

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(To be accompanied by a \$100 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)
 (a gas well) to be known as ARCO OIL AND GAS COMPANY -- Cavenham Energy Resources 13-1-55
 (Company or operator) (Lease) (Well No.)

in SW 1/4 of Sec. 1, T. 5N, R. 5W W.B.M. Directional? No X Yes

Survey Coordinates: 1525'N and 300'E from the SW Corner of Section 1

Wildcat: Yes (or) Field Name: Mist County: Columbia

Elevation of ground above sea level is 740 feet. All depth measurements are taken from KB
 _____, which is ±10' above ground.

Lessor (Mineral Owner): Cavenham Energy Resources Inc. c/o Zilkha Energy Co.

Address: 1201 Louisiana, Suite 3200, Houston, TX 77002-5223

Surface Owner: Cavenham Forest Industries, Inc.

Address: 62424 North Nehalem Highway, Vernoma, OR 97064

Lessee: ARCO OIL AND GAS COMPANY

Address: P. O. Box 147, Bakersfield, CA 93302 (4550 California Ave., Bakersfield, CA 93309)

We propose to use the following strings of casing and to land or cement them as herein indicated:

Size of hole	Size of casing	Weight in pounds per foot	Grade/Type	Depth	Amount of cement
12-1/4"	9-5/8"	36	K-55/ST&C	450	250 sx Cement to surface
8-1/2"	3-1/2"	9.3	J-55/EUE	1645	225 sx Rick Watts 8-8-89

Geologic Objectives Clark & Wilson @ 1230' TVD

Proposed Depth 1645'

ARCO OIL AND GAS COMPANY
 Company/Operator Division of Atlantic Richfield

Signature Kwang U. Park 7/28/89

Position District Drilling Superintendent
 Date July 28, 1989

SEND WELL COMMUNICATION TO:

Name Kwang U. Park

Address P. O. Box 147

Bakersfield, CA 93302

Phone (805) 321-4060 (Day) (805) 834-4826 (Night)

DOGAMI Approved August 28, 1989
 The July 1987 stipulations approved by the State Geologist are conditions of this permit.
 By Dan E. Wermiel
 Dan Wermiel, Petroleum Geologist

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.