

OWNER: Easthampton Rubber Thread Co. - Well #9
DRILLER: Sydnor Pump and Well Co., Inc.
COUNTY: Patrick (Stuart)

VDMR #1330
WWCR #85
TOTAL DEPTH: 224'

GEOLOGIC LOG

- 0-33 Gneiss — medium-light-gray, grain size 0.25 - 3.0 mm; quartz, microcline, plagioclase, biotite; minor amphibole chlorite, sphene; trace pyrrhotite, magnetite and calcite; thin lamina dark-blue-gray, very-fine-grained, carboniferous, carbonates (the sample does not agree with drillers log).
- 33-40 As above — iron stained in part.
- 40-50 Gneiss — white and black, 0.5-2.0 mm grain size; sugary; microcline, oligoclase, quartz, biotite, chlorite, muscovite; minor calcite, zircon, and pyrrhotite.
- 50-60 As above.
- 60-70 As above — less biotite.
- 70-80 As above — more biotite, minor fractures recemented with sericite and chlorite.
- 80-90 Gneiss — medium-light-gray, grain size 0.5 to 10.0 mm; alkali feldspar, quartz, oligoclase, biotite; trace calcite; slight concentration biotite in some layers.
- 90-100 As above — less layering.
- 100-110 Hornblende Gneiss — medium-dark-gray, grain size 0.25 to 2.0 mm; hornblende, plagioclase, quartz, epidote; minor biotite, alkali feldspar, actinolite.
- 110-120 As above.
- 120-130 Biotite, Hornblende, and Actinolite Gneisses — medium-light-gray, medium-dark-gray, and pale-green, respectfully bedded; grain size 0.1 to 5.0 mm; biotite gneiss: quartz, microcline, biotite, minor anorthoclase, oligoclase, hornblende, epidote, and calcite; hornblende gneiss: as above, with major hornblende; actinolite gneiss: quartz, alkali feldspar, actinolite, chlorite, epidote, and calcite; porphyroblasts: oligoclase, alkali feldspar, and quartz; trace dark-blue-gray, fine-grained, carbonaceous, carbonates layers; minor pyrite throughout.

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130-140 Biotite Gneiss — medium-light-gray, grain size 0.25-1.0 mm; quartz, alkali feldspar, biotite, muscovite, oligoclase; minor hornblende actinolite, epidote, sphene, calcite.

140-150 As above — slightly coarser, minor chlorite rich lamina.

150-160 As above — slightly coarser, more pyrite.

160-170 As above — slightly less biotite, fine-grained.

170-180 As above.

180-190 Gneiss — light-gray, grain size 0.1 to 1.0 mm; quartz, plagioclase, biotite; minor calcite, garnet, epidote, sphene, hornblende, and pyrrhotite.

190-200 As above — minor muscovite, no observable garnet.

200-210 As above — with minor hornblende gneiss.

210-220 As above — only trace hornblende gneiss.

220-224 No sample.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-220	Biotite Gneiss	Questionable
220-224	No sample	

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
July 21, 1965