

INTERVAL SHEET

WWCR 278

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VDMR Well No.: Well No. 1234

Date 1/21/65

Sample Interval: from 0 to 480

PROP: Hylton Enterprises #15
(Dale City Well #3)

Total depth 482

COMP: Leazer

Oil Gas Water Exploratory

COUNTY: Prince William
(Woodbridge)

Cuttings Core Other

VDMR Well No: W-1234

From-To	From-To	From-To	From-To	From-To
-	0 - 10	300 - 310	No washed samples	
-	10 - 20	310 - 320	-	-
-	20 - 30	320 - 330	-	-
-	30 - 40	330 - 340	-	-
-	40 - 50	340 - 350	-	-
-	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 - 482 No sample	-	-
-	190 - 200		-	-
-	200 - 210		-	-
-	210 - 220		-	-
-	220 - 230		-	-
-	230 - 240		-	-
-	240 - 250		-	-
-	250 - 260		-	-
-	260 - 270		-	-
-	270 - 280		-	-
-	280 - 290		-	-
-	290 - 300		-	-

OWNER: Hylton Enterprises Well #15
(Dale City Subdivision - Well #3)
DRILLER: Leazer Pump & Well, Incorporated
COUNTY: Prince William (Woodbridge)

VDMR #1234
WWCR 278
TOTAL DEPTH: 482'

GEOLOGIC LOG

Overburden (0-10')

0-10 Overburden — medium-light-gray, medium- to fine-grained; weathered and crushed silicified siltstone and some fresh sandstone fragments; quartz, feldspar, biotite, muscovite, amphibole, zoisite, clay.

Zone of Contact Metamorphism (10-480')

10-20 Metamorphosed Sandy Siltstone — medium-blue-gray, medium and fine-grained; blebs of blue and white quartz in a quartzitic matrix with abundant zoisite; two fragments white quartzite; trace pyrite, fractures.

20-30 As above — slightly lighter color.

30-40 Metamorphosed Sandy Siltstone — medium-brownish-gray, medium- to very-fine-grained; blebs of white and blue quartz in a fine-grained quartzitic matrix with biotite; tiny crystals of pyrite; saussurite veins; fractures with blue clay.

40-50 Leached Metamorphosed Sandy Siltstone — light-gray, fine-grained, porous, friable when wet; quartz, epidote, biotite, muscovite, clay; one fragment shale.

50-60 Leached Metamorphosed Sandy Siltstone — light-brownish-gray, fine-grained, poorly developed bedding, friable when wet, porous in part; quartz, epidote, biotite, muscovite, clay.

60-70 As above.

70-80 Metamorphosed Sandy Siltstone — medium- to light-gray, slightly foliated, fine sand to fine pebbles; quartz, biotite, muscovite, sericite, zoisite; part of the sample is porous and altered to clay.

80-90 As above — slightly browner, less porous.

90-100 Gneiss — medium-gray, grains very fine to 2 mm., thin section: slight lineation of minerals; porphyroblasts of hornblende, quartz, feldspar in a fine-grained matrix of quartz, biotite, feldspar, zoisite; veins of quartz and zoisite; a minor portion of sample altered to pale blue clay with pyrite.

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- 100-110 Gneiss — medium-gray, grains very fine to 2 mm., thin section: slight lineation of minerals; porphyroblasts of hornblende, quartz, feldspar in a fine grained matrix of quartz, biotite, feldspar, zoisite; veins of quartz and zoisite; a minor portion of sample altered to pale-blue clay with pyrite.
- 110-120 As above — with calcite veins; no clay.
- 120-130 Hornfels — medium-dark-gray, fine-grained; hornblende, biotite, zoisite, quartz, minor feldspar, calcite; trace pyrite.
- 130-140 As above.
- 140-150 As above.
- 150-160 As above — with chlorite and more calcite.
- 160-170 As above.
- 170-180 Metamorphosed Sandy Siltstone — medium-gray, fine-grained, poorly developed bedding; quartz, biotite, calcite, chlorite, zoisite and pyrite.
- 180-190 As above — less bedding.
- 190-200 As above — minor bedding, abundant calcite veins.
- 200-210 Hornfels — medium-dark-gray, fine-grained, biotite, quartz, hornblende, zoisite, chlorite, calcite, pyrite.
- 210-220 Metamorphosed Sandy Siltstone — medium-light-gray, slightly greenish; fine-grained; quartz, clay, calcite, biotite, chlorite, vein calcite and pyrite.
- 220-230 As above.
- 230-240 As above.
- 240-250 As above.
- 250-260 As above — with sand.
- 260-270 Metamorphosed Sandy Siltstone — medium-light-gray, fine-grained; granules of blue quartz, fine-grained matrix of quartz, zoisite, biotite, sericite, minor pyrite, vein quartz, and calcite; thin section of densest material: fine grained cherty quartz, zoisite, dusty opaques.

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- 270-280 Hornfels — medium-light-gray, fine zoisite grained to 3 mm; blebs of blue quartz and grain mount, examination: quartz, zoisite, hornblende, biotite, muscovite, calcite.
- 280-290 As above — slightly darker, more hornblende; fractures with blue clay.
- 290-300 As above — slightly lighter, less hornblende, calcite veins; no fractures or clay.
- 300-310 Hornfels — medium-gray, fine-grained to 3 mm; porphyroblasts hornblende and blue quartz, aggregate of zoisite in a fine-grained quartzitic matrix of zoisite, quartz, biotite and sericite.
- 310-320 As above.
- 320-330 As above.
- 330-340 As above.
- 340-350 As above — with calcite vein.
- 350-360 As above — trace pyrite.
- 360-370 Hornfels — medium-light-gray, very-fine-grained except blebs of blue quartz and patches of zoisite to 2 mm; grain mount examination of matrix; quartz, zoisite, calcite, hornblende, sericite, biotite; minor pyrite.
- 370-380 As above — slightly darker.
- 380-390 As above — thin section: porphyroblasts of hornblende, altered to mica, in a fine grained quartzitic matrix containing biotite in parallel orientation; abundant zoisite; veins of calcite and zoisite.
- 390-400 As above — less biotite, minor pyrite.
- 400-410 As above.
- 410-420 As above.
- 420-430 As above.
- 430-440 As above — minor fractures.
- 440-450 Hornfels — medium-gray, greenish, fine- to medium-grained; hornblende, quartz, biotite, zoisite, minor pyrite.

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- 450-460 Hornfels — medium-gray, medium-fine-grained; blebs of quartz, aggregates, and zoisite in quartzitic matrix; quartz, zoisite, biotite; trace pyrite.
- 460-470 As above — no pyrite.
- 470-480 As above — some of the zoisite replacing feldspar.
- 480-482 No sample.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-10	Overburden	Quaternary
10-480	Zone of contact metamorphism, possibly between a granite gneiss and the Quantico Slate.	Uncertain
480-482	No sample	

Note: As a hornfels is formed by contact metamorphism, this well indicates that this contact zone is nearly vertical.

Virginia Division of Mineral Resources
Hollis N. Walker, Geologist
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