

OWNER: J. N. Broadus
DRILLER: J. T. Ellington
COUNTY: Caroline

VDMR 1116
WWCR 22
TOTAL DEPTH: 318'

GEOLOGIC LOG

0-20 No sample.

Calvert Formation

20-30 Quartz Gravel - white, subangular to subrounded, up to 15 mm. in length, frosted, no fine material.

30-45 Quartz Gravel and Sand - gravel as above, quartz sand - tan, fine grained, subangular to angular, clear to frosted, minor clay and muscovite, few fossils.

45-60 Sand - tan, clear, angular to subangular, quartz, more clay and muscovite than above.

60-75 Quartz Gravel and Sandy-Silt - white to gray, gravel same as previously, sandy-silt - very fine, subangular, quartz, muscovite, few fossils.

75-90 As above.

90-105 Sand - light tannish-gray, clear to frosted, subangular to subrounded, fine grained quartz, minor clay and glauconite.

105-120 As above - except quartz, fine to medium grained and considerable pyrite.

120-135 As above - slightly calcareous.

135-145 Sand Biotite Granite - sand as above, granite composed of biotite and quartz.

Granite and Granodiorite

145-165 Biotite Granite - salt and pepper color, biotite, quartz, pyrite, feldspar, possibly garnet and apatite.

165-180 As above.

180-195 Granodiorite - X-ray analysis: 35% quartz, 35% biotite, 20% plagioclase, 5% clay, and 5% pyrite and garnet.

195-210 As above - but less biotite.

210-225 No sample.

OWNER: J. N. Broadus (Continued)

#1116

225-240 Granodiorite - X-ray analysis: 35% quartz, 35% biotite, 20% plagioclase, 5% clay, and 5% pyrite and garnet.

240-255 As above.

255-270 As above.

270-285 As above - but less plagioclase.

285-300 As above.

300-315 Granodiorite - minerals the same as previously, but the biotite and quartz and plagioclase have a felted or woven relation, possibly a gneiss.

315-318 No sample.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-20	No sample	
20-145	Calvert Formation	Miocene
145-315	Granite and Granodiorite	Precambrian

Virginia Division of Mineral Resources
Garnett Gatlin, Geologist
August 25, 1964