

INTERVAL SHEET

C-321

VDMR WELL NO.: 509

Sample Interval: from 0 to 326

Total Depth

Oil Gas Water X Exploratory

Cuttings X Core Other

Page 1

Date 8/8/61

PROP: Henrico Co. Schools

COMP: Mitchell

COUNTY: Henrico (Richmond Jennings Road)

WASHED SAMPLES

From-To	From-To	From-To	From-To	From-To
0-5	290-300	-	-	-
5-10	300-310	-	Complete set of	-
10-20	310-326	-	sampled intervals	washed
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	-	-	-	-
150-160	-	-	-	-
160-170	-	-	-	-
170-180	-	-	-	-
180-190	-	-	-	-
190-200	-	-	-	-
200-210	-	-	-	-
210-220	-	-	-	-
220-230	-	-	-	-
230-240	-	-	-	-
240-250	-	-	-	-
250-260	-	-	-	-
260-270	-	-	-	-
270-280	-	-	-	-
280-290	-	-	-	-

OWNER: Henrico Co. Schools
DRILLER: Mitchell
COUNTY: Henrico (Jennings Road)

W#: 509
C#: 321
TOTAL DEPTH: 326'
QUAD.: Seven Pines

GEOLOGIC LOG

Depth
(feet)

- 0-5 Sand — light gray; moderate clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite; few opaques.
- 5-10 As above.
- 10-20 Sand — light grayish yellow; moderate clay; fine to medium grained, some very fine grains; subangular to subrounded; moderately well sorted; quartz; feldspar; some glauconite.
- 20-30 Sand — pale yellowish orange; abundant clay; very fine to medium grained, few granules; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of glauconite; muscovite.
- 30-40 Sand — dark yellowish orange; heavily stained; slightly clayey; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; feldspar; some opaques; few grains of glauconite; muscovite.
- 40-50 Sand — dark yellowish orange; slightly stained; moderate clay; fine to medium grained, 20% granules, 10% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few grains of glauconite; few opaques.
- 50-60 Sand — dusky yellow; fine to medium grained, some coarse grains, 5% granules, 15% gravel (4-16 mm); subangular to subrounded; poorly sorted; quartz; feldspar; some muscovite; few grains of glauconite; few black phosphatic fragments.
- 60-70 Sand and clay — yellowish gray; moderate clay; abundant sand; fine to medium grained, 15% granules, 10% pebbles (4-18 mm); subangular to subrounded; poorly sorted; quartz; feldspar; some muscovite; few black phosphatic fragments; glauconite.
- 70-80 Sand — yellowish gray; abundant clay; very fine to fine grained, some medium grains, 3% granules, few pebbles; subangular to subrounded; moderately sorted; quartz; some glauconite; some feldspar; muscovite; few black phosphatic fragments.
- 80-90 Clay — yellowish gray; abundant sand; fine to coarse grained, 3% granules, few pebbles; subangular to subrounded; poorly sorted; quartz; 5% black phosphatic material; some glauconite; some feldspar; muscovite.
- 90-100 Clay — olive light gray; abundant sand; very fine to medium grained, some coarse grains, 5% granules, 2% pebbles; subangular to subrounded; poorly sorted; quartz; 2% glauconite; some muscovite; few grains of feldspar.

Depth
(feet)

- 100-110 Clay — very light gray, light olive gray; moderate sand; fine to coarse grained, 3% granules, 3% pebbles; subangular to subrounded; moderately sorted; quartz; some black phosphatic material; some glauconite; some muscovite.
- 110-120 As above except pinkish gray; 2% black phosphatic material.
- 120-130 Sand — dusky yellow; slightly clayey; moderate silt; fine to medium grained, some coarse grains, 5% granules, few pebbles; subangular to subrounded; moderately sorted; quartz; 7% glauconite; feldspar; some muscovite; few black phosphatic fragments.
- 130-140 Sand — olive gray; slightly clayey; very fine to very coarse grained, 2% granules; subangular to rounded; poorly sorted; 60% glauconite; quartz; 2% shell fragments; some muscovite..
- 140-150 Sand — olive light gray; moderate clay; very fine to medium grained, few granules; subangular to rounded; moderately sorted; quartz; 40% shell fragments; 20% glauconite; some muscovite.
- 150-160 Clay — medium light gray; abundant sand; very fine grained to granular, 5% pebbles; subangular to rounded; poorly sorted; quartz; 30% shell fragments; 20% glauconite; some feldspar; muscovite.
- 160-170 As above except 25% shell fragments; 25% glauconite.
- 170-180 Clay — light brown; abundant sand; medium grained to gravel (20%); subangular to subrounded; poorly sorted; quartz; feldspar; 2% glauconite; 2% shell fragments.
- 180-190 Clay — light reddish brown; abundant sand; coarse grained to granular (40%), 5% pebbles; subrounded; poorly sorted; quartz; feldspar; 3% shell fragments; 2% glauconite.
- 190-200 Clay — dusky yellow, light reddish brown; slightly sandy; fine to coarse grained, 10% granules, some pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; some muscovite; some glauconite.
- 200-210 As above except light reddish brown; moderate sand.
- 210-220 Sand — very pale yellowish orange; slightly clayey; medium grained to granular, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of glauconite; muscovite.

Depth
(feet)

- 220-230 Clay — dusky yellow; moderate sand; medium to coarse grained, 15% granules, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of glauconite.
- 230-240 Sand — white; slightly clayey; coarse grained to granular, some medium grains, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
- 240-250 As above except grayish yellow; no pebbles.
- 250-260 As above plus some muscovite.
- 260-270 Sand — white; slightly clayey; coarse grained to granular, 3% pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
- 270-280 As above plus some medium grains; some pebbles.
- 280-290 Sand — white; slightly clayey; coarse to very coarse grained, 2% granules; subrounded; moderately well sorted; quartz; feldspar; few grains of garnet; muscovite.
- 290-300 As above except few pebbles.
- 300-310 Sand — light olive gray; moderate clay; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar.
- 310-326 Sand — light brown; abundant clay; fine grained to granular; subangular to subrounded; poorly sorted; quartz; feldspar; some garnet; muscovite.

Logged by: Michael T. Currie

OWNER: Henrico County Schools

W: 509

GEOLOGIC SUMMARY

<u>Depth (feet)</u>	<u>Thickness (feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0-50	50	Columbia Group	Pleistocene
50-80	30	Eastover	
80-130	50	Calvert	
130-150	20	Nanjemoy Formation	Eocene
150-210	60	Marlboro Clay	Eocene
210-326	116	Patuxent Formation	Cretaceous

VDMR
David A. Hubbard, Jr., Geologist
December 5, 1978

Reproduced by Jessee Standbridge – March 7, 2011

160

-4-

GEOLOGIC SUMMARY

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0-50	50	Columbia Group	Pleistocene
50-80	30	Eastover	
80-130	50	Calvert	
130-150	20	Nanjemo Formation	Eocene
150-210	60	Marlboro Clay	Eocene
210-326	116	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES

David A. Hubbard, Jr., Geologist

December 5, 1978