

INTERVAL SHEET

WWCR 855

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VDMR Well No.: Well No. 814

Date 4/22/63

Sample Interval: from 40 to 200

PROP: Dr. G. L. Johnson

Total depth 200

COMP: C. R. Moore

Oil  Gas  Water  Exploratory

COUNTY: Albemarle

Cuttings  Core  Other

VDMR Well No: W-814

Washed samples

From-To	From-To	From-To	From-To	From-To
-	40 -	-	-	-
-	50 -	-	-	-
-	60 -	-	-	-
-	70 -	-	-	-
-	80 -	-	-	-
-	90 -	-	-	-
-	95 -	-	-	-
-	100 -	-	-	-
-	105 -	-	-	-
-	110 -	-	-	-
-	115 -	-	-	-
-	115 - 120	-	-	-
-	125 -	-	-	-
-	120 - 130	-	-	-
-	125 - 130	-	-	-
-	130 -	-	-	-
-	135 -	-	-	-
-	140 -	-	-	-
-	145 -	-	-	-
-	150 -	-	-	-
-	155 -	-	-	-
-	160 -	-	-	-
-	170 -	-	-	-
-	175 -	-	-	-
-	180 -	-	-	-
-	190 -	-	-	-
-	200 -	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Complete set of  
sampled intervals.

OWNER: Dr. G. L. Johnson (Brinnington Farm)  
DRILLER: C. R. Moore (Gibson)  
COUNTY: Albemarle (Free Union)

VDMR #814  
WWCR #855  
TOTAL DEPTH: 200'

### GEOLOGIC LOG

- 40 Overburden — light-brown, fine-grained; quartz, feldspar, biotite, sericite, clay, chlorite, and iron oxides.
- 50 As above — medium-brown, less clay, blue quartz noted.
- 60 Biotite Gneiss — light-bluish-gray, fine-grained, lineation of biotite, no real foliation could be observed in the cuttings, much of the quartz is blue due to minute inclusion. X-ray examination showed that 2/3 of rock is quartz; chlorite, biotite, muscovite, and plagioclase are present in about equal amounts. Optical methods showed the plagioclase to be andesine, and showed that garnet, ilmenite, and minor calcite are present. (Top of bedrock in this interval).
- 70 As above — biotite more abundant and more general oxidation.
- 80 Biotite Gneiss — blue-gray; light minerals segregated from dark minerals; blue quartz abundant in fragments rich in biotite; quartz, sericite, biotite, feldspar; minor garnet, zircon, and pyrite.
- 90 Metamorphosed Arkose — white with black spots, white quartz, blue quartz, potash feldspar, sericite, biotite.
- 95 Metamorphosed Arkose — As above with increase in X-ray examination showed 40% each of quartz and potash feldspar, the remainder being biotite and muscovite.
- 100 As above.
- 105 As above — more biotite, more oxides, more blue quartz, minor garnet and pyrite.
- 110 Gneiss — dark-gray, foliated, fine-grained; biotite, quartz (much blue), and muscovite, (X-ray examination; 50% biotite, 25% quartz, remainder muscovite and plagioclase).
- 115 As above.
- 115-120 As above — more quartz.
- 125 Gneiss — medium-gray; fine-grained dark material, and equal amounts of coarse-grained light material; dark Gneiss and metamorphosed arkose.

OWNER: Dr. G. L. Johnson (Brinnington Farm)

#814

- 120-130 Gneiss — dark-gray, foliated; biotite, quartz, muscovite, and plagioclase.
- 125-130 Gneiss — medium-gray; equal amounts of dark gneiss and metamorphosed arkose.
- 130 Metamorphosed Sandstone — blue-white, medium-grained; quartz (some blue), sericite, potash feldspar, minor biotite.
- 135 Gneiss — dark-gray and white - a mixture of dark gneiss and metamorphosed sandstone.
- 140 Gneiss — medium-dark-gray; dark minerals are fine-grained, lighter minerals are medium-grained. (X-ray examination: 30% biotite, 25% quartz, 25% muscovite, and 20% plagioclase).
- 145 As above.
- 150 As above — medium-gray, increase in light material.
- 155 Metamorphosed Sandstone — light-gray, medium- to fine-grained, no foliation; quartz (some blue), feldspar, muscovite, biotite in minor amounts well disseminated, trace of pyrite.
- 160 As above — with minor amounts of dark gneiss.
- 170 As above.
- 175 Metamorphosed Arkose — light-gray, medium- to fine-grained, no foliation, some blue quartz. (X-ray examination showed equal parts, plagioclase, potash feldspar, and quartz, lesser amounts of biotite.
- 180 Gneiss — medium-gray, segregated, fine-grained, dark-gray gneiss and light-gray metamorphosed arkose; quartz, potash feldspar, plagioclase, sericite, biotite, minor ilmenite and pyrite.
- 190 As above — more biotite and pyrite.
- 200 As above — less segregation.

GEOLOGIC SUMMARY

FORMATION

AGE

Mechum River

Precambrian

Virginia Division of Mineral Resources  
Hollis N. Walker, Geologist  
October 5, 1964