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.)

__________________________, Oregon April 18 1985

In compliance with rules and regulations pursuant to ORS 520 (Chapter 296, L. 1977), application is hereby made for permit to drill a new well (stratigraphic hole) to be known as ARCO Columbia County (company or operator) (lease)

Well No. 23-19 in NE/SW of Sec. 19, T. 6 N, R. 5 W, W.B.M., Field, County.

Survey Coordinates: 2558' North & 2096' East of SW Corner

Elevation of ground above sea level is 702.5 feet. All depth measurements are taken from top of KB, which is 11' above ground.

Lessor: County of Columbia Courthouse

Address: First Street, St. Helens, Oregon 97051

Lessor: Atlantic Richfield Company

Address: P. O. Box 5540, Denver, CO 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>Landed or cemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>63</td>
<td>Line pipe</td>
<td>New</td>
<td></td>
<td>50'</td>
<td>50</td>
</tr>
<tr>
<td>12-1/4&quot;</td>
<td>9-5/8&quot;</td>
<td>J-55/STC</td>
<td>New</td>
<td></td>
<td>400'</td>
<td>250</td>
</tr>
<tr>
<td>8-3/4&quot;</td>
<td>5-1/2&quot;</td>
<td>J-55/LTC</td>
<td>New</td>
<td></td>
<td>3200'</td>
<td>1220</td>
</tr>
</tbody>
</table>

Proposed Depth: 3200'

Objectives: Clark & Wilson Sand at ±2250'

Approved May 15, 1985

except as follows:
The September 1984 stipulations approved by the State Geologist are conditions of this permit.

DEPT./OF GEOLOGY & MINERAL INDUSTRY
By ____________________ Director
Petroleum Geologist

ARCO Exploration Company

By ____________________ K. U. Park
Position District Drilling Superintendent
Send communications regarding well to: ARCO Oil and Gas Co., Div. of
Name Atlantic Richfield Company
Address P. O. Box 147
Bakersfield, CA 93302

NOTE: This permit is valid only if land use approval is obtained from the county or city in which the drilling takes place, and provided these authorities make a determination of compliance with statewide rules.