

OWNER: National Park Service (Shenandoah)  
Comers Deadening Test Hole #3  
DRILLER: Frank W. Martin Drilling Company  
COUNTY: Madison (Old Rag)

VDMR: 1136  
WWCR: 38  
TOTAL DEPTH: 365'

GEOLOGIC LOG

Depth in feet

0 - 5	Weathered Zone — greenstone, quartzite, and meta-graywacke.
5 - 10	" with some asbestos.
10 - 15	" "
15 - 20	" "
20 - 25	" "
CATOCTIN FORMATION (25-270)	
25 - 30	Greenstone — bluish-green, fine-grained; quartz, epidote, feldspar, biotite, chlorite, and hematite.
30 - 35	"
35 - 40	" with less epidote.
40 - 45	Greenstone — light green, fine-grained; quartz, feldspar, biotite, chlorite, hematite, and epidote.
45 - 50	" with vein quartz.
50 - 55	" without vein quartz.
55 - 60	Greenstone — light green, fine-grained; quartz, feldspar, biotite, chlorite, hematite, and epidote.
60 - 65	"
65 - 70	Greenstone — bluish-green, fine-grained; quartz, biotite, chlorite, feldspar and epidote.
70 - 75	"
75 - 80	"
80 - 85	"
85 - 90	"

90 - 95	Greenstone — light green, fine-grained; quartz, feldspar, biotite, chlorite, and epidote.
95 - 100	"
100 - 105	"
105 - 110	"
110 - 115	"
115 - 120	"
120 - 125	Greenstone — greenish-blue, fine-grained; quartz, biotite, chlorite, feldspar, and epidote; fracture zone.
125 - 130	" no fracture zone.
130 - 135	" "
135 - 140	" "
140 - 145	" " with vugular quartz.
145 - 150	Greenstone — greenish-blue, fine-grained; quartz, biotite, chlorite, feldspar, and epidote; fracture zone.
150 - 155	" no fracture zone.
155 - 160	" "
160 - 165	" "
165 - 170	" "
170 - 175	" "
175 - 180	Greenstone — bluish-green, fine-grained; quartz, biotite, chlorite, feldspar, and epidote.
180 - 185	" with vein quartz.
185 - 190	" no vein quartz.
190 - 195	" with vein quartz.
195 - 200	" "
200 - 205	" no vein quartz.

205 - 210	Greenstone — greenish-blue, coarser grained than above; feldspar, quartz, epidote, biotite, chlorite.
210 - 215	"
215 - 220	"
220 - 225	"
225 - 230	" with fracture zone.
230 - 235	" no fracture zone.
235 - 240	Greenstone — greenish-blue, relatively coarse-grained; quartz, biotite, chlorite, feldspar and epidote.
240 - 245	"
245 - 250	"
250 - 255	"
255 - 260	"
260 - 265	"
265 - 270	"

SWIFT RUN FORMATION (270 - 365 )

270 - 275	Greenstone and Metamorphosed Graywacke — greenstone as above; meta-graywacke is fine- to medium-grained, with clear and stained quartz, plagioclase, chlorite and mafics.
275 - 280	Metamorphosed-Graywacke — fine- to medium-grained, clear and stained quartz, plagioclase, chlorite and mafics.
280 - 285	"
285 - 290	Metamorphosed-Graywacke and Phyllite — meta-graywacke as above; phyllite is bluish-black, with vein quartz, asbestos.
290 - 295	" with minor iron oxid stains.
295 - 300	" "
300 - 305	Metamorphosed-Graywacke — poorly sorted; quartz, chlorite, feldspar, muscovite, and mafics.
305 - 310	"

310 - 315	Metamorphosed-Graywacke — poorly sorted; quartz, chlorite, feldspar, muscovite, and mafics.
315 - 320	"
320 - 325	Metamorphosed-Graywacke and Phyllite — metamorphosed-graywacke as above; phyllite is bluish-gray and green.
325 - 330	"
330 - 335	"
335 - 340	"
340 - 345	" with large amount of weathered material.
345 - 350	Metamorphosed-Graywacke and Phyllite — metamorphosed-graywacke is poorly sorted; with quartz, feldspar, chlorite, and mafics phyllite is green, and contains some weathered material.
350 - 355	No sample.
355 - 360	Metamorphosed-Graywacke and Phyllite — metamorphosed-graywacke is poorly sorted; with quartz, feldspar, chlorite, and mafics phyllite is green, and contains some weathered material.
360 - 365	"

GEOLOGIC SUMMARY

<u>Depth</u>	<u>Rock Unit</u>	<u>Age</u>
0 - 25	Weathered zone	Quaternary
25 - 270	Catoctin Formation	Cambrian-Precambrian
270 - 365	Swift Run Formation	Precambrian

Virginia Division of Mineral Resources  
Garnett Gatlin - Geologist  
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