

OWNER: County of Henrico  
Civil Defense Control Center - Well #1  
DRILLER: Sydnor Pump & Well Company, Inc.  
COUNTY: Henrico

VDMR #1123  
WWCR #172  
TOTAL DEPTH: 255'

### GEOLOGIC LOG

#### Calvert Formation (0-141')

- 0-1 Clay — buff; sandy, fairly well-sorted, medium-grained, subangular to subrounded, very abundant, sand; (clay and sand present in almost equal amounts).
- 1-10 Clay — bright orange-yellow with small amounts of gray and bright red; sandy - very abundant, very fine- to medium-grained sand; a few small pebbles; (clay and sand present in almost equal amounts).
- 10-20 Sand — red, medium-grained but poorly sorted; subangular; abundant small gravel and scattered larger pebbles (up to 20 mm), argillaceous, small amount of muscovite.
- 20-24 As above.
- 24-34 Sand — tan; very-coarse-grained; angular to subangular; small amount of small gravel (granules); very slightly silty.
- 34-47 Sand — orange-brown, coarse- to very-coarse-grained, angular to subangular; trace of clay and fine silt.
- 47-57 Clay — gray; sandy - abundant, very-fine-grained angular sand; small amount of granules and small pebbles; slightly ferruginous; trace of muscovite.
- 57-67 Clay — gray; very gravelly, small pebbles very abundant; silty and sandy, sand fraction very poorly sorted; slightly ferruginous.
- 67-77 Clay — gray; slightly sandy; small amount of small gravel and scattered larger pebbles (up to 20 mm).
- 77-87 Clay — gray; sandy; moderate amount of small gravel; slightly ferruginous; small amounts of pyrite, glauconite and partly devitrified basic glass (?).
- 87-97 Clay — gray; sandy; moderate amount of small gravel; glauconitic; slightly ferruginous; small amounts of pyrite and partly devitrified basic glass (?); fairly micaceous (muscovite).
- 97-106 Clay - gray; sandy; small amount of small gravel; glauconitic; slightly ferruginous; small amount of pyrite; fairly micaceous (muscovite).

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- 106-116 Clay — gray, mottled orange-brown; sandy; moderate amount small gravel; glauconitic; ferruginous; small amounts black glass (?) and muscovite.
- 116-131 Sand — gray, very-fine-grained, well sorted; silty and argillaceous; glauconitic; small amount of black glass (?); ferruginous; very micaceous (muscovite); trace of vertebrate fossil material (shark teeth).
- 131-141 Sand — dark-gray; very-fine- to fine-grained, fairly-well-sorted; silty and argillaceous, moderate amount of light-green clay much of which is calcareous; very large amount of small gravel; very glauconitic; small amounts of muscovite; traces of pyrite and black glass (?); small amount shell fragments.
- Potomac Group (141-257)
- 141-152 Sand — gray, fine- to coarse-grained, poorly sorted; moderately argillaceous and slightly silty; moderate amount of granules and a few small pebbles; slightly glauconitic; small amount light-green clay; trace of pyrite.
- 152-162 Sand — gray, mottled brown, fine- to coarse-grained, poorly sorted; highly argillaceous and silty with moderate amount light-green clay; moderate amount of granules and small pebbles; very slightly glauconitic; ferruginous; trace of muscovite.
- 156-167 Clay — gray-green mottled brown, well-indurated; sandy; some small gravel; ferruginous; very slightly glauconitic; trace of muscovite.
- 167-177 Sand — buff, fine- to medium-grained, subangular; small amount of small gravel; very argillaceous; very slightly glauconitic; moderately ferruginous; abundant muscovite.
- 177-187 Sand — buff, medium- to very-coarse-grained, subangular; small amount of small gravel; moderately argillaceous; very slightly glauconitic; slightly ferruginous; small amounts of muscovite and black glass (?).
- 187-197 Sand — buff, coarse- to very-coarse-grained, subangular to subrounded; small amount small gravel; argillaceous; small amount of black glass (?); trace of glauconite.
- 197-207 Sand — buff, medium- to very-coarse-grained, poorly sorted, subangular; moderate amount small gravel, mostly granules; slightly argillaceous and glauconitic; small amounts of muscovite and ferruginous material; trace of shell material.

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207-217 Sand — buff, coarse- to very-coarse-grained, sub-angular; minor amount of gravels; slightly argillaceous; slightly glauconitic; small amount muscovite and black glass (?); trace of garnet, epidote, feldspar.

217-227 Sand — buff, coarse- to very-coarse-grained, subangular; moderately gravelly - mostly granules; slightly argillaceous; very slightly glauconitic; small amount of muscovite and black glass (?); trace of garnet.

227-237 Sand — buff, medium- to coarse-grained, subangular; small amount granules; slightly argillaceous; small amounts muscovite, black glass (?), and reddish garnet.

237-247 Sand — gray, mottled brown, medium- to very-coarse-grained, subangular; small amount small gravel; ferruginous; slightly argillaceous; small amount muscovite.

247-257 As above.

Petersburg Granite (257')

257 Granite — quartz, feldspar, muscovite.

257-262 No sample.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-141	Calvert Formation	Miocene
141-257	Potomac Group	Lower Cretaceous
257	Petersburg Granite	Unknown
257-262	No sample	

Virginia Division of Mineral Resources  
Robert H. Teifke, Geologist  
October 27, 1964

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- 87-97 Clay — gray; sandy; moderate amount of small gravel; glauconitic; slightly ferruginous; small amounts of pyrite and ~~partly devitrified basic glass (?)~~  $P_2O_5$  fairly micaceous (muscovite).
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- 207-217 Sand - buff, coarse- to very-coarse-grained, sub-angular; minor amount of gravels; slightly argillaceous; slightly glauconitic; small amount muscovite and black glass (?); trace of garnet, epidote, feldspar.
- 217-227 Sand - buff, coarse- to very-coarse-grained, subangular; moderately gravelly - mostly granules; slightly argillaceous; very slightly glauconitic; small amount of muscovite and black glass (?); trace of garnet.
- 227-237 Sand - buff, medium- to coarse-grained, subangular; small amount granules; slightly argillaceous; small amounts muscovite, black glass (?), and reddish garnet.
- 237-247 Sand - gray, mottled brown, medium- to very-coarse-grained, subangular; small amount small gravel; ferruginous; slightly argillaceous; small amount muscovite.
- 247-257 As above.

Petersburg Granite (257')

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 $P_2O_5$
- 116-131 Sand — gray, very-fine-grained, well sorted; silty and argillaceous; glauconitic; ~~small amount of black glass (?)~~;  $P_2O_5$  ferruginous; very micaceous (muscovite); trace of vertebrate fossil material (shark teeth).
- 131-141 Sand — dark-gray; very-fine- to fine-grained, fairly-well-sorted; silty and argillaceous, moderate amount of light-green clay much of which is calcareous; very large amount of small gravel; very glauconitic; small amounts of muscovite; traces of pyrite and ~~black glass (?)~~; small amount shell fragments.  
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