

Miscellaneous Permit Application
- Oil & Gas Program

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) Surface Storage: Longview Fibre; Mineral Storage: Columbia County & Longview Fibre.

(Well No.) IW 43a-22-65 API # 36-009-00357

Sec. 22, T 6, R 5 Surveyed Coordinates (if directional, BHL & SHL):

Surface Location: 250 ft. north and 550 ft. west of the E 1/4 corner of section 22 T6N R5W (surface location of abandoned LF 42-22-65)

Top of C&W Sandstone location: 790 ft. south and 380 ft. east of surface (NE 1/4 of SE 1/4 of sec. 22 T6N R5W)

Bottom Hole Location: 790 ft. south and 900 ft. east of surface (NW1/4 of SW 1/4 of sec. 23 T6N R5W)

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

County: Columbia

Signature: H. Jack Meyer

Date: 8.4.04

Position: Geologist - Project & Resource Services Dept

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 #539.

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 43a-22-65 to IW 13b-23-65

The surface location of the well is unchanged from the permit.

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

840 ft. south and 600 ft. east of the surface location (NW 1/4 of SW 1/4 of sec. 23 T6N R5W).

The targeted bottom hole location is:

1300 ft. south and 930 ft. east of the surface location (NW 1/4 of SW 1/4 of sec. 23 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 1,870 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 8-4-04

Date Geologist - Project & Resource Services Dept.

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)