

OWNER: Dr. A. W. Pleasants, Jr.
DRILLER: Sydnor Pump and Well Co., Inc.
COUNTY: Rockbridge (Lexington)

VDMR #666
WWCR # 62
DEPTH: 413'

SAMPLE EXAMINATION
(unwashed)

- 0-60 SOIL - yellow to orange, soft, argillaceous, with 10% coarse, subrounded, quartz sand
- ORDOVICIAN WHITESBURG LIMESTONE
- 82 LIMESTONE - light gray, hard, massive, very fine grained, moderately calcareous, (BEDROCK IN INTERVAL BETWEEN 60-82 FEET)
- 103 LIMESTONE - medium gray, hard, massive, fine grained, moderately calcareous with small white veinlets of calcite
- 115 LIMESTONE - light gray, hard, massive, fine grained, moderately calcareous
- 130 As above
- 145 As above
- 160 As above
- 175 As above
- 190 LIMESTONE - light gray to white, hard, massive, dolomitic, slightly calcareous, 1% iron stained
- 205 LIMESTONE - light gray, hard, massive, fine grained, dolomitic, slightly calcareous, trace of white calcite veins
- 220 LIMESTONE - light gray, hard, massive, fine grained, dolomitic, slightly calcareous
- 235 As above
- 250 As above
- 265 As above
- 280 As above
- 295 As above

OWNER: Dr. A. W. Pleasants, Jr. (cont.)

- 310 LIMESTONE - white-to gray, hard, massive, fine grained, moderately calcareous
- 325 As above
- 340 LIMESTONE - dark gray to white, hard, massive, fine grained, moderately calcareous
- 355 LIMESTONE - dark gray, hard, massive, fine grained, dolomitic, slightly calcareous

ORDOVICIAN

LENOIR LIMESTONE

- 370 LIMESTONE - pink with some gray, hard, fine grained, highly calcareous with 1% fine grained, pink siltstone
- 385 LIMESTONE - gray with some pink and white, hard, fine grained, highly calcareous with 2% pink, fine grained, calcareous siltstone, 1% black chert
- 400 LIMESTONE - gray and white, hard, fine grained, moderately calcareous, 5% black, nodular chert, trace of limonite

GEOLOGIC SUMMARY

	<u>AGE</u>	<u>FORMATION OR UNIT</u>
0-355	Ordovician	Whitesburg limestone
370-400	Ordovician	Lenoir limestone

VIRGINIA DIVISION OF MINERAL RESOURCES
 Merrick S. Whitfield, Geologist
 July 2, 1962

ADDITIONAL WELL DATA

Microscopic examination of sediment from a water sample collected from 365 to 367 feet: SILTSTONE - reddish orange, extremely fine grained, limonitic, slightly argillaceous

Microscopic examination of sand from water bearing strata below 365 feet: SAND - yellow to white, fine to coarse grained quartz and limestone, subrounded to well rounded limestone grains, highly calcareous

Analysis of the water sample indicated the Ph to be 7.4 and the mineral content in parts per million as follows:

Iron-----	.35
Manganese-----	.75
Nitrate-----	.19
Sulfate-----	20.00
Total hardness-	171.00