INTERVAL SHEET

WWCR 29

Page 1 VDMR Well No: Well No. 1420

Date 11/22/65 Sample Interval: from 50 to 490

PROP: Va. Game & Inland Fisheries Powhatan Game Comm. Total Depth 490

COMP: Farmville Drilling Co. Oil ___ Gas ___ Water X Exploratory ___

COUNTY: Powhatan Cuttings X Core ___ Other ___

VDMR Well No: W-1420 Washed samples

From-To	From-To	From-To	From-To	From-To
-	-	0 - 50 No samples	-	-
-	-	50 - 60	350 - 360	-
-	-	60 - 70	360 - 370	-
-	-	70 - 80	370 - 380	-
-	-	80 - 90	380 - 390	-
-	-	90 - 100	390 - 400	-
-	-	100 - 110	400 - 410	-
-	-	110 - 120	410 - 420	-
-	-	120 - 130	420 - 430	-
-	-	130 - 140	430 - 440	-
-	-	140 - 150	440 - 450	-
-	-	150 - 160	450 - 460	-
-	-	160 - 170	460 - 470	-
-	-	170 - 180	470 - 480	-
-	-	180 - 190	480 - 490	-
-	-	190 - 200	-	-
-	-	200 - 210	-	-
-	-	210 - 220	-	-
-	-	220 - 230	-	-
-	-	230 - 240	-	-
-	-	240 - 250	-	-
-	-	250 - 260	-	-
-	-	260 - 270	-	-
-	-	270 - 280	-	-
-	-	280 - 290	-	-
-	-	290 - 300	-	-
-	-	300 - 310	-	-
-	-	310 - 320	-	-
-	-	320 - 330	-	-
-	-	330 - 340	-	-
		340 - 350		

OWNER: Va. Game and Inland Fisheries
Powhatan Game Commission
DRILLER: Farmville Well Drilling Co.
COUNTY: Powhatan

VDMR #1420
WWCR #29
TOTAL DEPTH: 492'

GEOLOGIC LOG

0-50	No samples.
50-60	Hornblende-Biotite Gneiss — white and black and pink; grain size: 0.5 to over 13 mm; lineation of dark minerals; microcline, oligoclase, hornblende partially altered to biotite, quartz, epidote; minor sphene and calcite; a few large augen of microcline.
60-70	As above — less biotite.
70-80	As above — coarser grained; minor pyrite.
80-90	As above — minor fracture with pale-yellow-green, fine-grained epidote replacement of the gouge.
90-100	As above — less biotite, minor chlorite, no fine-grained epidote.
100-110	As above — less chlorite, no pyrite.
110-120	As above.
120-130	As above.
130-140	Hornblende-Biotite Gneiss — white and black and pale pink; grain size: 0.5 to over 13 mm; microcline, oligoclase, hornblende partially altered to biotite, quartz, epidote, minor sphene.
140-150	As above.
150-160	Hornblende-Biotite Gneiss and Hornblende Gabbro — hornblende-biotite gneiss: as above with less sphene; hornblende gabbro: medium-gray, interlocking poikilitic crystals 1-10 mm long, lineated; andesine, hornblende; minor quartz, microcline and apatite.
160-170	Hornblende Gneiss — white and black; grain size: 1 to over 15 mm; oligoclase, microcline, hornblende, quartz, epidote; minor biotite, sphene, and apatite.
170-180	As above — trace of chlorite (replacing hornblende).
180-190	As above.
190-200	As above — minor fracture with fine-grained epidote.

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200-210 Hornblende Gneiss — white and black; grain size: 1 to over 15 mm; oligoclase, microcline, hornblende, quartz, epidote; minor biotite, chlorite, sphene, and apatite; minor fractures with fine-grained epidote filling.

210-220 As above.

220-230 As above.

230-240 As above — this sample includes a cleavage fragment of microcline 28 x 15 mm.

240-250 Hornblende Gneiss — white, black, and pale pink; grain size: 0.5 to over 13 mm; oligoclase, microcline, hornblende, quartz, epidote and minor sphene, biotite, and chlorite; trace of fracture with fine-grained epidote.

250-260 As above.

260-270 As above — no chlorite, no epidote fracture fillings.

270-280 As above — minor chlorite.

280-290 As above — with trace epidote fracture filling.

290-300 Gabbroic Hornblende Gneiss and Hornblende Gneiss — Gabbroic gneiss: medium-gray, grain size: 1-6 mm; hornblende, andesine-oligoclase, apatite, quartz; minor biotite and sphene; hornblende gneiss: as above.

300-310 Hornblende Gneiss — white, black, and pink; grain size: 0.5 to 20 mm; oligoclase, microcline, hornblende, quartz, minor sphene, epidote, biotite, and apatite; trace of epidote fracture filling.

310-320 As above — trace of weathering stain.

320-330 As above — no epidote fracture filling, no weathering stain.

330-340 Gabbroic Hornblende Gneiss — black and white; grain size: 0.5 to 3 mm; hornblende, oligoclase-andesine, quartz, biotite, and minor apatite, calcite, epidote, sphene, and microcline.

340-350 Hornblende Gneiss — white and black; grain size: 0.25 to 6 mm; oligoclase, quartz, hornblende, epidote, microcline, sphene, biotite, and minor apatite.

350-360 As above — with a few microcline cleavage fragments up to 12 mm across.

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360-370 Hornblende Gneiss — very-dark-green, white, and pink; augen of microcline, plagioclase and quartz (some over 20 mm across) in a dark-green-gray matrix (grain size: 0.5-4 mm); hornblende, plagioclase, epidote, biotite, chlorite, minor sphene, and quartz.

370-380 As above — minor fracturing and brecciation recemented with fine-grained chlorite and epidote.

380-390 Hornblende Gneiss — white, spotted and streaked with black; grain size 0.5 to 6 mm, quartz, plagioclase, hornblende, with minor epidote, chlorite, biotite, sphene, and trace of garnet.

390-400 Gabbroic Hornblende Gneiss — medium-gray, grain size: 0.5 to 4 mm, lineated; hornblende, oligoclase, quartz; minor biotite, epidote, apatite, and sphene.

400-410 Hornblende Gneiss — black and white, grain-size: 0.5 to 5 mm; hornblende, oligoclase, quartz, epidote; minor sphene, chlorite, and biotite.

410-420 As above.

420-430 Hornblende Gneiss — white and black; grain-size 0.5 to 3 mm, plagioclase, quartz, hornblende partly altered to biotite, epidote and minor sphene.

430-440 Augen Gneiss — pale-pink, white, and black; augen of microcline (over 20 mm) in a salt and pepper matrix (average grain size 1 mm); plagioclase, biotite, hornblende, quartz, epidote, and a trace of sphene.

440-450 Hornblende Gneiss — black and white, grain size 0.5 to 5 mm; hornblende, oligoclase, quartz, biotite, epidote, sphene; minor augen of microcline.

450-460 As above — one-third of sample is pegmatitic fragments of microcline and quartz with muscovite. A minor portion of the gneiss has been chloritized.

460-470 As above — less pegmatitic material, no chloritized gneiss.

470-480 As above — no pegmatitic material.

480-490 As above — trace pegmatitic material.

490-492 No sample.

OWNER: Va. Game and Inland Fisheries (Powhatan Game Commission)

GEOLOGIC SUMMARY

	ROCK UNIT	TIME ROCK UNIT
0-50	No samples	
50-490	Hornblende Gneiss	
490-492	No sample	

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
December 2, 1965