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

36-009-00326PI#:

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

application bec	omes a permi with rules and	t to drill when	signed and dated by DOGAMI in I	box below.	nineral rights ownership or lease.) This		
Northwest Natural Gas Company		ompany	Northwest Natural Gas Company		OM 12-22-65		
(Company or Operator)		(Lease)		(Well No.)			
	T. 6N orner, sec. 22	R. 5W ; T6N; R5W	Surveyed Coordinates (if di SHL: 2300' South and 1250'		BHL: 1880' South & 1000' East sec. 22; T6N; R5W		
				EAST			
Wildcat:			(or) Field Name: Calvin Creek-Al's Pool		County: Columbia		
Elevation of ground above sea level: 550 f			50 feet.	All depth measurements are taken from Kelly Bushing			
		which is 9 feet	above ground.				
Lessor (Mine	ral Owner):	Fred & Phylis	s Busch				
Address: 13163 Busch Lane Mist, OR 97016							
Surface Own	er: Fred & F	hylis Busch					

Address: 13163 Busch Lane Mist, OR 97016 Lessee: Northwest Natural Gas Company

Address: 220 Northwest Second Ave. Portland, OR 97209

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
12-1/4"	8-5/8"	24#	J-55	350 feet	245 sx
7-7/8"	5-1/2"	15.5#	J-55	2300 feet	360 sx

Geologic Objectives: Clark and Wilson Sand Proposed Depth: 2100 TVD

DOGAMI approved (date) JULY 16, 1997
24 HOUR NOTICE FOR DOP TESTS
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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 Company/Operator: Northwest Natural Gas Company

DOGAM

Portland

, Ida a Thou Signature:

Position: Storage Development Engineer

19/97 6 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