

OWNER: Commonwealth of Virginia, Div. of Min. Resources VDMR #1117
Claytor Lake State Park, Well #2 WWCR #35
DRILLER: Sydnor Pump & Well Company, Inc. TOTAL DEPTH: 319'
COUNTY: Pulaski (Newbern)

GEOLOGIC LOG

- 0-10 Overburden — reddish-brown, white, coarse-grained; sand, angular quartz (some blue), pebbles fragments of sandstone, clay, mica.
- Rome Formation (10-210')
- 10-20 Shale — light-brown, fine-grained; minor ferruginous sandstone; laminations, quartz sand and pebbles.
- 20-27 Shale — purple to blue, minor green; fine-grained, fissile; minor sandy shale, pyrite.
- 27-40 No sample.
- 40-50 Shaly Sandstone — brownish-purple, green; fine-grained, soft.
- 50-60 Shale — dark-gray, very-fine-grained, hard, quartz, veins parallel to and transecting the bedding; brown and red iron staining.
- 60-70 Shale — light-gray and light-purple, fine-grained, very minor mica, vein quartz.
- 70-80 As above — more fissile.
- 80-90 Shale — medium-blue-gray, fine-grained, very minor ferruginous partings.
- 90-100 As above — minor purplish ferruginous shale.
- 90-105 Limestone — dark-gray, fine-grained, dense, conchoidal fracture; minor pale-red, arkosic sandstone, medium-grained, porous; minor red-brown, porous claystone.
- 100-110 Dolomite — medium-gray and green, minor purple, fine-grained; partially crystalline, shaly; trace pyrite.
- 110-120 Shale — purple, fine-grained, calcareous, minor medium-brown, calcareous siltstone.
- 120-130 Shale — medium-light-gray, fine-grained, minor pink and white calcite veins, trace mica.
- 130-140 Shale — medium-gray, fine-grained; minor green chloritic shale; and purple sandstone.

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- 140-150 No sample.
- 150-160 Shale — purple, minor gray, fine-grained, fissile; minor buff-colored, porous limestone.
- 160-170 As above — less purple shale.
- 170-180 As above.
- 180-190 As above — more purple shale, porous; vein calcite.
- 190-200 Shale — purple and gray, fine-grained; interbedded with buff, medium-grained, porous, dolomitic limestone and minor pale-purple to light-gray sericitic phyllite.
- 200-210 Shale — gray, fine-grained; almost a phyllonite; interbedded with porous, buff, dolomitic limestone and minor fine-grained, pink sandstone.

Conococheague Formation (210-319')

- 210-220 Dolomite — white and dark-gray, fine-grained, crystalline, the white dolomite is porous, parallels and transects the bedding; vein calcite and minor vein quartz; trace pyrite; minor purple-gray, phyllitic shale.
- 220-230 As above — more gray dolomite; slightly coarser-grained.
- 230-240 Dolomitic Limestone — white, medium-gray, buff; fine-grained, brecciated, porous; minor red sandstone, thin lamina; very minor gray, medium-grained, crystalline dolomite; trace pyrite.
- 240-250 As above — more crystalline; minor-brown, sandy shale; green, chloritic shale.
- 250-259 Dolomite — medium-dark-gray, fine-grained, crystalline, permeable; abundant white dolomite veins; minor red-brown, fine-grained sandstone and green, chloritic dolomite; trace pyrite.
- 260-270 Dolomite — light- to medium-gray, minor dark-gray, fine-grained bedded, porous; minor quartz and pyrite; minor brown, sandy, micaceous shale, and green, shaly dolomite.
- 270-280 As above.
- 280-290 As above.

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- 290-300 Dolomite -- medium-gray, fine-grained, bedded, porous;
minor calcareous, friable sandstone; green, shaly, brecciated
dolomite; red-brown, silty shale.
- 300-310 As above -- less calcareous sandstone.
- 310-319 As above -- more calcareous sandstone.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-10	Overburden	Recent
10-210	Rome Formation	Lower Cambrian
210-319	Conococheague Formation	Upper Cambrian

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
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