

Sheet No. 1

PROP: NORFOLK CITY  
 WELL #308 Year 1905  
 COUNTY: PRINCESS ANNE  
 VDMR WELL NO. 0175  
 FROM: TO:

VDMR WELL NO. 0175

Sample Interval 5-1740

Total Depth 1750 (11)

Oil \_\_\_ Gas \_\_\_ Water  Exploratory \_\_\_

Cuttings  Core \_\_\_ Other \_\_\_

See Bulletin 5 p. 322 and  
 Bulletin 63 pp. 346, 351 + 364  
 and USGS Atlas Folio 80

From-To	From-To	From-To	From-To	From-To
5 - <sup>Gr.</sup> 30	285-305 <sup>Gr.</sup> 34	625-7	915-34	1110-31
15 - 38	315-325 38	645-5	925-17	1120-35
35-45 32	335-345 26	665-4	935-49	1140-25
55-75 25	355-37 37	685-11	945-36	1150-21
85-35	365-375 32	705-8	955-46	1170-42
95-30	385-20	715-725 14	965-25	1180-19
105-28	395-10	735-15? 21?	975-19	1200-32
125-145 40	405-415 16	745-755-22	985-43	1210-1220 <sup>502</sup>
130-28	425-20	765-44	995-22	1230-31
155-28	435-12	775-31	1000-26	1240-45
160-32	445-455 30	795-10	1010-5	1250-43
165-29	465-5	815-825-28	1020-14	1260-45
175-185 5	475-485 17	835-38	1030-28	1270-36
195-205 18	495-8	845-54	1040-36	1280-38
215-35	505-525 4	855-865 55	1050-54	1290-16
225-25	535-555 10	875-40	1060-50	1300-24
235-255 32	540-30	885-46	1070-31	1310-31
265-20	565-575 5	895-50	1080-1090 <sup>48</sup>	1320-21
275-38	585-595 5	905-29	1100-28	1330-30

VDMR WELL NO. 0175

Sheet No. 2

Sample Interval \_\_\_\_\_

PROP: NORFOLK CITY  
WELL #308 Year 1905  
COUNTY: PRINCESS ANNE  
VDMR WELL NO. 0175  
FROM: TO:

Total Depth \_\_\_\_\_

Oil \_\_\_\_\_ Gas \_\_\_\_\_ Water  Exploratory \_\_\_\_\_

Cuttings  Core \_\_\_\_\_ Other \_\_\_\_\_

From-To	From-To	From-To WASHED & FLOATED SAMPLES	From-To	From-To
1350-1360	65 1620-1630	38	785- 9	-
1370-1390	56 1640	50	465- 1	795- 13
1400	18 1650	35	475-485	1- 805- 38
1410	55 1660	8	495-	1- 925- 11
1420	38 1670	45	505-525	1- 975- 20
1440-1450	70 1680	5	535-555	1- 995- 21
1460-1470	46 1690	56	565-575	1- 1010- 1
1480	45 1700	54	585-595	1- 1020- 12
1490	32 1720	45	625-	4 1540- 27
1510	30 1730-1740	10	645-	2 1590- 20
1520-1530	50	-	655-	1 1660- 21
1535	15	-	665-	4 1680- 1
1550	30	-	675-	7 1730-1740
1560	40	-	685-	-1
1570	59	-	705-	2
1580	35	-	715-725	2
1590	6	-	735-	16
1600	20	-	745-755	3
1610	32	-	775-	15

OWNER: City of Norfolk  
DRILLER: C. L. Parker  
COUNTY: Princess Anne Co.

VDMR # 0175  
WWCR # 11  
Depth: 1750'

SAMPLE EXAMINATION  
(washed)

	PLEISTOCENE	COLUMBIA GROUP
0-10	Clay, yellow, sandy	
10-15	Sand, quartz, fine grained, subangular, white	
15-25	No sample	
25-35	Clay, gray, slightly sandy, finely micaceous, firm	
35-55	No sample	
55-85	Clay as above, very sandy-gravelly at base	
	MIOCENE	CHESAPEAKE GROUP
85-95	Sand, quartz, fine grained, with brown calcareous clay. With shell fragments	
95-106	Clay, brown, marly, very sandy with foraminifera and shell fragments	
105-125	No sample	
125-140	Clay as above, no foraminifera	
140-150	Clay, brown, gravelly, non-calcareous	
150-155	Clay, gray, marly, slightly glauconitic, sandy	
155-160	Sand, quartz, fine to coarse grained, angular with large fragments of lignite	
160-165	Clay, brown, soft	
165-175	No sample	
175-215	Clay pink brown and gray, firm	
215-225	Clay, gray mottled with pink, firm, minor shell fragments	

225-235	No sample	
235-255	Clay as above	
255-275	Sand quartz, very fine grained, cemented with clay in part, slightly calcareous and glauconitic	
275-285	No sample	
285-305	Clay, gray brown, firm, very slightly glauconitic with few shell fragments	
305-315	No sample	
315-325	Clay as above	
325-335	No sample	
335-355	Clay as above	
355-365	No sample	
365-380	Clay as above	
380-485	Clay, gray, mottled with red, finely micaceous, firm. Minor amount red and ochre clay, few shell fragments	
485-495	As above but pink to brown	
495-540	As above but brown to pink	
540-550	Gravel, quartz, minor sand, angular to rounded	
550-565	No sample	
565-575	Clay, chocolate brown, firm	
575-585	No sample	
585-595	Clay, brown, calcareous, firm	
595-610	No sample	
	EOCENE (?)	CHICKAHOMINY FM
610-625	Clay, brown, calcareous, glauconitic, sandy, with foraminifera and shell fragments	
625-635	No sample	
635-688	Clay, brown, marly, glauconitic, sandy with shell fragments. Foraminifera at base	

- 688-705 Clay, gray to blue, soft, interbedded with brown clay. Trace limestone, dense, glauconitic
- 705-725 Clay, brown gray, calcareous, sandy, slightly glauconitic
- 725-735 Marl consisting of shell fragments, gray, sandy, clay, sand and limestone, gray, sandy, glauconitic pyritic with foraminifera
- 735-745 No sample
- 745-755 Clay, gray brown, glauconitic, calcareous, sandy, micaceous  
PALEOCENE-UPPER CRETACEOUS MATTAPONI FM.
- 755-765 Quartz, gravel and sand, arkosic with abundant brown sandy clay
- 765-795 Sand, quartz, fine to coarse grained, angular to subangular, micaceous, loosely cemented with white clay in part. Abundant gray feldspar
- 795-805 No sample
- 805-845 Sand as above, cleaner toward base
- 845-855 No sample
- 855-915 Sand quartz, fine to coarse grained, angular, micaceous in part, arkosic in part, argillaceous in part
- 915-935 Gravel and sand. Trace of lignite
- 935-955 Sand quartz, fine grained, subangular
- 955-965 Gravel and sand with abundant lignite
- 965-975 Sand, fine to medium grained, subangular
- 975-985 Gravel and sand, abundant feldspar
- 985-995 Sand, fine to coarse, subangular
- 995-1000 Clay, yellow, sandy, soft, micaceous
- 1000-1010 Clay, brown, soft, few shell fragments
- 1010-1020 Sand, fine grained, angular, abundant clay
- 1020-1030 Clay, brown, firm, sandy
- 1030-1050 Sand, fine to coarse grained, angular to subangular arkosic
- 1050-1060 Gravel, one large quartzite fragment noted
- 1060-1070 Sand and gravel with abundant feldspar

- 1070-1080 No sample
- 1080-1200 Sand fine to coarse grained, angular to subangular, arkosic, abundant gravel and clay in part.
- 1200-1210 No sample
- 1210-1230 Sand, fine grained, angular, abundant brown clay
- 1230-1240 Clay, brown, sandy, abundant loose sand
- 1240-1280 Sand, fine to coarse grained, angular, micaceous in part, abundant clay

CRETACEOUS

POTOMAC GROUP

- 1280-1290 Clay, yellow, very sandy, soft
- 1290-1300 Clay, red, firm, sandy, micaceous
- 1300-1310 Sand, fine to medium grained, angular with abundant yellow clay
- 1310-1320 Clay, red mottled with yellow, very sandy
- 1320-1330 Sand, fine to medium grained, angular, abundant tan clay
- 1330-1350 No sample
- 1350-1360 Sand, fine to coarse grained, angular, argillaceous with large rounded pebbles
- 1360-1370 No sample
- 1370-1420 Sand, fine to coarse grained, angular, micaceous with abundant clay and rounded pebbles
- 1420-1440 No sample
- 1440-1450 Gravel and sand with abundant feldspar
- 1450-1460 No sample
- 1460-1530 Sand, fine to coarse grained, angular, abundant rounded pebbles and clay. Trace lignite 1470-1480
- 1530-1535 Clay, dark gray to brown, silty, micaceous with plant remains?
- 1535-1550 Sand, fine to medium grained, angular interbedded with tan to yellow clay
- 1550-1560 Sand, fine to medium grained, angular to subangular
- 1560-1570 Pebble gravel, quartz and feldspar, rounded

- 1570-1580 Clay, red, pink, and brown, sandy, firm  
1580-1610 Sand, fine to medium grained angular, abundant red to yellow clay  
1612-1620 No sample  
1620-1670 Sand, fine to coarse grained, subangular, with abundant clay and large pebbles  
1670-1680 Clay, brown, silty, micaceous, firm  
1680-1690 Sand, fine grained, ranging to gravel size, subangular  
1690-1700 Clay, brown pink and red, sandy  
1700-1720 Clay, pink to lavender and brown, soft, sandy  
1720-1730 No sample  
1730-1740 Clay, red, firm, slightly sandy.

GEOLOGIC SUMMARY

Pleistocene	Columbia Gp.	Surface - 85
Miocene	Chesapeake Gp.	85 - 610'
Eocene	Chickohominy Fm ?	610 - 775'
Paleo-Cret	Mattaponi Fm ?	755 - 1280'?
Cretaceous	Potomac Gp.	1280 - T. D.

REMARKS

Tops are highly questionable.

VIRGINIA DIVISION OF MINERAL RESOURCES  
William Dudley, Geologist  
October 1958

VDMR Well No.0175

Loc: Moores Bridge (?)

Princess Anne Co.

Prop: City of Norfolk

<u>Interval</u>	<u>Description</u>
	PLEISTOCENE <span style="float: right;">COLUMBIA GROUP</span>
0-10	clay, yellow, sandy
10-15	sand, quartz, fine grained, subangular, white
15-25	no sample
25-35	clay, gray, slightly sandy, finely micaceous, firm
35-55	no sample
55-85	clay as above, very sandy-gravelly at base
	MIOCENE <span style="float: right;">CHESAPEAKE GROUP</span>
85-95	sand, quartz, fine grained, with brown calcareous clay. With shell fragments
95-106	clay, brown, marly, very sandy with foraminifera and shell fragments
105-125	no sample
125-140	clay as above, no foraminifera
140-150	clay, brown, gravelly, non-calcareous
150-155	clay, gray, marly, slightly glauconitic, sandy
155-160	sand, quartz, fine to coarse grained, angular with large fragments of lignite
160-165	clay, brown, soft
165-175	no sample
175-215	clay pink, brown and gray, firm
215-225	clay, gray mottled with pink, firm, minor shell fragments
225-235	no sample
235-255	clay as above
255-275	sand quartz, very fine grained, cemented with clay in part, slightly calcareous and glauconitic
275-285	no sample
285-305	clay, gray brown, firm, very slightly glauconitic with few shell fragments
305-315	no sample



Well No. 175 (Cont'd)

315-325	clay as above
325-335	no sample
335-355	clay as above
355-365	no sample
365-380	clay as above
380-485	clay, gray, mottled with red, finely micaceous, firm. Minor amount red and ochre clay, few shell fragments
485--495	as above but pink to brown
495-540	as above but brown to pink
540-550	gravel, quartz, minor sand, angular to rounded
550-565	no sample
565-575	clay, chocolate brown, firm
575-585	no sample
585-595	clay, brown, calcareous, firm
595-610	no sample
	EOCENE (?) CHECKAHOHINY FM
610-625	clay, brown, calcareous, glauconitic, sandy, with foraminifera and shell fragments
625-635	no sample
635-688	clay, brown, marly, glauconitic, sandy with shell fragments. Foraminifera at base
688-705	clay, gray to blue, soft, interbedded with brown clay. Trace limestone, dense, glauconitic
705-725	clay, brown gray, calcareous, sandy, slightly glauconitic
725-735	marl consisting of shell fragments, gray, sandy, clay, sand and limestone, gray, sandy, glauconitic pyritic with foraminifera
735-745	no sample
745-755	clay, gray brown, glauconitic, calcareous, sandy, micaceous
	PALEOCENE-UPPER CRETACEOUS MATTAPONI FM.
755-765	quartz gravel and sand, arkosic with abundant brown sandy clay
765-795	sand, quartz, fine to coarse grained, angular to subangular, micaceous, loosely cemented with white clay in part. Abundant gray feldspar

- 795-805 no sample
- 805-845 sand as above, cleaner toward base
- 845-855 no sample
- 855-915 sand quartz, fine to coarse grained, angular, micaceous in part, arkosic in part, argillaceous in part
- 915-935 gravel and sand. Trace of lignite
- 935-955 sand quartz, fine grained, subangular with abundant
- 955-965 gravel and sand with abundant lignite
- 965-975 sand, fine to medium grained, subangular
- 975-985 gravel and sand, abundant feldspar
- 985-995 sand, fine to coarse, subangular
- 995-1000 clay, yellow, sandy, soft, micaceous
- 1000-1010 clay, brown, soft. Few shell fragments
- 1010-1020 sand, fine grained, angular, abundant clay
- 1020-1030 clay, brown, firm, sandy
- 1030-1050 sand, fine to coarse grained, angular to subangular arkosic
- 1050-1060 gravel, one large quartzite fragment noted
- 1060-1070 sand and gravel with abundant feldspar
- 1070-1080 no sample
- 1080-1200 sand fine to coarse grained, angular to subangular, arkosic, abundant gravel and clay in part.
- 1200-1210 no sample
- 1210-1230 sand, fine grained, angular, abundant brown clay
- 1230-1240 clay, brown, sandy, abundant loose sand
- 1940-1280 sand, fine to coarse grained, angular, micaceous in part, Abundant clay
- CRETACEOUS
- POTOMAC GROUP
- 1280-1290 clay, yellow, very sandy, soft
- 1290-1300 clay, red, firm, sandy, micaceous

Well No. 0175 (Cont'd)

1300-1310 sand, fine to medium grained, angular with abundant yellow clay  
1310-1320 clay, red mottled with yellow, very sandy  
1320-1330 sand, fine to medium grained, angular, abundant tan clay  
1330-1350 no sample  
1350-1360 sand, fine to coarse grained, angular, argillaceous with large rounded pebbles  
1360-1370 no sample  
1370-1420 sand, fine to coarse grained, angular, micaceous with abundant clay and rounded pebbles  
1420-1440 no sample  
1440-1450 gravel and sand with abundant feldspar  
1450-1460 no sample  
1460-1530 sand, fine to coarse grained, angular, abundant rounded pebbles and clay. Trace lignite 1470-1480  
1530-1535 clay, dark gray to brown, silty, micaceous with plant remains ?  
1535-1550 sand, fine to medium grained, angular interbedded with tan to yellow clay  
1550-1560 sand, medium to coarse grained, angular to subangular  
1560-1570 pebble gravel, quartz and feldspar, rounded  
1570-1580 clay, red, pink, and brown, sandy, firm  
1580-1610 sand fine to medium grained angular, abundant red to yellow clay  
1612-1620 no sample  
1620-1670 sand, fine to coarse grained, subangular, with abundant clay and large pebbles  
1670-1680 clay, brown, silty, micaceous, firm  
1680-1690 sand fine grained, ranging to gravel size, subangular  
1690-1700 clay, brown pink and red, sandy  
1700-1720 clay, pink to lavender and brown, soft, sandy  
1720-1730 no sample  
1730--1740 clay, red, firm slightly sandy.

Well No. 0175 (Cont'd)

SUMMARY

Pleistocene	Columbia Gp.	Surface - 85
Miocene	Chesapeake Gp.	85 - 610'
Eocene	Chickohominy Fm?	610 - 755' ?
Paleo-Cret	Mattaponi Fm ?	755 - 1280' ?
Cretaceous	Potomac Gp.	1280' - T. D.

Tops are highly questionable