**APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL**

In compliance with rules and regulations pursuant to ORS 520, application is hereby made for permit to drill

(a gas well) to be known as Neahana & Weagant Energy Co. - Cavenham Energy Resources CER 41-21-64

(Well No.)

In NE 1/4 of Sec. 21, T. 6N, R. 4W, W., N.W. Directional: No XX, Yes

Survey Coordinates: 1200' south 500' west from the NE corner

Wildcat: XX (or) Field Name: County: Columbia

Elevation of ground above sea level is 1,120 feet. All depth measurements are taken from Kelly Bushing, which is 11.4 above ground.

**Lessor (Mineral Owner):** Cavenham Energy Resources

**Address:**

1500 S.W. 1st Avenue
Portland, OR 97201

**Surface Owner:** Cavenham Forest Industries

**Address:** 62424 N. Nehalem Highway
Vernonia, OR 9704

**Lessees:** ARCO Oil & Gas Co.

**Address:** P.O. Box 147
Bakersfield, CA 93302

We propose to use the following strings of casing and to land or cement them as heretofore 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>12½&quot;</td>
<td>8-5/8&quot;</td>
<td>24</td>
<td>J-55</td>
<td>400'</td>
<td>290x^</td>
</tr>
<tr>
<td>7-7/8&quot;</td>
<td>5½&quot;</td>
<td>10.5</td>
<td>J-55</td>
<td>2,500'</td>
<td>300x^</td>
</tr>
</tbody>
</table>

**Geologic Objectives:** Clark & Wilson sand

**Proposed Depth:** 2,500'

**Company/Operator:** Oregon Natural Gas Development Corp.

| DOGAMI Approved | September 17, 1990 |

The July 1987 stipulations approved by the State Geologist are conditions of this permit. Notify DOGAMI to witness BDP test.

**By:**

Dennis L. Olmstead, Petroleum Engineer

**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 after permit issuance.

Form 1

*(5-85)*