

## INTERVAL SHEET

Page 1VDMR Well No.: Well No. 749, WWCR # 61Date 11/7/62Sample Interval: from 0 to 320

PROP: Dogwood Knoll Subdivision

Total depth 320

COMP: Mitchell's

Oil \_\_\_\_\_ Gas \_\_\_\_\_ Water X Exploratory \_\_\_\_\_

COUNTY: Hanover

Cuttings X Core \_\_\_\_\_ Other \_\_\_\_\_

(Mechanicsville)

VDMR Well No: W - 749

From-To	From-To	From-To	From-To	From-To
-	0 - 10	290 - 300	-	-
-	10 - 20	300 - 303	-	-
-	20 - 30	303 - 310	-	-
-	30 - 40	310 - 320	-	-
-	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 - 275	-	-	-
-	275 - 280	-	-	-
-	280 - 290	-	-	-

OWNER: Dogwood Knoll Subdivision VDMR # 749  
(Mitchell Water Supply) WWCR # 61  
DRILLER: Mitchell's Well and Pump Company TOTAL DEPTH: 320  
COUNTY: Hanover (Mechanicsville)

SAMPLE DESCRIPTION  
(Washed samples)

COLUMBIA GROUP (0-60')

- 0-10 Sand - clear and milky quartz, very fine to coarse grained, subangular to subrounded, argillaceous, trace of white feldspar and iron staining.
- 10-20 Sand - clear and milky quartz, very fine to coarse grained, subangular to subrounded, trace of iron-cemented sandstone, white feldspar and blue quartz.
- 20-30 As above
- 30-40 Sand - clear and milky quartz, very fine grained to granules, subrounded, heavy trace of white feldspar, trace of blue quartz and iron oxide.
- 40-50 Sand - clear and milky quartz, very fine grained to pebbles, rounded to subrounded, trace of white feldspar, and blue quartz, slight trace of black sand.
- 50-60 Sand - clear and milky quartz, very fine grained to pebbles, rounded to subangular, trace of white feldspar and blue quartz, slight trace of iron-stained mica.

CALVERT FORMATION (60'-120')

- 60-70 Sand - light gray, clear to milky quartz, very fine grained, subrounded, trace of fine mica flakes.
- 70-80 As above
- 80-90 Sand - light gray, clear to milky quartz, fine grained, subrounded, trace of quartz granules, heavy trace of iron-stained mica, trace of iron oxide.
- 90-100 Sand - light gray, clear to milky quartz, fine grained, subrounded, trace of fine mica flakes.

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100-110 As above

110-120 Sand - light gray, clear to milky quartz, fine grained, subrounded.

NANJEMOY FORMATION (120'-200')

120-130 Sand - light gray, clear to milky quartz, fine grained, subrounded, trace of glauconite.

130-140 Sand - dark green to black, glauconitic, fine grained, subrounded, well sorted, slightly calcareous, 60% glauconite, 35% clear quartz, heavy trace of fine mica flakes, trace of fossil fragments.

140-150 Sand - green and light gray, glauconitic, fine grained, subrounded, well sorted, 60% clear quartz, 35% glauconite, 4% mica, trace of microfossils.

150-160 Sand - light gray, fine grained, subrounded, well sorted, 90% quartz, 10% glauconite, 1% mica.

160-170 Sand - light gray, fine grained, subrounded, well sorted, 90% quartz, 5% glauconite, 2% mica.

170-180 Sand - light gray to light green, clear quartz, very fine to fine grained, subrounded, poorly sorted, 10% glauconite, 2% mica, 2% fossil fragments.

180-190 Clay and sand - light gray, very fine to fine grained, poorly sorted, 1% glauconite, 1% mica, 1% fossil fragments.

190-200 Clay and sand - light gray, very fine to fine grained, poorly sorted, 1% glauconite, 1% mica, trace of fossil fragments.

AQUIA FORMATION (200'-240')

200-210 Sand - light gray and light green, very fine to coarse grained, 10% fossil fragments, 5% glauconite, trace of microfossils and iron staining.

210-220 As above

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- 220-230 Sand - light gray, fine grained to pebbles, argillaceous,  
15% glauconite, 10% fossil fragments, heavy trace of  
iron-stained clay.
- 230-240 Sand - light gray, very fine grained to pebbles, argillaceous,  
angular to rounded, 3% glauconite, 2% shell fragments.

PATUXENT FORMATION (240'-320')

- 240-250 Sand - white, clear quartz, medium grained to pebbles,  
rounded to subangular, trace of white feldspar,  
slight trace of shell fragments.
- 250-260 Sand - light gray, clear to milky quartz, fine grained to  
pebbles, angular to subangular, compacted, trace  
of musconite and white feldspar.
- 260-270 Sand - white, clear to milky quartz, fine grained to pebbles,  
angular to well rounded, compacted, argillaceous,  
5% yellow clay, trace of feldspar and iron staining.
- 270-275 Sand - white, clear to milky quartz, fine grained to pebbles,  
angular to rounded, compacted, trace of white  
feldspar.
- 275-280 As above
- 280-290 As above
- 290-300 Sand - white to tan, clear to milky quartz, fine grained to  
pebbles, subrounded to angular, compacted, heavy  
trace of iron staining.
- 300-303 Sand - white to tan, clear to milky quartz, fine grained to  
pebbles, angular to subangular, trace of feldspar.
- 303-310 Sand - white, clear quartz, medium grained to granules,  
angular to subrounded, compacted, trace of white  
feldspar and iron staining, slight trace of biotite.
- 310-320 As above

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GEOLOGIC SUMMARY

	<u>AGE</u>	<u>FORMATION OR UNIT</u>
0-60	Pleistocene	Columbia group
60-120	Miocene	Calvert formation
120-200	Eocene	Nanjemoy formation
200-240	Eocene	Aquia formation
240-320	Lower Cretaceous	Patuxent formation

Virginia Division of Mineral Resources  
Merrick S. Whitfield, Geologist  
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