## INTERVAL SHEET

				WWCR 687
Page	1	VDMR Well No	.: Well No. 1298	
Date	4/14/65	Sample Inter	val: from 0 to	429
PROP:	Belle Haven Country Club	Total depth_	429	
COMP:	Sydnor Pump & Well Co.	OilGas	WaterX_Explorato	ry
COUNTY:	Fairfax (Alexandria)	Cuttings X	Other	
	Well No: W-1298			
From-To	From-To	From-To	From-To	From-To
0 - 1	300 - 310	-	-	÷ 1
10 - 2	310 - 320	-	-	-
20 - 3	30 320 - 330	-	-	-
-	330 340	-	-	-
_	340 350		-	- ,
50 - 6	350 _ 360	-		_
	360 - 370	_	-	-
	30 370 - 380	-	-	_
	380 - 390	-	- '	-
	0 390 400	-	-	-
90 10	590 400			
100 _ 11	400 410	_	_	_
	410 _ 420	_	-	_
	30 420 - 429	-	-	-
	40 -		-	-
	50 -	-	-	. <del></del> 1:
110 15				
150 - 16	50 <u>-</u>	-	-	-
160 - 17	70 -	-	-	-
170 - 18		-	-	-
	- 00	-	-	-
	- 00	-	-	-
200 _ 2.		-	-	-
	- 20	-	-	-
220 - 23		-	-	-
230 - 24	40 -	-	-	- /
240 - 25	50 -	99 19	-	-
	60 -	-	-	-
260 - 27	70 -	<b>H</b>	-	-
270 28	30 -	-	-	-
	90 _	-	-	-
	00		-	( <b>—</b> (
690 3	00			

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OWNER: Belle Haven Country Club DRILLER: Sydnor Pump & Well Co., Inc. COUNTY: Fairfax (Alexandria) VDMR #1298 WWCR #687 TOTAL DEPTH: 429'

## GEOLOGIC LOG

- 0-10 Clay orange-brown; sandy; sand consists of poorly sorted and variably rounded quartz of several aspects, and scattered grains of white, weathered chert; nodular goethite, muscovite, and carbonaceous fragments; scattered, waxy plant fragments.
- 10-20 Sand orange-brown; very slightly argillaceous, medium- to very-coarse-grained, moderately sorted, angular to subangular; quartz (85-90%), white, weathered feldspar including, in order of abundance, orthoclase, microperthite, microcline, and plagioclase (10%), relatively abundant mica, a few rock fragments, mostly quartz and micas, fine-grained magnetite, and nodules of goethite and hematite, (intensely decomposed muscovite and biotite).
- 20-30 Sand brown; slightly to moderately argillaceous (yellow brown clay); medium- to very-coarse-grained, moderately sorted, angular to subangular; quartz (hyacinth variety common 80-85%); white, weathered feldspar mostly potassium feldspar (10-15%); small amounts of rock fragments, intensely decomposed micas (mostly biotite), nodular iron oxides, and fine-grained magnetite, tourmaline and yellow-brown rutile.
- 30-40 As above.
- 40-50 Clay reddish-brown (mottled, as seen with microscope, in reds, pale-green, and gray); very sandy; sand consists of poorly sorted, variably rounded quartz with subordinate white feldspar, minor amount of decomposed mica (mostly biotite), scattered nodules of iron oxides, and fragments of dull white chert; scattered plant fragments.
- 50-60 As above.
- 60-70 As above.
- 70-80 Clay reddish-brown (mottled, as seen with microscope, in reds, browns, and greenish-gray); sandy and pebbly; sand poorly sorted, variably rounded; pebbles 2-5 mm in diameter, well sorted, and subrounded; quartz, with minor white, weathered chert, nodular iron oxides traces of intensely weathered feldspar and mica, and carbonaceous fragments.
- 80-90 As above.
- 90-100 As above.
- 100-110 As above.

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- 110-120 Clay reddish-brown (mottled, as seen with microscope, in reds, browns, and greenish gray); sandy and pebbly; sand poorly sorted, variably rounded; pebbles 2-5 mm in diameter well sorted, and subrounded; quartz, with minor white, weathered chert, nodular iron oxides, traces of intensely weathered feldspar and mica, and carbonaceous fragments.
- 120-130 As above but with scattered, rounded pebbles of dull white, weathered chert up to 10 mm.
- 130-140 Clay mottled-reddish-brown, gray, and greenish-gray; sandy and pebbly; sand poorly sorted and poorly rounded; pebbles up to 15 mm, moderately sorted, subrounded to rounded; quartz, with minor white, weathered chert, white, altered alkaline feldspar, and small amounts of nodular iron oxides (mostly hematite) and intensely weathered mica (muscovite and biotite).
- 140-150 As above.
- 150-160 As above.
- 160-170 As above.
- 170-180 As above but sandier.
- 180-190 Sand reddish-brown; argillaceous (hematitic clay); very slightly pebbly; medium- to coarse-grained, moderately sorted, subangular; quartz, white, weathered alkaline feldspar (about 10%), and small amounts chert; intensely decomposed micas, magnetite, (euhedral) and nodular goethite and hematite.
- 190-200 As above.
- 200-210 As above.
- 210-220 As above.
- 220-230 As above.
- 230-240 As above.
- 240-250 Sand —brown; pebbly; slightly to moderately argillaceous; medium- to very-coarse-grained, moderately sorted, subangular; gravel (10-15% of sample) consists of subrounded pebbles up to 12 mm; quartz, alkaline feldspar (about 10% of sand), abundant magnetite, and small amounts of decomposed micas and nodular iron oxides.

250-260 Sand — brown; pebbly; slightly to moderately argillaceous; medium- to very-coarse-grained, moderately sorted, subangular; gravel (10-15% of sample) consists of subrounded pebbles up to 12 mm; quartz, alkaline feldspar (about 10% of sand), abundant magnetite, and small amounts of decomposed micas and nodular iron oxides.

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- 260-270 As above but very argillaceous.
- 270-280 Sand brown; slightly argillaceous and pebbly; coarse- to verycoarse-grained, moderately sorted, subangular; quartz, alkaline feldspar (10-15% of sand), magnetite, and small amounts decomposed micas, and nodular iron oxides; trace of kyanite.
- 280-290 As above but with abundant gray clay and carbonaceous and pyrito-carbonaceous particles.
- 290-300 Sand brown; argillaceous (mottled clay); scattered subrounded pebbles up to 15 mm; poorly sorted, variably rounded; arkosic quartz sand with some carbonaceous and pyrito-carbonaceous particles, occasional flakes of decomposed mica, and nodules of goethite and hematite.
- 300-310 As above.
- 310-320 As above.
- 320-330 Clay mottled greenish-gray-yellow-brown; very-sandy; scattered pebbles; sand poorly sorted, variably rounded; arkosic quartz sand with abundant earthy hematite and scattered flakes of decomposed mica.
- 330-340 As above.
- 340-350 As above.
- 350-360 As above but with abundant carbonaceous material, and with abundant minute grains of an opague rose-gold mineral that gives a copper line on the spectroscope.
- 360-370 Sand gray; very-argillaceous; poorly sorted, subangular; moderately arkosic quartz sand with some carbonaceous material and a small amount of pyrite.
- 370-380 Sand gray; slightly argillaceous; coarse-grained, moderately sorted, subangular; arkosic quartz sand with abundant carbonaceous material associated with opague rose-gold mineral described above; traces of blue-green hornblende and earthy iron oxides.

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380-390 Sand — gray; argillaceous; scattered pebbles; poorly sorted, variably rounded; arkosic quartz sand with minor decomposed micas, carbonaceous particles, and hematite; some plant fragments.

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- 390-400 Sand buff; a few scattered pebbles; medium- to very-coarsegrained, moderately sorted, subangular to subrounded; arkosic (20% +, mostly gray, to dull white, to yellowish-weathering microcline) clear quartz; abundant euhedral magnetite; minor amounts of pink garnet; green epidote, micas, pyrite, and decomposed hornblende.
- 400-410 Sand gray; moderately argillaceous; moderately pebbly; poorly sorted, variably rounded; arkosic quartz sand with abundant hyacinth quartz; minor amounts of magnetite, pink garnet, brown epidote, micas; a few grains of glauconite.
- 410-420 As above.
- 420-429 As above but more and coarser gravel.

## GEOLOGIC SUMMARY

ROCK UNIT

## TIME ROCK UNIT

Potomac Group

Lower Cretaceous

Virginia Division of Mineral Resources Robert H. Teifke, Geologist May 17, 1965