

OWNER: Mr. J. M. Barnhardt  
DRILLER: Sydnor Pump & Well Co. (C. Mitchell)  
COUNTY: Middlesex

VDMR # 610  
WWCR # 115  
TOTAL DEPTH : 751

GEOLOGIC LOG

0-285 No samples

Calvert formation (285-315)

285-300 Sand - gray, coarse to fine grained, angular to subangular, large number of shell fragments, small number of shark teeth and Foraminifera (Siphogenerina), trace of silt and collophane

300-315 Sand - gray, coarse to fine grained, angular to subangular, large number of shell fragments, small number of Foraminifera, trace of silt and collophane

Nanjemoy formation (315-460)

315-327 Sand - gray, coarse to fine grained, angular to subangular, large number of shell fragments, large amount of limestone, very glauconitic, trace of pyrite

327-385 Sand - gray, coarse to fine grained, angular to subangular, large number of shell fragments, large amount of limestone, slightly glauconitic, trace of pyrite and clay

385-400 Greensand - brown, medium to fine grained, rounded to subrounded, very sandy, small number of shell fragments, small amount of limestone

400-412 Greensand - brown, medium to fine grained, rounded to subrounded, very sandy, large number of shell fragments, large amount of limestone

412-450 No samples

450-451 Greensand - gray to green, medium grained, angular to subrounded and botryoidal, very argillaceous, slightly sandy and silty, small number of Foraminifera (Abicides, Marginulina).

Marlboro clay (460-500)

460-461 Clay - gray, trace of mica, small number of Foraminifera.

470-471 Clay - gray, trace of mica

- 480-481 Clay - gray, trace of mica, small number of Foraminifera
- 490-491 Clay - gray, trace of mica
- Aquia formation (500-520)
- 500-501 Greensand - gray to green, medium grained, angular to subrounded and botryoidal, very argillaceous, slightly sandy and silty
- 510-511 Greensand - green, fine grained, angular to subrounded and botryoidal, slightly sandy, large number of shell fragments, small number of Foraminifera (Nodosaria affinis, Abicides).
- Potomac group (520-746)
- 520-521 Sand - light gray, coarse to fine grained, angular to subangular, very arkosic and silty, slightly argillaceous (kaolin) and micaceous
- 530-531 Clay - gray, very micaceous, slightly silty
- 540-541 Sand - light gray, coarse to fine grained, angular to subangular, very arkosic and silty, slightly argillaceous (kaolin) and micaceous
- 550-551 Sand - light gray, medium to fine grained, angular to subangular, very silty and micaceous, slightly argillaceous (kaolin) arkosic
- 560-561 Sand - light gray, fine grained, angular to subangular, very silty and micaceous, slightly argillaceous (kaolin) and arkosic
- 570-571 Silt - gray, very sandy and micaceous
- 580-581 Silt - gray, very sandy and argillaceous, slightly micaceous
- 590-591 As above
- 600-601 Sand - light gray, fine grained, angular to subangular, very silty, slightly micaceous, argillaceous (kaolin) and arkosic
- 610-611 Clay - light gray to brown, slightly silty, ferruginous, and micaceous

- 620-621 Clay - red to brown with gray mottling, very ferruginous, slightly micaceous, trace of silt
- 630-631 Clay - gray, very silty and micaceous, slightly ferruginous
- 640-641 Sand - light gray, fine grained, angular to subangular, very silty, slightly argillaceous (kaolin) and micaceous
- 650-651 Sand - light gray, medium to fine grained, angular to subangular, slightly silty, arkosic, and micaceous, trace of clay (kaolin)
- 660-661 Silt - light gray very sandy, slightly micaceous and argillaceous (kaolin)
- 670-671 Sand - gray, fine grained, angular to subangular, very silty and micaceous, slightly argillaceous
- 680-681 Sand - light gray, coarse to fine grained, angular to subangular, very silty and arkosic, trace of clay (kaolin) and mica
- 690-691 As above
- 700-701 As above
- 710-711 As above
- 720-721 Sand - light gray, medium to fine grained, angular to subangular, very silty and arkosic, trace of clay (kaolin) and mica
- 730-731 Sand - gray, medium to fine grained, angular to subangular, very silty, argillaceous and arkosic, slightly micaceous
- 740-741 Sand - light gray, medium to fine grained, angular to subangular, very silty and arkosic, slightly argillaceous and micaceous
- 745-746 Clay - light gray, slightly sandy, silty, and micaceous

## GEOLOGIC SUMMARY

	<u>AGE</u>	<u>ROCK UNIT</u>
0-285	No samples	
285-315	Miocene	Calvert formation
315-460	Eocene	Nanjemoy formation
460-500	Eocene	Marlboro clay
500-520	Eocene	Aquia formation
520-746	Lower Cretaceous	Potomac group

## Remarks:

Samples from 285-412 are cuttings;

Samples from 450-751 are cores

Virginia Division of Mineral Resources  
James L. Ruhle - Geologist  
March 14, 1963