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 #: 36-009-00349
(To be accompanied by a $250 permit fee, a surety bond conditioned as provided by law, and evidence of mineral rights ownership 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

NW Natural

Company or Operator: Northwest Natural Gas Company

Wildcat: (or) Field Name: Calvin Creek-Reichhold Pool

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>2103 feet</td>
<td>900 sx</td>
</tr>
</tbody>
</table>

Geologic Objectives: Clark and Wilson Sand

Proposed Depth: 2998' MD 1615' TVD

Company/Operator: NW Natural

Signature: Todd A. Thomas

Position: Storage Development Engineer

Date: 2/14/2000

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

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

permitap doc 2/1/00