Town of Stanley Well #2 Sydnor Pump & Well Co. Page OWNER: DRILLER:

COUNTY:

VDMR #664 WWCR # 58 DEPTH: 490

## SAMPLE EXAMINATION

| 0-142        | No samples   |
|--------------|--|
| 142-172      | Clay-yellow, soft, silty-very fine grained, permeable  |
| 172-200      | Clay-yellow, soft, silty-very fine grained permeable, with small fragments of soft, gray, slightly silty shale (10%)   |
| 200-250      | Siltstone-gray to yellow, well consolidated, hard, very fine grained, almost impermeable   |
| -250         | As above (Sample bailed from well before running turbine)  |
| <b>~</b> 268 | As above   |
| -283         | Siltstone-pink, yellow and gray, hard, well consolidated, very fine grained, argillaceous, slightly permeable  |
| 285-300      | Siltstone-pink to yellow, hard, well consolidated, fine grained, slightly permeable  |
| -297         | Siltstone-pink, yellow and gray, hard, well consolidated, fine grained, argillaceous, slightly permeable   |
| 300-315      | Siltstone-pink and yellow, hard, well consolidated, fine grained, calcareous with some small calcite veins, slightly permeable                                   |
| 315-330      | As above but mostly pink and more calcareous   |
| 330-345      | Siltstone-pink and yellow, moderately hard, well consolidated. fine grained, slightly permeable, highly calcareous, with small calcite veins                     |
| 345-360      | Siltstone-pink, yellow and gray, hard, well consolidated, fine grained, slightly permeable, highly calcareous, increase in calcite vein fillings                 |
| 360-380      | Siltstone-light gray, hard, well consolidated, fine grained, highly calcareous, slightly permeable   |
| 380-395      | Siltstone-light gray and pink, hard, well consolidated, highly calcareous, with calcite vein material, slightly permeable, trace of manganese oxide in dendrites |

| 395-410 | As above without the manganese oxide  |
|---------|---|
| 410-425 | Siltstone-yellow, pink and gray, hard, well consolidated, highly calcareous with calcite vein material, slightly permeable, trace of manganese oxide staining                           |
| 425-440 | As above with 1% manganese oxide stained particles  |
| 440-475 | Siltstone-light green, gray, tan and pink, hard, well consolidated, highly calcareous with calcite vein material, slightly permeable, slight trace of manganese oxide stained particles |

## GEOLOGIC SUMMARY

grained, calcareous, slightly permeable

Cambrian

475-490

Rome (Waynesboro) Fm.

## REMARKS

#1 Bailer sample description of fill from 348' after pump testing: Siltstone-light gray with red staining, hard, well consolidated, fine grained, calcareous, slightly permeable

Siltstone-light gray and pink, hard, well consolidated, fine

#2 Bailer sample description of fill from 348'6" after pump testing: Same as above

The fill material that occurs in the drill hole from 348 to 490 feet below ground level could have been forced up the hole from a depth below 400 feet by vertical release of compressive forces near the Stanley fault, or from a caving zone between 316 and 348 feet. The pump test of 110 gallons per minute of CLEAR water seems to support the latter, and indicate the aquifer is also between 316 and 348 feet below ground level. However, there is no indication of water-bearing strata or fractures on the electric logs of this depth interval.

Virginia Division of Mineral Resources Merrick S. Whitfield June 13, 1962