

**The Oregon Department of Geology and Mineral Industries**  
STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
800 NE Oregon St # 28 Portland, OR 97232

**HISTORY OF OIL OR GAS WELL**  
(In compliance with rules and regulations pursuant to ORS 520)

RECEIVED  
NOV 20 2002  
Mined Land Reclamation

(Company or Operator) Northwest Natural Gas Company(Lease) NW Natural Gas Co (Well No.) CC#10

Sec. 10 T 6N, R 5W Surveyed Coordinates – SHL; 1976'North & 1065' East of the Southwest corner of section3; T6NR5W.

Wildcat: \_\_\_\_\_ (or) Field Name: Mist Underground Storage County: Columbia

Signature: Yodd Glan

Date: 11/19/02

Position: Project 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.

July 20, 2002

Moved Taylor Rig No. 1 to location to remove bridge plug at 2680' and clean out well bore to 2925 feet K.B. Checked wellhead pressure SITP 675 psi – SICP 0 psi. Stripped flow line and well site building. Moved stripped equipment off lease. Rigged up equipment for work over. Hauled salt water to pump tank and fresh water to wash tank. Shut down operations and secured equipment and well.

July 22, 2002

Daily walk around and safety check. Rigged in pump line to tubing, filled with salt water and put on vacuum. Removed wellhead. Noted that all bolts and screws be changed out on future work. Installed and tested BOPE per DOGAMI request. Unseated packer and reverse circ out gas trapped below. Circ down tubing and up annulus to clear packer and annulus. Rig up to pull out of hole. Started out of hole well swabbing. Work string up down hole 60 ft. Stand back first stand. Tubing starts flowing dig to circulate and circ well the long way to circ out gas bubble and small amount of mud and trash. Circ well until all clear. Pull tubing and standin derrick. Secure well bore and equipment and shut down for night.

July 23, 2002

Daily walk around and safety check. Checked wellhead pressure and filled hole with salt water. Trip out of hole with 2 3/8 tubing, lift valve, packer (Otis MH), and tail pipe. Lay down BHA. Trip in hole with new 3 7/8" bit on 2 3/8" tubing and work string. Rigged up floor, JU head and power swivel. Drill out bridge plug at 2680' K.B. Did not have to drill up the lower 1/2 of the CLV plug. Plug loose after 1.5 hours and bottom part of bridge plug is moving down hole easily. Push plug down hole to 2700'. Plug hung up. Rig up to drill remains of plug out. Drilled up bottom of bridge plug. Recovered nose cone and shear bolt pocket. Drilling very slow. The bit stopped drilling. Trip out and inspect bit. All teeth worn or broken off. Trip in hole with rerun bit from CC-3. Trip in hole with six stands 2 3/8" tubing. Secure well bore and equipment and shut down for the night.

July 24, 2002

Daily walk around and safety check. Checked wellhead pressure and filled hole with salt water. Trip in hole with 2 3/8" tubing string and rerun bit. Drilled on bridge plug at 2700'. Trip out of hole with work string. Bit was scrubbed. Make up a third new 3 7/8" bit. Trip in hole. Rig up floor, JU head and power swivel. Drill out bridge plug at 2710' K.B. Circulated hole clean. Picked up 2 3/8" work string run in hole to 2865' K.B. Rig up Floor, JU head and swivel drilling on plug junk. Cleaned out to 2870' K.B. Secured well and equipment and shut down for night.

July 25, 2002

Daily walk around and safety check. Checked wellhead pressure and filled hole with salt water. Drill out junk at 2870 ". Drilled on hard cement from 2875' K.B to 2900' K.B. Bit stopped drilling at 2900'. Circulated hole clean. Trip out work string. Bit #3 completely scrubbed. Final PBTD 2900' K.B. Trip in hole with 4.5 scraper to 2900'. Circulated hole clean. Trip out scraper and lay down work string and BHA. Rig in Halliburton cased hole truck on CC10 well. Make up CIT tools run in hole to log. Halliburton log tools not working. Change out tools and run again. Tools still not working. Work on CIT tools and surface equipment. Halliburton CIT tools not working properly and will not repeat. Secured well and shut down for the night.

July 26, 2002

Daily walk around and safety check. Fill hole with salt water. Rig in Halliburton cased hole truck. Make up and run CIT tools. Log 4.5" casing from 2900' to surface. Make up tail pipe and packer assembly. Packer string from bottom to top. See attached well schematic.

Set and test packer to 500 psi. Open packer bypass and circulate casing annulus to inhibited clean water. Remove BOPE and install wellhead. Rig in swabbing equipment and swab well. Flow test to atmosphere to clean up. Secure wellhead and shut down for night. Job completed. Well to be used as monitor well.

Well schematic is attached.



