. Portland, OR 97209

We propose to use the following strings of casings 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/Type</th>
<th>Depth</th>
<th>Amount of Cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-1/2&quot;</td>
<td>13-3/8&quot;</td>
<td>54.50#</td>
<td>H-40</td>
<td>400 feet</td>
<td>300 sx</td>
</tr>
<tr>
<td>12-1/4&quot;</td>
<td>8 5/8&quot;</td>
<td>32#</td>
<td>J-55</td>
<td>2107 feet</td>
<td>600 sx ~ 550 ft</td>
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</table>

Geologic Objectives: Clark and Wilson Sand
Proposed Depth: 2998' MD 1621' TVD

Company/Operator: NW Natural

DOGAMI approved (date) 8/06/01
PROVIDE 24 HOUR NOTICE TO WITNESS BOPE TEST.
by: [Signature]

Note: (1) Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan. (2) Permit expires one year from date of issue. (3) Land use approval must be obtained from the county or city in which the drilling takes place. (4) Unless specifically exempted, permittee is obligated to comply with all current applicable statutes and rules including those adopted

Signature: [Signature]
Position: Construction Manager
Date: July 3, 2001
SEND WELL COMMUNICATION TO:
Name: Todd A. Thomas
Address: 220 Northwest 2nd Ave.
Portland, OR 97209
Phone-(day) 503/226-4211 ext. 4686 (night) 503/848-2947

permitapp.001 7/3/2001