

INTERVAL SHEET

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VDMR Well No.: 750 WWCRC #62

Date 11-19-62

Sample Interval: from 2 to 320

PROP: Brandy Creek Estates

Total depth 320

COMP: Mitchell's

Oil Gas Water X Exploratory

COUNTY: Hanover (Mechanicsville)

Cuttings X Core Other

From-To	From-To	From-To	From-To	From-To
-	0-2	No sample	300 - 310	-
-	2 - 10		310 - 320	-
-	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 - 160		-	-
-	160 - 170		-	-
-	170 - 170		-	-
-	180 - 190		-	-
-	190 - 200		-	-
-	200 - 210		-	-
-	210 - 220		-	-
-	220 - 230		-	-
-	230 - 240		-	-
-	240 - 250		-	-
-	250 - 260		-	-
-	260 - 270		-	-
-	270 - 280		-	-
-	280 - 290		-	-
-	290 - 300		-	-

Complete set of sample intervals

OWNER: Brandy Creek Estates
(Mitchell Water Supply)
DRILLER: Mitchell's Well and Pump Company
COUNTY: Hanover (Mechanicsville)

VDMR # 750
WWCR # 61 62
TOTAL DEPTH: 320

SAMPLE DESCRIPTION
(Washed samples)

PLEISTOCENE (0'-90')

- 0-2 No samples
- 2-10 Sand - light brown, clear to milky quartz, fine grained to granules, angular to rounded, trace of white feldspar.
- 10-20 Sand - clean, clear to milky quartz, fine to coarse grained, angular to subrounded, traces of white feldspar, and iron oxide.
- 20-30 Sand - clear to milky quartz, fine grained to granules, subangular to rounded, traces of white feldspar, and of blue quartz.
- 30-40 Sand - clear to milky quartz, fine grained to granules, subangular to subrounded, traces of white feldspar, iron staining, and blue quartz.
- 40-50 Sand - clear to milky quartz, fine grained to pebbles, angular to subangular, traces of white feldspar, blue quartz and iron staining.
- 50-60 Sand - clean, clear to milky quartz, fine to coarse grained, subangular to subrounded,
- 60-70 Sand - clean, clear to milky quartz, fine grained to granules, angular to subrounded, trace of blue quartz,
- 70-80 Sand - light brown, clear to milky quartz, fine grained to pebbles, subangular to subrounded, traces of iron staining and feldspar.
- 80-90 Sand and gravel - clear, milky and rose quartz, fine grained to pebbles, subangular to rounded, trace of iron staining.

CALVERT FORMATION (90'-110')

- 90-100 Sand - light gray, quartz, very fine to coarse grained, rounded to subrounded.
- 100-110 Sand - light gray, quartz, very fine to coarse grained, rounded to subrounded.

NANJEMOY FORMATION (110'-150')

- 110-120 Sand - black and white with some light green, quartz, glauconitic, very fine grained to granules, subangular to well rounded, 60% glauconite.
- 120-130 As above
- 130-140 Sand - black and white, quartz, glauconitic, fine to course grained, subangular to subrounded, 2% fossil fragments, trace of pyrite.
- 140-150 Siltstone - light gray, glauconitic, fine grained, subangular, argillaceous, slightly micaceous, poorly sorted, poorly consolidated.

AQUIA FORMATION (150'-220')

- 150-160 Sand - light gray, quartz, glauconitic, micaceous, course grained, rounded to subangular, poorly sorted.
- 160-170 Sand - light gray, quartz, glauconitic, micaceous, fine to coarse grained, rounded to subangular, heavy trace of shell fragments, trace of pyrite.
- 170-180 As above
- 180-190 Sand - light gray, argillaceous, slightly micaceous, fine to coarse grained, rounded to subangular, heavy trace of shell fragments, traces of pyrite, iron oxide and microfossils.
- 190-200 As above
- 200-210 Sand - light gray, glauconitic, slightly micaceous, fine to coarse grained with granules of black glauconite, subangular, 5% glauconite, heavy trace of shell fragments.

OWNER: Brandy Creek Estates
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210-220 Marl - light gray, slightly calcareous, micaceous and silty, very fine grained with trace of pebble-size quartz, poorly sorted, poorly consolidated, trace of glauconite, slight trace of shell fragments.

PATUXENT FORMATION (220'-320')

220-230 Sand - clear, milky and rose quartz, argillaceous, arkosic, silty, fine grained to pebbles, compacted, poorly consolidated, trace of iron staining.

230-240 As above

240-250 Sand - clear to milky quartz, arkosic, medium grained to pebbles, rounded to subrounded, compacted.

250-260 Sand - clear and milky quartz with trace of rose quartz, arkosic, medium grained to pebbles, compacted, subangular to subrounded.

260-270 Sand - clear and milky quartz with some rose quartz, arkosic, argillaceous, fine grained to granules, subangular to subrounded, compacted.

270-280 Sand - clear and milky quartz with some rose quartz, arkosic, fine grained to granules, subangular to subrounded, compacted.

280-290 As above

290-300 Sand and gravel - clear, milky and rose quartz, arkosic medium grained to gravel, subangular to subrounded, compacted.

300-310 As above

310-320 Sand - clear to milky quartz, arkosic, medium grained to gravel, subangular to subrounded, compacted.

OWNER: Brandy Creek Estates
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(Continued)

#750

GEOLOGIC SUMMARY

	<u>AGE</u>	<u>FORMATION OR UNIT</u>
0-90	Pleistocene	Columbia group
90-110	Miocene	Calvert formation
110-150	Eocene	Nanjemoy formation
150-220	Eocene	Aquia formation
220-320	Lower Cretaceous	Patuxent formation

Virginia Division of Mineral Resources
Merrick S. Whitfield, Geologist
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