

OWNER: Carlisle Water Corporation Well #6
DRILLER: Falwell Well Co.
COUNTY: Henry (Martinsville)

VDMR WELL # 1374
WWCR WELL # 160
TOTAL DEPTH : 250

GEOLOGIC LOG

Hornblende Gneiss (0-250)

0-10	Saprolitic Gneiss - medium-brown, white, and light gray; coarse-grained; biotite, partly kaolinized feldspar, quartz, chlorite, hornblende; trace magnetite; minor iron oxide.
10-20	As above
20-30	As above - more hornblende
30-40	As above
40-50	As above
50-60	As above
60-70	Hornblende Gneiss - black and white, coarse-grained; hornblende, epidote, feldspar, quartz, biotite, muscovite, chlorite; trace magnetite, minor iron oxide stain; irregular white concentrations of feldspar, quartz and muscovite.
70-80	As above - less epidote.
80-90	As above
90-100	As above - part of the alkali feldspar is slightly pink.
100-110	As above
110-120	Hornblende Gneiss - black and white; coarse-grained; hornblende, feldspar, epidote, quartz, biotite; minor pyrrhotite, magnetite; a portion of this sample is lightly iron-stained and slightly altered.
120-130	Hornblende Gneiss - black and white; coarse-grained; hornblende, feldspar, quartz, biotite, epidote; a portion of this level is hydrothermally altered zone with chlorite, saussurite and epidote veins; feldspar is slightly pink.
130-140	As above - less chlorite and saussurite.
140-150	As above - more chlorite and saussurite, minor unakite.
150-160	As above - white unaltered feldspar.
160-170	As above - less chlorite and saussurite trace pyrite.

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#1374

- 170-180 Hornblende Gneiss - black and white; very coarse-grained, - hornblende, feldspar, biotite, quartz, epidote; minor muscovite and chlorite; trace pyrrhotite and magnetite.
- 180-190 As above - more chlorite; very minor serpentine and epidote veins; trace asbestos.
- 190-200 As above - no serpentine; trace poorly developed slickensides.
- 200-210 Biotite Gneiss - white, black and greenish black very-coarse to medium-grained; biotite, feldspar, hornblende, quartz, epidote, chlorite, muscovite; leucocratic material in bands; one fragment medium-fine grained unakite (may be contamination).
- 210-220 As above - minor vein of saussuritized material with trace pyrite.
- 220-230 As above - more leucocratic bands; more chlorite; minor magnetite.
- 230-240 Gneiss - white and greenish-black; coarse to medium-grained; feldspar, quartz, hornblende, biotite, chlorite, epidote, muscovite, minor magnetite.
- 240-250 As above - less leucocratic material; the feldspar is altered to pale pink and slightly kaolinized.

GEOLOGIC SUMMARY

<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-250 Hornblende Gneiss	Precambrian

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
October 4, 1965