

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) to be known as Nahama & Weagant Energy Co. Cavenham Energy Resources CER 11-16-64  
 (an oil well) (Company or operator) (Lease) (Well No.)

in NW 1/4 of Sec. 16, T. 6N, R. 4W W.B.&M. Directional? No XX Yes

Survey Coordinates: 1200' south & 1100' east from the NW corner (Bottom hole location)

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

Elevation of ground above sea level is 1500 feet. All depth measurements are taken from  
Kelly Bushing, which is 11.4 above ground.

Lessor (Mineral Owner): 285 Cavenham Energy Resources  
 Address: 1500 S.W. First Avenue Portland, OR 97201

Surface Owner: 7 Cavenham Forest Industries  
 Address: 62424 N. Nehalem Highway Vernonia, OR 97064

Lessee: 11 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 herein indicated:

Size of hole	Size of casing	Weight in pounds per foot	Grade/Type	Depth	Amount of cement
12 1/2"	8-5/8"	24	J-55	400'	290sx
7-7/8"	5 1/2"	10.5	J-55	2500'	300sx

Geologic Objectives Clark & Wilson sand

Proposed Depth 2500 TVD

Company/Operator Oregon Natural Gas Development Corp.

Signature Todd Thomas

Position Senior Operations Superintendent

Date 8/6/90

SEND WELL COMMUNICATION TO:

Name Todd A. Thomas

Address 221 N. W. Second Avenue

Portland, OR 97209

Phone 220-2573 (Day) 359-4956 (Night)

DOGAMI Approved September 17, 1990  
 The July 1987 stipulations approved by the State Geologist are conditions of this permit. Notify DOGAMI to witness BOP test.  
 By Dennis L. Olmstead  
 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.