

INTERVAL SHEET

WWCR 590

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VDMR WELL NO.: Well No. 930

Date 12/12/63

Sample Interval: from 0 to 510

PROP: American Tel. & Tel. Co.
Short Hill #2

Total Depth 516'

COMP: Sydnor Pump & Well Co.

Oil Gas Water Exploratory

COUNTY: Loudoun

Cuttings Core Other

VDMR Well No.: W-930

Washed samples - only

From-To	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 no sample	-
-	-	70 - 80	370 - 400 no sample	-
-	-	80 - 90	400 - 410	-
-	-	90 - 100	410 - 420	-
-	-	100 - 110	420 - 430	-
-	-	110 - 120	430 - 440	-
-	-	120 - 130	440 - 450	-
-	-	130 - 140	450 - 460	-
-	-	140 - 150	460 - 470	-
-	-	150 - 160	470 - 480	-
-	-	160 - 170	480 - 490	-
-	-	172 -	490 - 500	-
-	-	170 - 180	500 - 510	-
-	-	180 - 190	510 - 516 no sample	-
-	-	190 - 200	-	-
-	-	200 - 210	-	-
-	-	210 - 220	-	-
-	-	220 - 230	-	-
-	-	230 - 240	-	-
-	-	240 - 260 no sample	-	-
-	-	260 - 270	-	-
-	-	270 - 280	-	-
-	-	280 - 290	-	-
-	-	290 - 300	-	-

OWNER: American Telephone & Telegraph Co.
Short Hill Mountain #2
DRILLER: Sydnor Pump and Well Co.
COUNTY: Loudoun

VDMR #930
WWCR #590
TOTAL DEPTH: 516'

GEOLOGIC LOG

Overburden (0-90)

- 0- 10 Overburden - light brown, fine grained, (weathered phyllite and quartz), sericite, amphibole, chlorite, euhedral magnetite, quartz and vein quartz, iron oxides and clay.
- 10- 20 As above - slightly darker.
- 20- 30 Overburden - light brown, coarse grained (weathered metamorphosed arkose), feldspar, quartz, clay, sericite, minor amphibole and magnetite.
- 30- 40 As above - less clay and magnetite.
- 40- 50 Weathered Metamorphosed Arkose - very light brown, coarse grained, potash feldspar, plagioclase, quartz, sericite, chlorite, minor amphibole.
- 50- 60 As above.
- 60- 70 As above.
- 70- 80 Metamorphosed Arkose (weathered) - light gray and brown, coarse grained, feldspar, quartz, sericite, chlorite, minor amphibole.
- 80- 90 As above - with some dark gray.

Catoctin Formation (90-510)

- 90-100 Sericitic Metamorphosed Arkose - light gray, minor brown, medium grained, sericite, chlorite, potash feldspar, plagioclase, quartz, biotite, and minor pyrite.
- 100-110 As above - light brown, less feldspar.
- 110-120 As above - with slickensides.
- 120-130 Chloritic Metamorphosed Arkose - medium gray-green, fine to coarse grained, chlorite, quartz, potash feldspar, plagioclase, sericite, amphibole, and pyrite.

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- 130-140 Chloritic Metamorphosed Arkose - medium gray-green, fine to coarse grained, chlorite, quartz, potash feldspar, plagioclase, sericite, amphibole, and pyrite.
- 140-150 As above - more feldspar.
- 150-160 As above.
- 160-170 Chloritic Metamorphosed Arkose - medium gray-green, fine to coarse grained, chlorite, potash feldspar, plagioclase, quartz, sericite, amphibole, minor pyrite and garnet, some augen of light minerals.
- 172 As above - vein of quartz and calcite.
- 170-180 As above - no garnet or augen, with pink potash feldspar.
- 180-190 As above.
- 190-200 Greenstone - medium gray-green, medium to fine grained, chlorite, sericite, feldspar, epidote, quartz, and amphibole, minor pyrite.
- 200-210 As above - darker, more amphibole.
- 210-220 As above - very dark gray.
- 220-230 Phyllite - medium green-gray, shiny, fine grained, chlorite and sericite.
- 230-240 As above.
- 240-260 No sample.
- 260-270 Chloritic Metamorphosed Arkose - light green and white, fine and coarse grained, potash feldspar, plagioclase, chlorite, quartz, sericite, minor pyrite.
- 270-280 Phyllite and Metamorphosed Arkose - medium gray-green and white, fine and coarse grained, chlorite, sericite, feldspar, quartz, amphibole, and minor pyrite.
- 280-290 Phyllite - medium greenish-gray, fine grained, chlorite, sericite, hornblende.

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- 290-300 Greenstone - dark gray-green, very fine grained, probably composed of chlorite, sericite and epidote.
- 300-310 Phyllite and Metamorphosed Arkose - dark green, fine grained, and white coarse grained, chlorite, sericite, feldspar, quartz, amphibole, and pyrite.
- 310-320 Greenstone - dark green-gray, very fine to coarse grained, chlorite, amphibole, quartz, and feldspar.
- 320-330 Chloritic Metamorphosed Arkose - medium light gray, coarse to fine grained, quartz, chlorite, minor pyrite.
- 330-340 As above - slightly greener.
- 340-350 Greenstone - medium gray, fine grained, chlorite, sericite, feldspar, quartz, minor pyrite and epidote.
- 350-360 Chloritic Metamorphosed Arkose - light green-gray, fine and coarse grained, feldspar, quartz, chlorite, sericite, amphibole, minor pyrite.
- 360-400 No sample.
- 400-410 Greenstone - medium gray-green, fine grained, chlorite, sericite, epidote with quartz and calcite vein material.
- 410-420 Greenstone and Chloritic Metamorphosed Arkose - dark green and light green, fine and coarse grained, chlorite, quartz, feldspar, and amphibole.
- 420-430 Greenstone - medium gray-green, fine grained, chlorite, sericite, epidote, quartz and minor pyrite.
- 430-440 Chloritic Metamorphosed Arkose - light gray-green, fine to coarse grained, quartz, feldspar, chlorite, sericite, minor amphibole and pyrite.
- 440-450 As above - with white and pink feldspar.
- 450-460 As above - with layers of dark green chlorite.

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- 460-470 Greenstone - medium dark gray, medium grained, chlorite, sericite, quartz, feldspar, amphibole, and minor pyrite.
- 470-480 Chloritic Metamorphosed Arkose - medium gray-green and white, minor dark green, chlorite, feldspar, quartz, amphibole, minor pyrite.
- 480-490 As above.
- 490-500 As above.
- 500-510 As above - darker, more chlorite.
- 510-516 No sample.

GEOLOGIC SUMMARY

Rock type - metamorphosed lava flows interbedded with arkoses and perhaps some shale, now all metamorphosed arkoses and greenstones.

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0- 90	Overburden	Quaternary
90-510	Catoctin Formation	Precambrian
510-516	No sample	

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
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