

Miscellaneous Permit Application  
- Oil & Gas Program

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Wildcat Land Reclamation

STATE OF OREGON

DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

800 NE Oregon St # 28 Portland, OR 97232

MISCELLANEOUS APPLICATION

(In compliance with rules and regulations pursuant to ORS 520)

(Company or Operator) NW Natural (Lease) F.W. & P.R. Busch Jr.

(Well No.) IW 24H-15-65 API # 36-009-00358

Sec. 15, T 6, R 5 Surveyed Coordinates (if directional, BHL & SHL):

Surface Location: 2,350 ft. east and 355 ft. south of the NW corner of section 22 T6N R5W  
Top of C&W Sandstone location: 540 ft. north and 750 ft. west of surface (SE 1/4 of SW 1/4 of sec. 15 T6N R5W)  
Bottom Hole Location: 680 ft. north and 1,390 ft. west of surface (SW1/4 of SW 1/4 of sec. 15 T6N R5W)

Wildcat: \_\_\_\_\_ (or) Field Name: Mist Storage Field Injection/Withdrawal Well

County: Columbia

Signature: H Jack Meyer

Date: 7-20-04

Position: Geologist - Project & Resource Services Department

Use this form for applications to deepen, rework, abandon, or any other proposed procedure on an existing well.

This form must be submitted unless verbal approval has been given. This application becomes a permit when signed and dated by DOGAMI in the box below.

**The present condition of the well, including complete casing record, is as follows:**

The well is undrilled. Permit #540.

**Following is a detailed account of proposed work:**

The drilling program has changed. The well was originally intended to be a horizontal injection/withdrawal well within the Clark & Wilson Sandstone. The well will now be drilled and completed as a deviated injection/withdrawal well within the Clark & Wilson Sandstone.

The name of the well will be changed from IW 24H-15-65 to IW 24c-15-65

The surface location of the well is unchanged.

The targeted top of the Clark & Wilson Sandstone location is slightly changed from original permit and is now:

560 ft. north and 810 ft. west of the surface location (SE 1/4 of SW 1/4 of sec. 15 T6N R5W).

The targeted bottom hole location is:

885 ft. north and 1,285 ft. west of the surface location (SW 1/4 of SW 1/4 of sec. 15 T6N R5W).

The drilling program has changed and is attached. The intermediate casing has been changed to 9 5/8", 36#, J55. It will be run to the top of the Clark and Wilson Sandstone, which is estimated to be at 2,040 ft. measured depth. The cementing program is unchanged and cement volumes are discussed in the drilling program.

Company/Operator NW Natural

Signature H Jack Meyer

Position Geologist - Project & Resource Services Department

Date 7-20-04

SEND WELL COMMUNICATION TO: H. Jack Meyer

Name H. Jack Meyer

Address NW Natural 220 NW Second Ave., Portland, OR 97209

Phone ( 503 ) 226-4211 ext 4683 (Day) (503) 666-3970 (Night)