

INTERVAL SHEET

WWCR 61

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VDMR Well No.: Well No. 1145

Date 10/9/64

Sample Interval: from 0 to 400

PROP: Boones Mill  
 COMP: Elementary School #1  
Martin Drilling

Total depth 400

COUNTY: Franklin (Boones Mill)

Oil  Gas  Water  Exploratory

Cuttings  Core  Other

VDMR Well No: W-1145

Washed samples

From-To	From-To	From-To	From-To	From-To
-	-	0 - 5	260 - 270	-
-	-	5 - 10	270 - 280	-
-	-	10 - 15	280 - 290	-
-	-	15 - 20	290 - 300	-
-	-	20 - 25	300 - 310	-
-	-	25 - 30	310 - 320	-
-	-	30 - 35	320 - 330	-
-	-	35 - 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	-	-
-	-	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	-	-

\* No sample

OWNER: Franklin County School Board  
Boones Mill Elementary School - Well #1  
DRILLER: Frank W. Martin Drilling Company  
COUNTY: Franklin (Boones Mill)

VDMR #1145  
WWCR #61  
TOTAL DEPTH: 400'

GEOLOGIC LOG

Overburden (0-15')

- 0-5 Overburden — brownish-orange, medium- to very-fine-grained, clay, quartz, mica; minor fragments, gray schist, and organic material.
- 5-10 Overburden — medium-brownish-gray; fine-grained sand; brownish-orange clay; fragments; gray mica schist, vein quartz, sandstone, iron stained phyllite.
- 10-15 As above.

Lynchburg Formation (15-320')

- 15-20 Saprolitic Phyllite — orange, brown, and gray, very-fine-grained, foliated, iron oxide stain common; muscovite, quartz, biotite, dusty opague; pyrite and carbonaceous material; minor cherty sandstone.
- 20-25 As above — no sandstone.
- 25-30 As above — iron oxide after garnet.
- 30-35 As above.
- 35-40 As above.
- 40-50 As above.
- 50-60 Phyllite — medium-gray, very-fine-grained, foliated; quartz, biotite, garnet (to 1 mm) fine-grained pyrite.
- 60-70 Phyllite — dark-gray, very-fine-grained, foliated; quartz, biotite, garnet (average size 1 mm), pyrite common on fractures and foliation, fine-grained pyrrhotite throughout; porous.
- 70-80 As above.
- 80-90 No sample.
- 90-100 Schist - medium-dark-gray, grain size: 0.1-0.3 mm; quartz, muscovite, biotite, garnet, pyrrhotite; minor calcite, zircon, amphibole.

- 100-110 Phyllite — dark-gray, very-fine-grained, foliated; quartz, biotite, muscovite, garnet, pyrrhotite.
- 110-120 As above.
- 120-130 As above.
- 130-140 Schist — medium-gray; quartz (0.1-2.0 mm grain size), biotite, pyrrhotite, minor garnet.
- 140-150 Phyllite — dark-gray, very-fine-grained, fissile; quartz, mica, pyrrhotite, garnet.
- 150-160 As above.
- 160-170 As above — more quartz and garnet.
- 170-180 As above.
- 180-190 Phyllite — medium-dark-gray, very-fine-grained, fissile; quartz, mica, pyrrhotite, garnet.
- 190-200 Quartz Schist — medium-light-gray, 0.1 to 2.0 mm grain size; quartz, mica, pyrrhotite, garnet.
- 200-210 Phyllite and Quartz Schist — dark-gray, very-fine-grained, foliated phyllite interbedded with light gray, friable quartz schist; quartz, mica, garnet, feldspar, pyrrhotite.
- 210-220 Phyllite — dark-gray, fine-grained, fissile; mica, quartz, pyrrhotite, minor garnet; minor slickensides.
- 220-230 Phyllite and Quartz Schist — dark-gray, fine-grained, foliated phyllite interbedded with friable, medium-gray, quartz-biotite schist; quartz, mica, garnet, pyrrhotite.
- 230-240 As above.
- 240-250 As above
- 250-260 Schist — dark-gray, grain size range 0.1-1 mm, foliated; mica, quartz garnet, and pyrrhotite.
- 260-270 As above.
- 270-280 As above.
- 280-290 As above.

- 290-300 Quartz Gneiss — light-gray, grain size range 0.2-3 mm; quartz, minor biotite, pyrite, calcite, feldspar.
- 300-310 As above — slightly darker and interbedded with dark-gray, fine-grained phyllite with garnet and pyrrhotite.
- 310-320 Quartz Schist — medium-gray, grain size; 0.2-0.5 mm; quartz, mica, pyrrhotite, garnet.

Amphibolite (320-400')

- 320-330 Amphibolite and Calcite Vein — dark-green and white, blades of hornblende (1-10 mm), fine-grained quartz, plagioclase and garnet, minor biotite, and muscovite, trace pyrrhotite; vein calcite and quartz.
- 330-340 As above — no vein calcite; no garnet.
- 340-350 Amphibolite — very-dark-green and white, hornblende (0.3 x 1 mm to 3 x 6 mm), quartz and plagioclase (0.2-2 mm), minor muscovite, biotite, epidote, trace of pyrrhotite.
- 350-360 As above.
- 360-370 As above.
- 370-380 As above — no pyrrhotite.
- 380-390 As above.
- 390-400 As above.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-15	Overburden	Recent
15-320	Lynchburg Formation	Precambrian
320-400	Amphibolite	Ordovician ?

Note: the dark color of the phyllites of this log were due to a finely disseminated opaque mineral which may be graphite or an iron sulfide or both.

Virginia Division of Mineral Resources  
 Hollis N. Walker, Geologist  
 February 9, 1965