

INTERVAL SHEET

Page 1

VDMR Well No.: Well No. 1157 WWCR 173

Date 10/16/64

Sample Interval: from 0 to 350

PROP: Sanburne Park #3

Total depth 350

COMP: Sydnor

Oil  Gas  Water  Exploratory

COUNTY: Henrico

Cuttings  Core  Other

VDMR Well No: W-1157

From-To	From-To	From-To	From-To	From-To
-	0 - 10	246 - 250	-	-
-	10 - 20	250 - 254 No sample	-	-
-	20 - 30	254 - 256	-	-
-	30 - 40	256 - 260	-	-
-	40 - 50	260 - 264	-	-
-	50 - 60	262 - 264	-	-
-	60 - 70	264 - 270	-	-
-	70 - 80	270 - 272	-	-
-	80 - 90	272 - 278	-	-
-	90 - 100	278 - 280	-	-
-	100 - 110	280 - 290	-	-
-	110 - 120	296 -	-	-
-	120 - 130	290 - 300	-	-
-	130 - 140	300 - 310	-	-
-	140 - 150	310 - 319	-	-
-	150 - 160	319 - 320	-	-
-	160 - 170	320 - 330	-	-
-	170 - 180	330 - 340	-	-
-	180 - 190	340 - 350	-	-
-	190 - 200	-	-	-
-	192 -	-	-	-
-	200 - 204	-	-	-
-	204 - 210	-	-	-
-	210 - 214	-	-	-
-	214 - 218	-	-	-
-	214 - 220	-	-	-
-	220 - 230	-	-	-
-	230 - 240	-	-	-
-	240 - 244	-	-	-
-	244 - 246	-	-	-

OWNER: County of Henrico (Sanburne Park #3)  
DRILLER: Sydnor Pump & Well Company, Inc.  
COUNTY: Henrico

VDMR #1157  
WWCR #173  
TOTAL DEPTH: 350'

GEOLOGIC LOG

Chesapeake Group (0-90')

- 0-10 Clay — orange-brown with lenses of red, yellow, and gray; moderately sandy; sand poorly sorted, subangular to subrounded; slightly arkosic; a few grains of glauconite.
- 10-20 As above.
- 20-30 Clay — orange-brown, small amounts of red, yellow, and gray; slightly pebbly; very sandy, sand, poorly sorted, subangular to subrounded; gravel consists of subrounded pebbles (up to 10 mm) of milky quartz; slightly arkosic; scattered shell fragments and carbonaceous material.
- 30-40 Gravel — yellow-brown; sand matrix; slightly argillaceous; subrounded granules and pebbles (up to 12 mm) of quartz; sand fine- to very-coarse-grained, poorly sorted, subangular to subrounded; moderately arkosic (white, moderately decomposed feldspar); trace of muscovite.
- 40-50 Clay - Sand - Gravel — ratio of clay to sand to gravel, by volume, is about 1:1:1; clay medium-gray; sand fine- to very-coarse-grained, poorly sorted, subangular to subrounded; gravel subrounded pebbles (up to 8 mm) of quartz and some chert; sand is arkosic; much of quartz is iron stained and purple quartz is common; small amount goethite-limonite; traces of pyrite and epidote.
- 50-60 As above — but with a higher sand to clay ratio, and a trace of pelecypod shell debris.
- 60-70 Clay — medium-gray, mottled brown; slightly pebbly; sandy; sand poorly sorted, but fine grades predominate; slightly arkosic (white to yellow- stained microcline); trace of brown epidote; scattered, subrounded pebbles (up to 12 mm) of milky quartz; small amounts of carbonaceous material and plant remains.
- 70-80 As above.
- 80-90 As above — but with a trace of glauconite.

Pamunkey Group (90-120')

OWNER: County of Henrico (Sanburne Park #3)

#1157

- 90-100 Clay — gray, silty, pebbly, very sandy; sand very-fine- to very-coarse-grained, poorly sorted, angular to sub- rounded; slightly arkosic (white microcline); glauconitic (10-15% of sand fraction); scattered grains of gray phosphorite and manganese oxides (psilomelane ?); small amount fine- grained muscovite; abundant subrounded to rounded pebbles (up to 12 mm) of quartz, minor chert and feldspar pebbles.
- 100-110 Sand — buff, speckled black; very slightly argillaceous; silty; silt coarse-grained, well sorted, angular; composed of quartz and glauconite; sand fine- to medium-grained, fairly well sorted, angular to subangular, slightly arkosic; slightly to moderately glauconitic (10-20% glauconite).
- 110-120 Sand — dark-gray, very argillaceous, slightly silty, a few small pebbles of quartz and phosphorite; sand fine-grained, fairly well sorted, angular to subangular, glauconitic (20-30%), slightly micaceous (muscovite); a few chalky pelecypod shell fragments and scattered foraminifera.
- Potomac Group (120-350')
- 120-130 Gravel — gray, matrix of very sandy gray clay; gravel consists of subrounded pebbles (up to 12 mm) of quartz and minor feldspar; sand very-fine- to very-coarse-grained, poorly sorted, subangular to subrounded, glauconitic, small amount muscovite.
- 130-140 Sand — buff, slightly argillaceous and silty; small amount subangular granules of quartz; sand medium- to very-coarse- grained, fairly well sorted, subangular to subrounded, slightly glauconitic (about 5%); small amount chalky pelecypod shell fragments.
- 140-150 Sand — buff, trace amounts of clay, silt, and granules; sand fine- to very-coarse-grained, poorly sorted, subangular, slightly to moderately arkosic (fresh, gray to white microcline and perthite), slightly glauconitic (about 5%), small amounts of garnet and muscovite; trace of pyrite; trace of shell material.
- 150-160 As above.
- 160-170 As above.
- 170-180 As above.
- 180-190 As above.

OWNER: County of Henrico (Sanburne Park #3)

#1157

- 190-200 Sand — buff; traces of clay and granules; sand fine-to very-coarse-grained, poorly sorted, subangular, slightly to moderately arkosic (fresh, gray to white microcline and perthite), slightly glauconitic (less than 5% of fine-grained glauconite); small amounts garnet and muscovite; trace of pyrite; trace of shell material.
- 192 As above.
- 200-204 Sand — gray, very slightly argillaceous, pebbly; sand medium- to very-coarse-grained, fairly well sorted, subangular to subrounded, moderately arkosic (gray to white microcline and perthite), slightly glauconitic in finer grades; small amounts garnet and pyrite; abundant subangular to subrounded granules and a few pebbles (up to 10 mm) of quartz; scattered pelecypod shell fragments.
- 204-210 As above.
- 210-214 As above — but without gravel.
- 214-218 Sand — gray, moderately argillaceous, moderately pebbly; sand medium- to very-coarse-grained (with modal diameter greater than 1 mm), moderately well sorted, subangular to subrounded; gravel consists of subrounded granules and very small pebbles of quartz; small amount of relatively fine-grained glauconite; small amount of muscovite; trace of garnet; scattered shell material and plant remains.
- 214-220 As above.
- 220-230 Sand — buff, slightly silty, sand medium- to coarse-grained, fairly well sorted, subangular, very slightly glauconitic and arkosic (less than 5% each of glauconite and feldspar); trace of garnet; trace of shell material.
- 230-240 As above — but slightly coarser and more arkosic (fresh gray microcline is conspicuous).
- 240-244 Sand — buff, very slightly silty and argillaceous; sand medium- to very-coarse-grained, fairly well sorted, subangular, slightly arkosic (fresh, gray microcline), small amount fine-grained glauconite, traces of muscovite and garnet; trace of shell material.
- 244-246 As above.

OWNER: County of Henrico (Sanburne Park #3)

#1157

- 246-250 Sand — gray-brown, very slightly pebbly, sand coarse- to very-coarse-grained, well sorted, subangular to sub- rounded, arkosic (fresh, gray to white microcline and perthite), very small amount fine-grained glauconite, relatively abundant garnet; some nodular pyrite.
- 250-254 No sample.
- 254-256 Sand — gray-brown; very slightly argillaceous; sand coarse- to very-coarse-grained (but not as coarse as 246-250' interval), well sorted, subangular to subrounded, moderately arkosic (fresh, gray to white microcline and perthite), very small amount fine-grained glauconite, small amount of garnet; trace of pyrite.
- 256-260 Sand — buff, trace of clay, slightly silty; sand medium- to very-coarse-grained, rather poorly sorted, subangular, very arkosic (fresh, gray to white microcline, more rounded than quartz), slightly glauconitic, some garnet; traces of kyanite, blue tourmaline, zircon (in quartz).
- 260-264 As above.
- 262-264 As above.
- 264-270 Sand — buff, very slightly argillaceous and silty; sand medium- to coarse-grained, fairly well-sorted, subangular to subrounded, very srkosic, slightly glauconitic, some garnet; traces of pyrite and tourmaline.
- 270-272 Sand — buff, moderately argillaceous, sand medium- to very-coarse-grained, fairly well-sorted, subangular to subrounded; slightly glauconitic; some garnet.
- 272-278 Sand — buff, trace of clay, very slightly silty; sand medium- to coarse-grained, fiarly well-sorted, angular to subrounded, slightly arkosic; slightly glauconitic; small amounts garnet and muscovite; trace of pyrite; trace of shell material.
- 278-280 Sand — buff, moderately argillaceous; sand medium- to coarse-grained, moderately well-sorted, subangular to subrounded; arkosic; slightly glauconitic; some garnet and muscovite.
- 280-290 As above.
- 296 As above.
- 290-300 As above.

OWNER: County of Henrico (Sanburne Park #3)

#1157

- 300-310 Sand — buff, moderately argillaceous; sand medium- to coarse-grained, moderately well-sorted, subangular to subrounded; arkosic; slightly glauconitic; some garnet and muscovite.
- 310-319 Sand — reddish-brown; slightly argillaceous and silty; sand medium- to very-coarse-grained, fairly well-sorted, subangular to subrounded; moderately arkosic (fresh, coarse, gray and white microcline); slightly glauconitic, small amount garnet.
- 319-320 As above.
- 320-330 As above.
- 330-340 As above.
- 340-350 As above — but more argillaceous (reddish-brown clay and some green clay).

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-90	Chesapeake Group	Miocene
90-120	Pamunkey Group	Paleocene-Eocene
120-350	Potomac Group	Lower Cretaceous

Virginia Division of Mineral Resources  
Robert H. Teifke, Geologist  
January 28, 1965