

OWNER: Falwell Well Corporation
(Hyland Springs Subdivision #4)
DRILLER: Falwell Well Corp. (M. E. Sprinkle)
COUNTY: Campbell (Lynchburg)

VDMR #1156
WWCR #292

GEOLOGIC LOG

Overburden (0-70')

- 0-10 Overburden - black, white, and brown, oxidized and fragmented amphibolite, clay, quartz, and amphibolite pieces to 3/8 inch, mica, hornblende.
- 10-20 Overburden - greenish gray with light brown and black, oxidized and fragmented amphibolite, quartz, mica, clay, hornblende.
- 20-30 Overburden - gray, green and brown, medium grained, weathered amphibolite, hornblende, biotite, feldspar, quartz, epidote.
- 30-40 As above - amphibolite more decomposed.
- 40-50 Overburden - dark greenish gray, weathered amphibolite with brown oxides, white quartz, biotite, muscovite, hornblende, quartz, pyrite, and magnetite.
- 50-60 As above.
- 60-70 As above.

Dike (70-220')

- 70-80 Amphibolite - dark greenish gray with white, coarse to fine grained, good lineation of minerals, hornblende (blue-green variety probably barroisite), biotite elongated parallel to fibers of hornblende, chlorite concentrated in layers, fine granular acid plagioclase, epidote, magnetite, quartz, minor garnet, and pyrite present. X-ray examination shows minor pyroxene. There is slight oxidation along the fractures, vein quartz present, (top of bedrock in this interval).
- 80-90 As above - with minor graphite crystals less quartz.
- 90-100 Amphibolite - dark greenish gray, medium grained, good lineation, hornblende, biotite, chlorite, acid plagioclase, magnetite, epidote, minor vein quartz.

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- 100-110 Amphibolite - dark gray with white specks, coarse grained, lineation good, granular plagioclase segregated into layers, and more abundant than above, hornblende, chlorite, biotite, acid plagioclase, quartz, magnetite, pyrite. Quartz, probably secondary, in some layers, very minor amount oxidation.
- 110-120 As above - no pyrite.
- 120-130 Amphibolite - dark, greenish gray, medium to fine grained (variable), good lineation of minerals in one plane, hornblende (long needle crystals make a mat in chlorite matrix), chlorite, biotite, acid plagioclase, epidote, magnetite, minor quartz.
- 130-140 As above - with vein quartz.
- 140-150 Amphibolite - dark greenish gray, medium to very fine grained, good lineation, hornblende, chlorite, acid plagioclase, biotite, magnetite, minor epidote, and pyrite.
- 150-160 Amphibolite - medium greenish gray, medium to fine grained, lineation, segregation of chlorite, hornblende, (blue-green variety probably barrosite or riebeckite), biotite, chlorite, acid plagioclase, magnetite, minor graphite in chlorite layers.
- 160-170 Amphibolite - oxidized, fine grained, gray, brown, (one large piece).
- 170-180 Amphibolite - medium gray, fine grained, good lineation, acid plagioclase, hornblende, chlorite, biotite, epidote, magnetite, minor vein quartz.
- 180-190 As above - minor pyrite.
- 190-200 Amphibolite - medium gray, fine grained, good lineation, hornblende, plagioclase concentrated in zones, chlorite, biotite, epidote, magnetite in stringer in plagioclase zone, minor pyrite, X-ray examination did not show pyroxene.
- 200-210 As above - magnetite less abundant.
- 210-220 As above - less plagioclase, less magnetite.

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220-260 No sample.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-70	Overburden	
70-220	Amphibolite Dike	Ordovician
220-260	No sample	

Dike material intruded in Lynchburg Formation
(Precambrian).

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
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