

VIRGINIA DIVISION OF MINERAL RESOURCES  
INTERVAL SHEET

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C- 117  
Well Repository No: W-2417

Date rec'd: 1/22/69

Sample Interval: from 0 to: 600'

PROP: E. G. Wade Subdivision

Number of samples: 60

COMP: Sydnor Hydrodynamics, Inc.

Total Depth: 600'

COUNTY: Hanover (Mechanicsville)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To
0 - 10	300 - 310	-	-
10 - 20	310 - 320	-	-
20 - 30	320 - 330	-	-
30 - 40	330 - 340	-	-
40 - 50	340 - 350	-	-
50 - 60	350 - 360	-	-
60 - 70	360 - 370	-	-
70 - 80	370 - 380	-	-
80 - 90	380 - 390	-	-
90 - 100	390 - 400	-	-
100 - 110	400 - 410	-	-
110 - 120	410 - 420	-	-
120 - 130	420 - 430	-	-
130 - 140	430 - 440	-	-
140 - 150	440 - 450	-	-
150 - 160	450 - 460	-	-
160 - 170	460 - 470	-	-
170 - 180	470 - 480	-	-
180 - 190	480 - 490	-	-
190 - 200	490 - 500	-	-
200 - 210	500 - 510	-	-
210 - 220	510 - 520	-	-
220 - 230	520 - 530	-	-
230 - 240	530 - 540	-	-
240 - 250	540 - 550	-	-
250 - 260	550 - 560	-	-
260 - 270	560 - 570	-	-
270 - 280	570 - 580	-	-
280 - 290	580 - 590	-	-
290 - 300	590 - 600	-	-

All intervals have both washed and unwashed samples.

OWNER: E. G. Wade Subdivision  
DRILLER: Sydnor Hydrodynamics, Inc.  
COUNTY: Hanover (Mechanicsville)

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TOTAL DEPTH- 600'

GEOLOGIC LOG

Depth  
in feet

COLUMBIA GROUP (0-50')

- |       |   |
|-------|---|
| 0-10  | Sand — pink, silty, weathered and iron-oxide stained; fine to very fine grained, angular to subangular, fairly well sorted; quartz, feldspar and magnetite, with minor amount of clay                               |
| 10-20 | " light tan, less iron-oxide staining; minor amounts of very coarse sand and quartzo-feldspathic gravel   |
| 20-30 | Gravel — light tan to tan, sandy, slightly oxidized; rounded to subrounded quartzo-feldspathic gravel, with minor amount of very fine to medium grained, angular to subangular quartz sand; traces of silt and clay |
| 30-40 | "   |
| 40-50 | "   |

CALVERT FORMATION (50-130')

- |       |   |
|-------|---|
| 50-60 | Sand — gray, silty; angular to subangular, very fine to fine grained sand, with minor amounts of clay and quartzo-feldspathic gravel; quartz, with traces of feldspar, apatite, magnetite, and garnet; trace of shell fragments |
| 60-70 | "   |
| 70-80 | " increase in amount of gravel  |
| 80-90 | Clay — gray, silty, with fine to very fine grained angular to subrounded sand and rounded to angular gravel; quartz, with traces of glauconite, apatite and phosphate nodules   |

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- 90-100 Clay — gray, silty, with fine to very fine grained angular to subrounded sand and rounded to angular gravel; quartz, with traces of glauconite, apatite and phosphate nodules
- 100-110 " increase in clay and silt fractions, less gravel
- 110-120 " "
- 120-130 " "

NANJEMOY FORMATION (130-170')

- 130-140 Sand — dark gray, glauconitic, silty and clayey; very fine to medium grained, rounded to subangular sand with clay, silt and trace of gravel; quartz, with minor amount of glauconite and trace of phosphate nodules
- 140-150 Clay — gray and pink, silty, with very fine to fine grained sand; quartz, with traces of glauconite and phosphate nodules
- 150-160 Sand — gray, silty; very fine to medium grained, rounded to subangular sand, with minor amounts of gravel and clay; quartz, glauconite, and phosphate nodules with trace of pyrite; minor amount of pink silty clay, trace of shell fragments
- 160-170 Clay — gray and pink, silty, with fine to fine grained sand; quartz, with traces of phosphate nodules and glauconite

MATTAPONI FORMATION (170-180')

- 170-180 Sand — dark gray, gravelly and glauconitic ; very fine to medium grained, rounded to subangular, with minor amount of gravel and traces of silt and clay; quartz, glauconite and some phosphate nodules; trace of shell fragments

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PATUXENT FORMATION (180-220')

180-190	Gravel — gray; fairly well sorted, rounded to subrounded, with minor amounts of clay, silt, and sand; quartz, feldspar, glauconite, and a few granitic rock fragments; traces of shark teeth
190-200	"
200-210	"
210-220	"

PETERSBURG GRANITE (220-600')

220-230	Granite — pinkish-gray, fine to medium grained; feldspar and quartz, with minor amount of biotite
230-240	"
240-250	"
250-260	"
260-270	"
270-280	"
280-290	"
290-300	"
300-310	"
310-320	"
320-330	"
330-340	"
340-350	" about 40% of the fragments are gray, very micaceous biotite granite
350-360	" "

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360-370	Biotite granite — gray, fine to medium grained, micaceous, slightly foliated; feldspar, quartz and biotite
370-380	"
380-390	"
390-400	"
400-410	"
410-420	"
420-430	"
430-440	Granite — light tan, medium to coarse grained; feldspar and quartz, with minor amounts of biotite and muscovite; trace of pink garnet
440-450	"
450-460	"
460-470	"
470-480	"
480-490	"
490-500	Biotite granite — gray, fine to medium grained, micaceous, slightly foliated; feldspar, quartz, and biotite, with trace of pink garnet
500-510	"
510-520	" dark gray; increase in amount of biotite
520-530	" "
530-540	" "
540-550	" "

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550-560	Biotite granite — dark gray, fine to medium grained, very micaceous, slightly foliated; feldspar, quartz and biotite, with trace of pink garnet; light green stains on many of the quartz and feldspar crystals
560-570	"
570-580	"
580-590	"
590-600	"

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-50'	Columbia Group	Pleistocene
50-130'	Calvert Formation	Miocene
130-170'	Nanjemoy Formation	Eocene
170-180'	Mattaponi Formation	Paleocene
180-220'	Patuxent Formation	Cretaceous
220-600'	Petersburg Granite (?)	Paleozoic (?)

Virginia Division of Mineral Resources  
Robert G. Willson, Geologist  
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