

INTERVAL SHEET

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VDMR Well No: 1511

Date rec'd: 1 March 66

Sample Interval: from 0 to 165

PROP: Lee Park Golf Club, Inc., Well #2

Number of samples: 16

COMP: Mitchell's Well & Pump Co.

Total Depth: 165

COUNTY: Prince George (Petersburg)

Oil or Gas: Water: XExploratory:

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50	-	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 110	-	-	-
110 - 120	-	-	-
120 - 130	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
150 - 165	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

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DRILLER: Mitchell's Well & Pump Company
COUNTY: Prince George (Petersburg)

VDMR #1511
WWCR #159
TOTAL DEPTH: 165'

GEOLOGIC LOG

Columbia Group (0-50')

- 0-10 Sand — buff, argillaceous; medium-grained, fairly well sorted, angular to subangular.
- 10-20 Clay — gray, pale-green, and buff; sandy; sand poorly sorted, poorly rounded; scattered plant fragments.
- 20-30 Sand — orange-brown, argillaceous; medium- to very-coarse-grained, fairly well sorted, angular to subangular; about 5% white to clear, moderately fresh potassic feldspar; much of quartz is iron-stained; traces of tourmaline, muscovite, and brown epidote.
- 30-40 Sand — brown, moderately argillaceous, about 10% very fine gravel (2-6 mm) including abundant feldspar cleavage fragments; coarse- to very-coarse-grained, well-sorted, subangular to subrounded; very arkosic (fresh, white potassic feldspar and some clear plagioclase); small amounts brown and green epidote, blue kyanite, garnet, muscovite, and tourmaline.
- 40-50 Sand — gray, very argillaceous; fine- to medium-grained, well-sorted, angular to subangular; small amounts of hornblende, carbonaceous material, and muscovite; traces of epidote and kyanite.

Yorktown Formation (50-80')

- 50-60 Sand — gray, argillaceous; fine-to medium-grained, well-sorted, angular to subrounded; small amounts of fine-grained phosphorite, feldspar, muscovite, chloritized biotite, epidote, glauconite, hornblende, zircon; a few pelecypod shell fragments and echinoid spines.
- 60-70 Sand — gray, argillaceous; fine- to medium-grained, well-sorted, angular to subangular; small amount of fine, platy phosphorite; traces of garnet and green epidote; 10-20% shell fragments including pelecypods, bryozoa, gastropods (mostly Turritella), and echinoid spines and plates; Yorktown foraminifers and ostracods (miliolids, Amphistegina).
- 70-80 "

OWNER: Lee Park Golf Club, Inc., Well #2

#1511

Calvert Formation (80-110')

80-90 Clay — gray; slightly silty and sandy; trace of glauconite; slightly diatomaceous.

90-100 a few plant fragments.

100-110 more silt and sand.

Pamunkey Group (110-130')

110-120 Sand — black with greenish cast; moderately argillaceous, a few small, rounded pebbles; fine-grained, fairly well sorted, angular to subrounded; clear to greenish quartz (65-70%) and glauconite (30-35%); small amounts muscovite and phosphorite; traces of feldspar, garnet, epidote; a very few foraminifers, fish teeth, and vertebrae.

120-130 Sand — gray; medium- to very-coarse-grained, moderately sorted, angular to subrounded; slightly arkosic (fresh, white and gray potassic feldspar); slightly glauconitic; small amounts of platy phosphorite and muscovite; traces of brown and green epidote.

Patuxent Formation (130-165')

130-140 Sand — light-gray, slightly argillaceous, about 10% fine gravel (granules and very small pebbles); medium- to very-coarse-grained, moderately sorted, subangular to subrounded; arkosic; small amounts of brown epidote, and trace of pyrite.

140-150 "

150-165 Sand and Gravel — gray; 30-40% small, subrounded to rounded pebbles of quartz, quartzite, and feldspar up to 20 mm.; 60-70% sand: clean, medium- to very-coarse-grained, fairly well sorted (skewed coarse), subangular to subrounded; very arkosic (gray and white potassic feldspar).

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-50	Columbia Group	Pliocene-Pleistocene
50-80	Yorktown Formation	Miocene
80-110	Calvert Formation	Miocene
110-130	Pamunkey Group	Eocene
130-165	Patuxent Formation	Lower Cretaceous

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Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
April 11, 1966