

OWNER: Lewis Gardens Service Corporation
DRILLER: Sydnor Hydrodynamics, Inc.
COUNTY: Henrico (Richmond)

VDMR: 1898
WWCR: 195
TOTAL DEPTH: 300'

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0-80')

- 0-10 Sand - orange, trace of clay; medium- to coarse-grained, fairly well-sorted, subangular; iron-oxide-stained quartz; minor feldspar and magnetite
- 10-20 Sand - orange-brown, slightly clayey, 10% very fine-grained gravel; medium grained, moderately sorted, subangular; clear and iron-oxide-stained quartz; minor feldspar, goethite, and magnetite
- 20-30 Sand - orange, very slightly clayey; fine- to coarse-grained, moderately sorted, angular to slightly subrounded; iron-oxide-stained quartz, with minor feldspar, chert, and magnetite
- 30-40 Gravel - brown, matrix of poorly-sorted sand; fine grained, well sorted, rounded; 2-5 mm; stained quartz, with some sandstone, chert and goethite
- 40-50 Gravel - brown; rounded, well sorted; 5-20 mm.; quartz, sandstone and chert
- 50-60 Sand - brown, clean; coarse- to very coarse-grained, well sorted, subangular to subrounded; iron-oxide-stained quartz, chert, rock fragments; minor feldspar; blue quartz common
- 60-70 " "
- 70-80 " "

NANJEMOY FORMATION (80-120')

- 80-90 Silt - Sand - dark greenish-gray, very clayey; coarse silt to very fine-grained sand, composed of clear, angular quartz (80%) and black glauconite (20%)
- 90-100 Sand - black, very clayey; fine- to very fine-grained, very well-sorted, angular; 55% clear to greenish quartz, 35% black glauconite, 10% macerated shell material; trace of muscovite; a few foraminifers

OWNER: Lewis Gardens Service Corporation

#1898

100-110 Sand - black, very clayey; fine- to very fine-grained, very well-sorted, angular; 50% clear to greenish quartz, 30% black glauconite, 20% small shell fragments; trace of muscovite; a few foraminifers

110-120 " "

PATUXENT FORMATION (120-300')

120-130 Sand - light- to medium-gray, moderately clayey; fine- to coarse-grained, poorly sorted, angular to subangular; about 5% glauconite; slightly feldspathic; traces of garnet, muscovite, phosphorite, and shell fragments

130-140 " "

140-150 " moderately feldspathic

150-160 Sand - gray, very slightly clayey, trace of granule gravel; coarse, moderately sorted; angular clear quartz, abundant fresh feldspar; slightly glauconitic; minor garnet; trace of kyanite

160-170 " "

170-180 " medium- to very coarse-grained

180-190 " "

190-200 " "

200-210 Sand - brownish-gray, abundant matrix of variegated clay, 5% fine gravel; fine- to very coarse-grained, poorly sorted, poorly rounded; feldspathic; slightly glauconitic

210-220 " "

220-230 Sand and Gravel - matrix of brick-red clay; 30% subangular to subrounded granule gravel; medium- to very coarse-grained, moderately sorted, poorly rounded; clear and stained (orange) quartz; slightly to moderately feldspathic; very slightly glauconitic; trace of garnet

230-240 " "

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- 240-250 Sand and Gravel - light-gray, tan clay binder; 30-40% granule gravel (quartzo-feldspathic); sand (60-70%) is coarse- to very coarse-grained, fairly well-sorted, subangular to subrounded; feldspathic; quartz is clear, frosted in aspect; feldspar is flat, pure white (sand and gravel fractions)
- 250-260 " "
- 260-270 " "
- 270-280 Sand - matrix of purplish clay, 5% fine-grained gravel; medium- to very coarse-grained, moderately sorted, subangular; clear, frosted quartz with abundant flat, pure-white feldspar; minor garnet and glauconite
- 280-290 " matrix of reddish-brown clay
- 290-300 " "

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-80	Columbia Group	Pleistocene
80-120	Nanjemoy Formation	Middle Eocene
120-300	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources
 Robert H. Teifke, Geologist
 October 13, 1967

Elev 155' topo

(143)

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DRIER : Sydnor Hydrodynamics, Inc. WPCA : 195
COUNTY : Henrico (Richmond)
 (Richmond field)

TOTAL DEPTH : 300'

GEOLOGIC LOG

Depth
in
feet

COLUMBIA GROUP (0-80')

0-10 Sand - orange, trace of clay; medium-
to coarse-grained, fairly well-sorted,
subangular; non-^{oxide} stained quartz; minor
feldspar and magnetite,

10-20 Sand - orange-brown, slightly clayey, 10%
very fine-grained gravel; medium grained,
moderately sorted, subangular; clean
and non-^{oxide} stained quartz; minor feldspar,
goethite, and magnetite,

20-30 Sand - orange, very slightly clayey; fine-
to coarse-grained, moderately sorted, angu-
lar to slightly subrounded; non-^{oxide} stained
quartz, with minor feldspar, chert, and
magnetite,

30-40 Gravel - brown, matrix of poorly-sorted sand;
fine grained, well sorted, rounded;
2-5 mm; stained quartz, with some
sandstone, chert and goethite,

40-50 Gravel - brown; rounded, well sorted;
5-20 mm; quartz, sandstone and chert,

f. 2002

50-60 Sand - brown, clean; ^{coarse- to} very coarse-grained, well sorted, ^{subangular to} subrounded; iron ^{oxide} stained quartz, chert, rock fragments; minor feldspar; blue quartz common,

60-70 " "

70-80 " "

NANTJEMOY FORMATION (80-120')

80-90 Silt-sand - dark greenish-gray, very clayey; coarse silt to very fine-grained sand, composed of clean, angular quartz (80%) and black glauconite (20%),

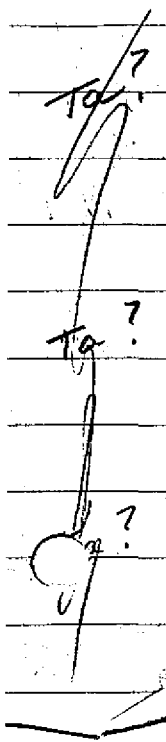
90-100 Sand - black, very clayey; ^{fine- to} very fine-grained, very well-sorted, angular; (55% clean to greenish quartz), (35% black glauconite), (10% mottled shell material); trace of muscovite; a few foraminifera,

100-110 " 20% small shell fragments; 50% quartz, 30% black glauconite,

110-120 " "

PATUXENT FORMATION (120-350')

120-130 Sand - light- to medium-gray, moderately clayey; fine- to coarse-grained, poorly sorted, angular to subangular; about 5% glauconite; slightly feldspathic; traces of garnet, muscovite, phosphite, and shell fragments;



7m?

130-140

"

"

/

7m?

140-150

"

moderately feldspathic /

150-160

Sand - gray, very slightly clayey, trace of granule gravel; coarse, moderately sorted; angular clear quartz, abundant fresh feldspar; slightly glauconitic; minor garnet; trace of kyanite /

160-170

"

"

/

170-180

"

medium to very coarse-grained /

180-190

"

"

/

190-200

"

"

/

200-210

Sand - brownish-gray, abundant matrix of variegated clay; 5% fine gravel; fine to very coarse-grained, poorly sorted, poorly rounded; feldspathic; slightly glauconitic /

210-220

"

"

/

220-230

Sand and gravel - matrix of brick-red clay; 30% subangular to subrounded granule gravel; medium to very coarse-grained, moderately sorted, poorly rounded; clear and stained (orange) quartz; slightly to moderately feldspathic; very slightly glauconitic; trace of garnet /

230-240

"

"

/

and Gravel
 240-250 Sand - light-gray, tan clay binder; 30-40% granule gravel (quartz-feldspathic); sand (60-70%) is coarse to very coarse-grained, fairly well-sorted, subangular to subrounded; ^{feldspathic;} quartz is clear, fractured in aspect; feldspar is flat, pure white (sand and gravel fractions); garnet is absent.

250-260

"

"

260-270

"

"

270-280

Sand - matrix of purplish clay, 5% fine-grained gravel; medium to very coarse-grained, moderately sorted, subangular; clear, fractured quartz with abundant flat, pure-white feldspar; minor garnet and glaucophane.

280-290

"

matrix of reddish-brown clay,

290-300

"

"

GEOLOGIC SUMMARY

Rock Name

Age

0-80'

Columbia Group

Pleistocene

80-110'

Naujeimy Formation

Middle Eocene

120-300'

Potuxent Formation

Early Cretaceous

VDMR

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