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

HISTORY OF OIL OR GAS WELL

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

NW Natural	Northwest Natural Gas	OM 22-26-65
(Company or Operator)	(Lease)	(Well No.)

Sec. 26 T. 6N R. 5W Surveyed Coordinates (if directional, BHL & SHL): SHL; S87°29'27"E 2512.13' & S02°30'33"E 1744.22' from the NW corner of section 26, T6N; R5W, BHL; 143' S & 51' W from surface location

Wildcat: (or) Field Name: Calvin Creek Storage Field County: Columbia

Signature: Todd Thomas

Date: 12/15/00 Position: Construction Manager

Use this form in reporting the daily operations at the well. (Operator may use his own forms, but heading of this form must also be completed and submitted.) Please submit a complete history of the well. Include such information as bit sizes, mud weights, casing sizes and depths set, amount of cement used, drilling depths, fishing, logging, perforating, and plugging procedures, and anything else pertinent to the operation. Do not include lithology.

Date	
5/18/00	Test blind rams. Drill out surface plug from 5' to 70'. Good hard cement. Test BOP equip. Tag cement at 210'. Drill poor cement to 270'. Drill good cement from 270' to 491' K.B. BTM of 7" casing at 487' K.B. Orient tools drill to 559'. Drill samples 100% formation at 559'. Circulate hole clean. Pull into casing. Swap out cement contaminated fluid with stored mud from last well. Ground elevation 621' K.B. elevation 631'. Mud density= 9, viscosity= 50.
5/19/00	Circulate and condition. Survey well bore. Drill to 1337' K.B. Circulate and condition. Lay down 2 drill collars. Make up new BHA. Trip in hole with bit-stab-monel-stab-20 HWDP. Ream tight spots from 559 to 620'. Mud density= 8.7, visc.= 40. MD=681', TVD=680', 8° AZM 200; MD=930', TVD=925', 12.25° AZM 204; MD=1275', TVD=1262', 12° AZM 206
5/20/00	Finish reaming with stiff assembly. Few tight spots. Hole clean on bottom. Drill to 2151' K.B. Circulate and condition mud and hole. Dummy trip to shoe. Lay down top stabilizer. Circulate and condition. Take bottom hole survey (17° AZM 210). Pulled slightly tight on stands no. 3&4. Pull to stand no. 8. String pulled free after 4th stand. Mud density= 8.9, visc.= 44.
5/21/00	Finish 8 stand dummy trip. Rig up Schlumberger and log well as per program. Lay down monel and stab. Make up bit on HWDP. Circulate and clean. Rig up and run 4.5" casing. Hole size= 6.25" from surface casing to 2151' T.D. Rig up Halliburton and cement casing. 2151' of 4.5" casing cemented in 6.25" hole. Casing landed at 2149' K.B. Float collar at 2104.71' K.B. Lead cement: 100 SXS prem. Type III 50/50 poz 5% gell .5% 344 yield 1.48 at 13.4 lbs/gl 26 bbl. slurry. Tail cement: 100 SXS prem. Type III 3% KCl .2% cfr-3 .6% 344 .2% CBL, yield 1.35 cu/ft/sx mixed at 14.8 lbs/gl 24 bbls slurry. Set slips with full string weight. Nipple down stack and install tree. Clean out mud tanks. Release rig. Mud density= 8.9, visc.= 40.

for NW Nat Co. OM 22-26-65