

INTERVAL SHEET

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VDMR Well No: 1912

Date rec'd: 6/30/67

Sample Interval: from 0' to: 800'

PROP: Bull Run Mt. Estates  
#5 (C. Gore)

Number of samples: 80

COMP: H. W. Lawson

Total Depth: 805'

COUNTY: Prince William (Haymarket)

Oil or Gas: Water: <sup>X</sup> Exploratory:

From-To	From-To	From-To	From-To
10 -	310	610 -	-
20 -	320* -	620 -	-
30 -	330* -	630 -	-
40 -	340* -	640 -	-
50 -	350 -	650 -	-
60 -	360 -	660 -	-
70 -	370 -	670 -	-
80 -	380* -	680 -	-
90 -	390 -	690 -	-
100 -	400 -	700 -	-
110 -	410 -	710 -	-
120 -	420 -	720 -	-
130 -	430* -	730 -	-
140 -	440* -	740 -	-
150 -	450 -	750 -	-
160 -	460 -	760 -	-
170 -	470 -	770 -	-
180 -	480 -	780 -	-
190 -	490 -	790 -	-
200 -	500 -	800 -	-
	510 -	-	-
210 -	520 -	-	-
220 -	530 -	-	-
230 -	540 -	-	-
240 -	550 -	-	-
250 -	560 -	-	-
260 -	570 -	-	-
270 -	580 -	-	-
280 -	590 -	-	-
290 -	600 -	-	-
300			

\* Unwashed samples only

OWNER: Bull Run Mt. Estates, #5  
DRILLER: Harry W. Lawson  
COUNTY: Prince William (Haymarket)

VDMR: 1912  
WWCR: 297  
TOTAL DEPTH: 805<sup>±</sup>

### GEOLOGIC LOG

#### Depth in feet

#### NEWARK FORMATION (10-80<sup>±</sup>)

- 10 Weathered Mudstone and Quartzite Float - friable to hard, light brown to red-brown, fine-grained to aphanitic, limonitic mudstone and decomposed subarkose; gray, sheared quartzite with lenticular quartz grains (up to 2 x 10 mm) with coalescing, indistinct boundaries; 2% black to gray specular hematite (0.1 - 0.2 mm) and weathered hematite (yellowish-orange limonite) fill interstices and parallel shear planes: fault zone
- 20 Weathered Mudstone and Subarkose - light brown to red-brown, soft, very fine-grained, slightly sericitic (very fine-grained, grains less than 0.2 mm) mudstone; very fine-grained, red-brown weathered, feldspathic (weathered to clay) subarkose; black goethite, sericitic quartzite: fault zone
- 30 "
- 40 "
- 50 " with abundant black goethite, limonite, trace of pale green chrysocolla: fault zone
- 60 " with a small amount of goethite: fault zone
- 70 " "

#### WEAVERTON FORMATION (80-805<sup>±</sup>)

- 80 Quartzite - medium to dark gray, sheared, partly mylonitized; few distinct grain boundaries but some fragments have sharply-angular quartz (up to 5 mm) set in massive-to-sugary, vitreous, gray matrix; other fragments have well-rounded quartz grains (1-2 mm); fine-grained sericitic (1-3%) cleavage planes: fault zone

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- 90 Quartzite - white and dark gray, sheared, slightly porous (0-5%), partly brecciated; with silvery-gray, specular hematite (2%): fault zone
- 100 Quartzite - white and dark gray, sheared, somewhat porous (0-10%), with minute (0.1 - 0.2 mm), terminated, crystalline, secondary quartz filling cavities (up to 2 mm); interstices and fracture cleavage filled with gray, silvery specular hematite, weathered in places to pale-yellow limonite: fault zone
- 110 Quartzite - white and gray, with very fine-grained, sericitic slip planes; some porous breccia (porosity about 5%); limonitic clay: fault zone
- 120 Quartzite - white and gray, sheared with silvery, fine-grained specular-hematite pigment; limonitic clay (20%)
- 130 Quartzite - white and gray, with very fine-grained, sericitic slip planes; some porous breccia (porosity about 5%); limonitic clay: fault zone
- 140 Quartzite - sheared, white, speckled with gray, fine-grained, specular hematite disseminated and oriented along fracture cleavage planes; limonite (1%) in irregular 0.5 mm clots.
- 150 "
- 160 "
- 170 " with sericitic slip planes
- 180 " "
- 190 "
- 200 "
- 210 "
- 220 "
- 230 "
- 240 "
- 250 "

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- 260 Quartzite - sheared, white, speckled with gray, fine-grained, specular hematite disseminated and oriented along fracture cleavage planes; limonite (1%) in irregular 0.5 mm clots with sericitic slip planes
- 270 "
- 280 "
- 290 "
- 300 Quartzite - light gray to light bluish-gray, slightly feldspathic (5%); traces of very fine-grained (0.1 mm) specular-hematite flakes uniformly distributed
- 310 Quartzite - light gray, without megascopically-visible grain boundaries; fine-grained (0.1 mm), sericitic slip planes
- 320 "
- 330 "
- 340 "
- 350 "
- 360 "
- 370 "
- 380 "
- 390 "
- 400 "
- 410 Chlorite-Biotite-Quartz Phyllite - dark greenish-gray to medium bluish-gray
- 420 Sericite-Chlorite-Quartz Phyllite - lustrous, silvery greenish-gray
- 430 Micaceous Quartzite - silvery, greenish-gray to silvery-gray; fine-grained; sericitic
- 440 "
- 450 "

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460	Micaceous Quartzite - silvery, greenish-gray to silvery-gray; fine-grained; sericitic, with vein quartz
470	"
480	"
490	"
500	"
510	"
520	"
530	Quartzite - white, massive
540	"
550	Micaceous Quartzite - gray, sericitic
560	"
570	"
580	"
590	"
600	"
610	"
620	"
630	"
640	"
650	Quartzite - white, massive; grain boundaries indistinguishable
660	"
670	"
680	"

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690	Micaceous Quartzite - gray, sericitic
700	"
710	"
720	"
730	"
740	"
750	"
760	Chlorite-Sericite-Quartz Phyllite - greenish-gray
770	"
780	"
790	" with some sheared gray quartzite with traces of specular hematite
800	Chlorite-Sericite-Quartz Phyllite - greenish-gray, silvery

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
10-80	Newark Formation	Triassic
80-805	Weaverton Formation	Early Cambrian

NOTE: This well was spudded in a fault zone that was penetrated to a depth of approximately 130 feet.

Virginia Division of Mineral Resources  
Richard S. Good, Geologist  
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