

INTERVAL SHEET

WWCR 23

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VDMR WELL NO.: Well No. 1194

Date 11/30/64

Sample Interval: from 0 to 175

PROP: National Park Service
(Poplar Grove Cemetery #2)

Total Depth 175

COMP: Mitchell's Well & Pump Co.

Oil Gas Water X Exploratory

COUNTY: Dinwiddie (Petersburg)

Cuttings X Core Other

VDMR WELL NO: W-1194

From-To	From-To	From-To	From-To	From-To
-	0 - 1	-	-	-
-	1 - 5	-	-	-
-	5 - 10	-	No washed samples	-
-	10 - 15	-	-	-
-	15 - 20	-	-	-
-	20 - 25	-	-	-
-	25 - 30	-	-	-
-	30 - 35	-	-	-
-	35 - 40	-	-	-
-	40 - 45	-	-	-
-	45 - 55	-	-	-
-	55 - 65	-	-	-
-	65 - 75	-	-	-
-	75 - 85	-	-	-
-	85 - 95	-	-	-
-	95 - 105	-	-	-
-	105 - 110	-	-	-
-	110 - 115	-	-	-
-	115 - 125	-	-	-
-	125 - 130	-	-	-
-	130 - 135	-	-	-
-	135 - 145	-	-	-
-	145 - 155	-	-	-
-	155 - 165	-	-	-
-	165 - 170	-	-	-
-	170 - 175	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

OWNER: National Park Service
Poplar Grove Cemetery #2
DRILLER: Mitchell's Well & Pump Company
COUNTY: Dinwiddie

VDMR #1194
WWCR # ~~25~~23
TOTAL DEPTH: 175'

GEOLOGIC LOG

Columbia Group (0-10')

- 0-1 Sand - dark grayish-brown, extremely argillaceous, sand poorly sorted and poorly rounded, some plant material and coal (contamination ?).
- 1-5 Clay - yellowish brown, mottled reddish brown, sandy, ferruginous (limonitic), some plant material and coal (contamination).
- 5-10 Clay - brownish-yellow, very sandy.

Chesapeake Group (10-95')

- 10-15 Sand - brown, with orange cast, very argillaceous, small amount subangular granules, sand poorly sorted, subangular and irregular, small amounts of muscovite and epidote.
- 15-20 Clay - pink, coherent, sandy, sand poorly sorted, angular to subangular, some muscovite.
- 20-25 Sand - brown, with purple cast, very argillaceous, small amount small gravel (subangular quartz and subrounded feldspar), sand poorly sorted, subangular and irregular, arkosic (abundant, white, moderately decomposed microcline), small amounts muscovite, epidote, trace of nodular phosphate.
- 25-30 Sand - buff, moderately argillaceous, small amount small gravel (subangular quartz and a little feldspar), sand medium to very coarse grained, fairly well sorted, subangular to subrounded, irregular, arkosic (abundant, white, relatively fresh microcline), traces of muscovite and epidote.
- 30-35 Sand - yellow, slightly argillaceous, abundant small gravel (up to 10 mm) subangular to subrounded quartz and a little feldspar, sand coarse to very coarse grained, well sorted, subangular to subrounded, moderately arkosic (fresh to moderately decomposed white, subrounded microcline), small amounts muscovite and epidote.

OWNER: National Park Service - Poplar Grove Cemetery #2 (Continued)

- 35-40 Sand - yellowish brown, moderately argillaceous, moderately abundant small gravel (up to 10 mm) subrounded quartz and a little feldspar, sand medium to very coarse grained, fairly well sorted, subangular to subrounded, moderately arkosic (fresh to moderately decomposed white feldspar), small amounts of muscovite, epidote, and tourmaline.
- 40-45 Clay - gray, coherent, sandy, pebbly, clay predominantly gray, with small amounts of pink and yellow (limonitic) clays, sand slightly arkosic (moderately decomposed white feldspar), moderately abundant gravel (up to 20 mm) subrounded to rounded quartz, minor epidote, moderately abundant shell fragments (pelecypods).
- 45-55 Clay (shell marl) - gray, fairly coherent, slightly sandy, extremely fossiliferous (pelecypods predominant, a few gastropods, including Turitella), small amount of chitino-phosphatic shell fragments and worm tubes.
- 55-65 As above.
- 65-75 As above.
- 75-85 Sand - gray, argillaceous, sand fine to medium grained, well sorted, subangular, moderate amount of phosphate (mostly phosphatic plates and shell fragments, but some small nodules and sand-size grains), trace of garnet, very fossiliferous (pelecypods, echinoid spines, gastropods, including Turitella, worm tubes, scaphopods, foraminifera, and ostracods).
- 85-95 Sand - gray, very argillaceous, sand very fine to very coarse grained, poorly sorted, subangular, moderate amount of phosphate, small amounts of muscovite and glauconite, fossiliferous (pelecypods, a few foraminifera).

Petersburg Granite (95-175')

- 95-105 Granite - gray, with purplish cast, microcline-biotite-muscovite granite with abundant pyrite and magnetite and some plagioclase and pink garnet, weathered, with high quartz/feldspar ratio, and much of the biotite altered to chlorite, quartz marked by patches of iron stain that surround altered magnetite inclusions.

OWNER: National Park Service - Poplar Grove Cemetery #2 (Continued)

- 105-110 Granite - gray, speckled brown, as above, but with more and fresher white feldspar, increase of magnetite, scattered grains of green glauconite (fissure deposit ?).
- 110-115 Granite - gray, microcline-biotite-muscovite granite, relatively fresh biotite and white to gray feldspar, abundant magnetite, some pyrite and plagioclase, small amount green glauconite and pink garnet, trace of rutile.
- 115-125 As above, but with abundant orange-pink microcline and small amount of pale green clay.
- 125-130 Granite - gray, microcline-biotite-muscovite granite, pyrite, magnetite, plagioclase, small amount of pale green clay, abundant pelecypod fragments, some coal, and a small amount of plant material (pollution).
- 130-135 As above - but less polluted.
- 135-145 Granite - gray, microcline-biotite-muscovite granite, pyrite, magnetite, sodic plagioclase, small amount pale green clay.
- 145-155 Granite - gray, microcline-biotite-muscovite granite, pyrite, magnetite, sodic plagioclase, small amounts pale green clay, a few grains of green glauconite, and a trace of pink garnet.
- 155-165 Granite - gray, microcline-biotite-muscovite granite, sodic plagioclase, magnetite, pyrite, much of the feldspar in pale orange, some rock fragments have gneissic aspect.
- 165-170 As above.
- 170-175 As above - but with more magnetite, less pyrite.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-10	Columbia group	Quaternary
10-95	Chesapeake group	Miocene
95-175	Petersburg granite	Paleozoic

Virginia Division of Mineral Resources
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