STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

800 NE Oregon Street #28, Portland OR 97232

36-009-00323

API#:

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 22H-22-65

Northwest Natural Gas Company

T. 6N

Northwest Natural Gas Company

IW 22H-22-65 (Well No.)

(Company or Operator)

Surveyed Coordinates (if directional, BHL & SHL): BHL: 2240' South & 160' West of the N 1/4 corner, sec. 22; T6N; R5W SHL: 2470' North & 2075' East of the SW corner Sec. 22; T6N; R5W

Wildcat:

Sec. 22

(or) Field Name: Calvin Creek-Al's Pool

County: Columbia

Elevation of ground above sea level: 640 feet.

All depth measurements are taken from Kelly Bushing

which is 16 feet

above ground.

Lessor (Mineral Owner): Longview Fibre Co.

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

Address: 220 Northwest Second Ave. Portland, OR 97209

R. 5W

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 | 1800 feet | 775 sx |
| 1 | | | | | |
| | | | | | |

Geologic Objectives: Clark and Wilson Sand Proposed Depth: 2600' MD 1650' TVD

Company/Operator: Northwest Natural Gas Company

DOGAMI approved (date) sury 16, 1997

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

Godda. J

Position: Storage Development Engineer

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