

OWNER: J. S. Terrell, Raleigh Sq. Co.
DRILLER: Mitchell Well & Pump Co.
COUNTY: James City (Williamsburg)

VDMR # 934
WWCR # 137
TOTAL DEPTH : 204

GEOLOGIC LOG

Columbia group (0-30)

- 0-10 Sand-silty, white to buff, coarse to very fine grained, subangular to subrounded.
- 10-20 Sand-silty, calcareous, white to yellow, fine grained, subangular to rounded, abundance of shell fragments.
- 20-30 Sand-white to yellow, coarse to fine grained, subangular to subrounded, abundance of shell fragments.

St. Marys formation (30-204) ?

- 30-40 Sand-green, coarse to fine grained, subangular to subrounded, shell fragments.
- 40-50 Sand-green, coarse to fine grained, subangular to subrounded, fragments of echinoid spines.
- 50-60 Silt-arenaceous, light to medium green, (X-ray analysis: quartz, aragonite, calcite, clay minerals, & minor amounts of feldspar).
- 60-70 Sand-green, fine to very fine grained, angular to subrounded, shell fragments (mostly pelecypoda).
- 70-80 As above
- 80-90 Siltstone-arenaceous, light to medium green.
- 90-100 As above
- 100-110 Siltstone-calcareous, moderately arenaceous, light green, shell fragments.
- 110-120 Siltstone-moderately calcareous & arenaceous, light green, shell fragments, (Turritella).
- 120-130 Siltstone-moderately calcareous & arenaceous, light green, shell fragments.
- 130-140 Siltstone-moderately calcareous & arenaceous, light to medium green, shell fragments.
- 140-150 As above
- 150-160 Siltstone-moderately calcareous & arenaceous, light to medium green, some blue quartz, shell and weathered rock fragments.

- 160-170 Sand-calcareous, white to green, granular to fine grained, angular to subrounded, shell fragments, foraminifera (Siphogenerina lamellata cushman, Nonion pizarrensis (Berry), Robulus sp.).
- 170-180 Sand-silty, calcareous, white to green, very coarse to very fine grained, angular to subrounded, foraminifera, (Siphogenerina lamellata).
- 180-190 Sand-white to yellow, coarse to fine grained, angular to subrounded, collophane, foraminifera (Siphogenerina lamellata cushman, Uvigerina calvertensis (Cushman) Textularia articulata d' Orbigney ?, Guttulina sp.?, Hanzawia concentrata (cushman) ?, Nonion pizarrensis (Berry)).
- 190-204 Sand-white, yellow, and green, very coarse to fine grained, angular to subrounded, abundance of collophane and accessory magnetite, rutile, monazite, pyrite, zircon, & sphene (?).
- Microfossil specimens from the 160' to 190' intervals on file.

GEOLOGIC SUMMARY

ROCK UNIT

AGE

0-30 Columbia group
30-204 St. Marys formation ?

Pleistocene
Miocene

Virginia Division of Mineral Resources
Roger C. Wilkenloh - Geologist
Feb. 24, 1964

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St. Marys formation (30-204) ?

30-40 Sand-green, coarse to fine grained, subangular to subrounded, shell fragments.

"gray mud"

40-50 Sand-green, coarse to fine grained, subangular to subrounded, fragments of echinoid spines.

50-60 Silt-^{sandy}arenaceous, light to medium green, (X-ray analysis: quartz, aragonite, calcite, clay minerals, & minor amounts of feldspar).

"blue marl"

60-70 Sand-green, fine to very fine grained, angular to subrounded, shell fragments (mostly pelecypoda).

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80-90 Siltstone-^{sandy}arenaceous, light to medium green.

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100-110 Siltstone-calcareous, moderately ^{sandy}arenaceous, light green, shell fragments.

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120-130 Siltstone-moderately calcareous & ^{sandy}arenaceous, light green, shell fragments.

130-140 Siltstone-moderately calcareous & ^{sandy}arenaceous, light to medium green, shell fragments.

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30-204	St. Marys formation ?	Miocene

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