

OWNER: Battery Park Fish & Oyster Co.  
DRILLER: R. L. Magette Well Drilling Co.  
COUNTY: Isle of Wight (Battery Park)

VDMR: 2108  
WWCR: 208  
TOTAL DEPTH: 480'

GEOLOGIC LOG

Depth in  
feet

YORKTOWN FORMATION (0-188')

- 0-20 Sand - brown, moderately clayey; fine- to very fine-grained, well-sorted, angular; minor feldspars, weathered glauconite, shell, and echinoid spines
- 20-40 Sand - gray, mottled brown, very slightly clayey, 5% shell fragments; medium-grained, fairly well-sorted; 65% clear, subangular to subrounded quartz, and 35% green glauconite; a very few foraminifers
- 40-60 Sand - gray, mottled brown, clayey, 10% shell fragments; fine- to very fine-grained, fairly well sorted, angular; much of quartz is iron-stained (yellowish); less than 5% glauconite
- 60-80 " fine- to medium-grained; 10-15% shell fragments
- 80-100 Sand and Shell - moderately abundant matrix of gray clay; 50% coarse pelecypod shell debris; 50% fine, moderately sorted, slightly glauconitic quartz sand; minor black carbonophosphatic material
- 100-120 Clay - gray, uniformly sandy, 15-25% coarse pelecypod shell fragments; sand is very fine-grained, well-sorted, angular; very slightly micaceous
- 120-140 Clay - gray, very slightly sandy; a few plant and shell fragments; a few foraminifers, mostly Nonion
- 140-160 Clay - gray, moderately sandy, 10% shell fragments; sand is fine- to very fine-grained, fairly well sorted, angular; very slightly glauconitic; traces of pyrite and muscovite; foraminifers rare
- 160-180 Clay - gray, sandy, 15% shell fragments; sand is fine- to coarse-grained, rather poorly sorted, variably rounded; clear quartz with 5% nodular and bone phosphorite; trace of glauconite; foraminifers common, but not abundant

CALVERT FORMATION (188-270') Top of formation defined on basis of other information.

- 180-200 Sand - dark brownish-gray, moderately clayey, a few shell fragments; fine-grained, well sorted, angular; clear and greenish quartz, with 5% bone phosphorite; foraminifers common

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YORKTOWN FORMATION(0-188')

- EL 10
- 0-20 Sand - brown, moderately clayey; fine- to very fine-grained, well-sorted, angular; minor feldspars, weathered glauconite, shell, and echinoid spines
- 20-40 Sand - gray, mottled brown, very slightly clayey, 5% shell fragments; medium-grained, fairly well-sorted; 65% clear, subangular to subrounded quartz, and 35% green glauconite; a very few foraminifers
- 40-60 Sand - gray, mottled brown, clayey, 10% shell fragments; fine- to very fine-grained, fairly well sorted, angular; much of quartz is iron-stained (yellowish); less than 5% glauconite
- 60-80 " fine- to medium-grained; 10-15% shell fragments
- 80-100 Sand and Shell - moderately abundant matrix of gray clay; 50% coarse pelecypod shell debris; 50% fine, moderately sorted, slightly glauconitic quartz sand; minor black carbon-phosphatic material
- 100-120 Clay - gray, uniformly sandy, 15-25% coarse pelecypod shell fragments; sand is very fine-grained, well-sorted, angular; very slightly micaceous
- 120-140 Clay - gray, very slightly sandy; a few plant and shell fragments; a few foraminifers, mostly Nonion
- 140-160 Clay - gray, moderately sandy, 10% shell fragments; sand is fine- to very fine-grained, fairly well sorted, angular; very slightly glauconitic; traces of pyrite and muscovite; foraminifers rare
- 160-180 Clay - gray, sandy, 15% shell fragments; sand is fine- to coarse-grained, rather poorly sorted, variably rounded; clear quartz with 5% nodular and bone phosphorite; trace of glauconite; foraminifers common, but not abundant

CALVERT FORMATION (188-270') Top of formation defined on basis of other information.

- 180-200 Sand - dark brownish-gray, moderately clayey, a few shell fragments; fine-grained, well sorted, angular; clear and greenish quartz, with 5% bone phosphorite; foraminifers common

- 200-220 Sand - greenish-gray, clayey, trace of shell; fine-grained, well-sorted, angular; clear to greenish quartz, with 5% bone phosphorite; minor glauconite and pyrite; foraminifers common, including Nonion and Uvigerina
- 220-240 " "
- 240-260 Clay - greenish-gray, sandy, 10% shell fragments; sand is very fine- to very coarse-grained, poorly sorted, angular to rounded; clear quartz, with 5% nodular and bone phosphorite and 10% dark- to light-green glauconite; minor pyrite and garnet; foraminifers common, mostly Siphogenerina
- 260-280 " "

MATTAPONI FORMATION (270-388') Top of Formation defined on basis of other information.

- 280-300 Sand - abundant matrix of greenish-gray clay; 60% medium- to very coarse, dark- to medium-green, autochthonous glauconite, and 40% fine- to medium-grained, well sorted, angular quartz; traces of phosphorite and pyrite; foraminifers common, but not abundant
- 300-320 Sand - black, trace of clay, trace of shell; medium- to coarse-grained, fresh black glauconite with traces of quartz and phosphorite
- 320-340 " with 10% quartz
- 340-360 Sand - gray speckled, slightly clayey; medium- to very coarse-grained, moderately sorted; 70% fresh, black glauconite, and 30% quartz; traces of feldspar and pyrite; trace of shell
- 360-380 " 50% quartz, 40% glauconite, 10% feldspar

PATUXENT FORMATION (388-480') Top of formation defined on basis of other information.

- 380-400 Sand - gray, very slightly clayey; coarse- to very coarse-grained, fairly well sorted, subangular; feldspathic; minor glauconite; accessory garnet and muscovite
- 400-420 " 3-5% glauconite, very feldspathic
- 420-440 " 10% glauconite, feldspathic
- 440-460 " minor glauconite, feldspathic
- 460-480 " trace of glauconite, feldspar

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-188'	Yorktown Formation	Miocene
188-270'	Calvert Formation	Miocene
270-388'	Mattaponi Formation	Paleocene-Late Cretaceous
388-480'	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources  
Robert H. Teifke, Geologist  
March 15, 1968

Robert H. Teifke  
March 6, 1972