## WELL DATA

Operator: OREGON NATURAL GAS DEVELOPMENT CORPORATION

Well Name: IW33C-3

Location: 1602.75' north and 2372.21' west from the southeast

corner of Section 3, Township 6N, Range 5 West, WB&M.

Columbia County, Oregon

Elevation: 1027.1 G. L.

1040.6 KB

Spud: December 21, 1986

Complete Drilling: January 14, 1987

Status: Completed as an injection/withdrawal well.

Total Depth: 2772' M. D., 2758' TVD

Hole Specifications:  $17\frac{1}{2}$ " surface to 503';  $12\frac{1}{4}$ " hole to 2535', 7 5/8" hole to

2772', 15'' under reamed hole 2528-2606'.

Casing: 13 3/8", K-55, 54.5#, ST&C surface to 498', cemented with

485 sacks Class 'G' mixed with 2% CaCl. 8 5/8", K-55, 36#, modified 8 round, surface to 2519. Cemented with: lead slurry of 452 sacks 1:1 perlite mixed with 2% CaCl, 2% gel, .75% Halad 4, tail slurry of 396 sacks Class 'G' mixed with 1% CaCl, 3% KCl, .1% CFR-3, .25% Halad 4. 5½", 15.5#, wire-wrapped and solid liner 2441-2603, 5½", K-55,

20#, modified 8 round tubing surface to 2436'.

Contractor: Taylor Drilling Company, Chehalis, WA Rig #4

Company Geologist: H. Jack Meyer

Petroleum Engineer: Charles E. Stinson

Well Site Super.: Todd A. Thomas

Tool Pusher: Jiggs Colclasure

Mud Type: Lignosulfonate to 2535', KCl HEC-10 polymer to total depth.

Mud Company: Beaver Drilling Fluids, Inc. Vancouver, WA

Maximum Bottom

Hole Temperature: <100° F.

Mud Logging Western Geo-Engineers

Company: Woodland, CA

Wireline Company: Dresser-Atlas Sacramento, CA

Perforations or Liner Interval:

 $5\frac{1}{2}$ " wire-wrapped liner 2441-2603

Other Service Companies:

Sand Control Halliburton Bakersfield, CA Packer Assembly Baker Rio Vista, CA Wellhead W-K-M Woodland, CA Casing Inspection Hydrotest Long Beach, CA Casing Mill Service Tri-State and Tools Di-Drill Bakersfield, CA Bakersfield, CA Cementing Halliburton Coring Eastman-Christensen Bakersfield, CA Directional Di-Drill Bakersfield, CA