0	INTERVAL SHEET	WWCR #591
Page1	VDMR WELL NO .:_	Well No. 931
Date 12/13/63	Sample Interval	: from <u>0</u> to <u>280</u>
PROP: American Tel. & Tel. Co. Short Hill #3	Total Depth	289'
COMP: Sydnor Pump & Well Co., Inc.	OilGas	WaterX_Exploratory
COUNTY: Loudoun	Cuttings X	CoreOther
VDMR Well No: W-931	Washed sample	s - only
From-To From-To	From-To Fro	m-To From-To
	0 - 10	
	10 - 20	
	20 - 30	
	30 - 40	
	40 - 50	-
	50 - 60	
	60 - 70	
	70 - 80	
~	80 - 90	
0	90 - 100	
	100 - 120	
	120 - 130	
	130 - 140	
	140 - 150	
	150 - 160	
	160 - 170	
	170 - 180	
	180 - 190	
	190 - 200	
	200 - 210	
_	210 _ 220	
	220 - 230	
n la transfer de la companya de la c	230 - 240	
-	240 - 250	
	250 - 260	
	260 - 270	
O	270 - 280	
· · · · · · · · · · · · · · · · · · ·	280 - 289 no sample	
	-	-

OWNER: American Telephone & Telegraph Co. Short Hill Mountain #3 DRILLER: Sydnor Pump & Well Co. COUNTY: Loudoun VDMR #931 WWCR #591 TOTAL DEPTH: 289'

GEOLOGIC LOG

Overburden (0-50)

0- 10	Overburden - medium brown, coarse to fine grained, quartz, feldspar, sericite, clay, iron staining, minor euhedral magnetite.
10- 20	As above - with fragments of phyllite, weathered arkose and hornblende-magnetite schist.
20- 30	As above - with vein quartz, no hornblende-schist.
30- 40	As above.
40- 50	As above.
Catoctin Formati	.on (50-280)
50- 60	Hornblende Phyllite - medium dark gray, and medium brown, medium grained, hornblende, sericite, chlorite plagioclase, iron oxides, clay, minor pyrite.
60- 70	Metamorphosed Arkose - pink and white with minor brown, coarse grained to fine grained, potash feldspar,

70- 80

80 Metamorphosed Arkose and Greenstone - metamorphosed arkose as above; greenstone - medium green-gray, medium to fine grained, chlorite, hornblende, epidote, sericite, minor pyrite, vein quartz in both rocks.

quartz, muscovite, minor hornblende, minor sericite, chlorite, hornblende and magnetite, open fractures lined with secondary pink feldspar crystals and quartz

80- 90 Greenstone - medium dark green-gray, medium-fine, chlorite, hornblende, epidote, sericite, minor pyrite, with vein quartz.

90-100 As above.

100-110 As above	- 6	slightly	darker,	more	hornblende.
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crystals.

110-120 As above - slightly lighter, less hornblende.

OWNER: American	Telephone & Telegraph Co. (Short Hill Mountain #3)
120-130	Greenstone - medium dark green-gray, medium-fine, chlorite, hornblende, epidote, sericite, with vein quartz.
130-140	Chloritic Metamorphosed Arkose - medium gray- green and white, medium and fine grained, potash feldspar, quartz, chlorite, epidote and hornblende.
	(X-ray examination showed stilpnomelane and plagioclase).
140-150	As above - light green-gray, more quartz and feldspar.
150-160	As above - medium green-gray, coarse grained.
160-170	Chloritic Phyllite - medium green-gray, fine grained, foliated, chlorite, sericite, epidote, feldspar, minor pyrite.
170-180	Hornblende Phyllite - dark green-gray, fine grained, hornblende, chlorite, quartz, feldspar, magnetite and minor pyrite.
180-190	As above - darker.
190-200	As above - with coarse grained pink and white vein fillings of potash feldspar and quartz, more pyrite.
200-210	As above - no vein fillings. (X-ray examination showed amphibole, chlorite, plagioclase, epidote, and small amounts of biotite).
210-220	Greenstone - medium gray-green, medium to coarse grained, chlorite, epidote, plagioclase, veins of potash feldspar, and quartz; coarse crystals of feldspar and blebs of quartz throughout which may be of secondary origin.
2 <mark>20</mark> -230	Greenstone - medium-dark, gray-green, fine to medium grained, chlorite, epidote, hornblende, plagioclase, with minor veins containing crystals of quartz and feldspar.
230-240	As above - with scattered quartz, feldspar and pyrite, no discernable veins.

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- 240-250 Chloritic Phyllite medium gray-green, fine to coarse grained, good foliation, chlorite, epidote, feldspar, fractures and veins with quartz and feldspar, very minor pyrite.
- 250-260 As above less vein material, more pyrite, very minor biotite.

260-270 As above - approximately 1/3 of sample is vein material.

270-280 Metamorphosed Arkose - medium light-gray-green, coarse grained. (50% green potash feldspar, 25% quartz, 25% greenstone type material, chlorite, epidote, plagioclase).

280-289 No sample.

GEOLOGIC SUMMARY

ROCK UNIT

TIME ROCK UNIT

0- 50	Overburden	Quaternary
50-280	Catoctin Formation	Precambrian
280-289	No sample	

Virginia Division of Mineral Resources Hollis N. Walker, Geologist November 29, 1964