STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES 800 NE Oregon Street #28, Portland OR 97232

API#:

36-009-00324

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(To be accompanied by a \$250 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) (an oil well) to be known as: IW 23a-22-65

IW 23a-22-65 Northwest Natural Gas Company Northwest Natural Gas Company (Well No.) (Company or Operator) (Lease) BHL: 530' South & 2270'East Surveyed Coordinates (if directional, BHL & SHL): R 5W Sec. 22 T. 6N of the W 1/4 corner, sec. 22; T6N; R5W SHL: 2470' North & 2070' East of the SW corner Sec. 22; T6N; R5W (or) Field Name: Calvin Creek-Al's Pool County: Columbia All depth measurements are taken from Kelly Bushing Elevation of ground above sea level: 640 feet. which is 16 feet above ground.

Lessor (Mineral Owner): Longview Fibre Co. 287 Address: P. O. Box 667 Longview, WA 98630 Surface Owner: Longview Fibre Co. Address: P. O. Box 667 Longview, WA 98630 Lessee: Northwest Natural Gas Company

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

Size of hole	Size of Casing	Weight in	Grade/Type	Depth	Amount of
		pounds per foot			Cement
17-1/2"	13-3/8"	54.50#	H-40	350 feet	250 sx
12-1/4"	8 5/8"	32#	J-55	1600 feet	700 sx

Geologic Objectives: Clark and Wilson Sand Proposed Depth: 1800' MD 1600' TVD

Company/Operator: Northwest Natural Gas Company

DÜGAMI

Portland

DOGAMI approved (date) JULY 16, 1997 24 HOUR POTICE FOR BOP TESTS

Address: 220 Northwest Second Ave. Portland, OR 97209

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

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Position: Storage Development Engineer

6/19/97 Date:

SEND WELL COMMUNICATION TO:

Name: Todd A. Thomas

Address: 220 Northwest 2nd Ave. Portland, OR 97209

Phone:(day) 503/226-4211 ext. 4686 (night) 503/848-2947

permitap.doc 6/19/97

