APPLICATION FOR PERMIT TO DRILL AN OIL AND GAS WELL OR STRATIGRAPHIC HOLE
(To be accompanied by a $100 permit fee for new wells only and a surety bond conditioned as provided by law.)

In compliance with rules and regulations pursuant to ORS 520 (Chapter 296 LE 1977) application is hereby made for permit to drill a well to be known as ARCO Columbia County ("CC") (company or operator) (lease)


Survey Coordinates: 250' North & 600' West from SE corner of Section 21, T6N, R5W

Elevation of ground above sea level is 810.5 feet. All depth measurements are taken from top of KB, which is 11 above ground.

Lessor: County of Columbia Courthouse
Address: 1st Street, St. Helens, Oregon 97051

Lessee: Atlantic Richfield Company
Address: Post Office Box 5540, Denver, Colorado 80217

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>Length or amount used</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-3/8&quot;</td>
<td>48#</td>
<td>H40, STC</td>
<td>New</td>
<td>50</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>12-1/4&quot;</td>
<td>9-5/8&quot;</td>
<td>36#</td>
<td>J55, LTC</td>
<td>New</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>8-3/4&quot;</td>
<td>5&quot;</td>
<td>14#</td>
<td>J55, LTC</td>
<td>New</td>
<td>3500</td>
<td>500</td>
</tr>
</tbody>
</table>

Proposed Depth: 3500' & Clatskanie Sands 2671'

Objectives: Clark & Wilson Sand @ 1921'

Approved: December 6, 1984

DEPT. OF GEOLOGY & MINERAL INDUSTRY

By: Petroleum Geologist

Atlantic Richfield Company

by: B. J. Ruckel

Position: District Drilling Superintendent

Send communications regarding well to: ARCO Oil and Gas Company

Address: Attn. Drilling Department

Post Office Box 147

Bakersfield, California 93302

NOTE: Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan. Permit expires one year from date of issue.