

Sheet No. 1

PROP: SOMERS
COUNTY: LANCASTER
VDMR WELL NO.: 0254
FROM: TO:

VDMR WELL NO. 0254 (16)

Sample Interval 53-725

Total Depth ?

Oil Gas Water Exploratory

Cuttings Core Other

From-To	From-To	From-To	From-To	From-To
53-64 ^{6 GRAMS} 51	704-714 33	<u>WASHED</u>	247-257 15	460-470 20
64-75 59	714-725 74	<u>SAMPLES</u>	257-265 38	470-480 8
75-86 25	-	53-64 13	268-278 45	480-490 1
97-107 39	-	64-75 18	278-289 69	490-500 4
107-117 85	-	75-86 1	290-311 7	500-510 10
117-127 40	-	97-107 1	314-325 30	510-522 1
127-137 56	-	107-117 9	325-335 26	522-535 1
137-147 20	-	117-127 16	335-345 11	535-545 58
182-192 20	-	127-137 40	345-356 27	550- 62
192-203 17	-	137-147 2	356-367 12	545-575 33
205 6	-	147-161 5	367-378 12	575-586 29
200-211 27	-	161-171 1	380-390 17	586-597 42
215-226 14	-	171-182 1	391-402 36	597-607 12
238-247 34	-	182-192 4	402-410 14	607-617 18
257-267 26	-	192-203 9	410-420 1	617-627 5
268-278 73	-	205- 57	420-430 1	627-637 10
278-289 64	-	200-211 24	430-440 1	637-647 27
^{MISSING} 50-522 31	-	215-226 17	440-450 1	647-657 26
^{MISSING} 693-704 56	-	227-238 20	450-460 2	657-678 27
		238-247 24		678-689 39
				689-693 6
				693-704 28
				704-714 28

OWNER: Somers
DRILLER:
COUNTY: Lancaster Co.

VDMR # 0254
WNCR # 16
Depth: 725'

SAMPLE EXAMINATION
(washed)

54-76 Sand, quartz, very fine grained, angular, with abundant shell fragments and silt 60'-76'.

76-85 Clay, brown, soft, silty

85-96 No sample

96-108 Clay as above

108-118 Sand, quartz, very fine grained, silty, argillaceous

118-128 Clay, brown, soft, silty to sandy

128-137 Sand, quartz, very fine to fine grained, argillaceous, with shell fragments

137-147 Clay, brown, soft, silty

147-182 No sample

182-204 Clay, brown, soft, silty, calcareous, with foraminifera and shell fragments and abundant clay

210-218 No sample

218-225 Sand, quartz, fine to medium grained, angular, with foraminifera, shell fragments and abundant brown clay

225-238 No sample

238-248 Clay, brown, marly, very sandy, slightly glauconitic, finely pyritic, with shell fragments

248-258 No sample

258-268 Clay, varicolored; ochre, brown, pink, marly, very sandy, glauconitic, with shell fragments

- 268-310 Sand, very fine
- 310-315 No sample
- 315-340 Sand, quartz, fine to coarse grained, rounded, glauconitic, with shell fragments. Foraminifera at base
- 340-390 Sand, predominantly glauconite, minor amount gray clay, with foraminifera and shell fragments 340-350
- 390-420 Sand, glauconite and quartz, abundant gray clay and shell fragments
- 420-430 Clay, gray, soft, waxy when dry
- 430-470 Sand, predominantly glauconite, with minor quartz, micaceous, abundant foraminifera and shell fragments. Traces of pyrite replacing glauconite.
- 470-490 Sand, quartz, very fine to fine grained, white, glauconitic, micaceous
- 490-500 As above with abundant gray clay and carbonized wood
- 500-510 Predominantly glauconite and coarse rounded quartz grains. With shell fragments
- 510-522 Clay, pink-yellow, soft, slightly sandy
- 522-535 Sand, quartz, very fine to fine grained, angular, glauconitic, abundant clay and carbonized wood
- 535-550 Sand, quartz, fine to medium grained, angular, micaceous, slightly glauconitic
- 550-585 As above, fine grained with abundant biotite. Non glauconitic
- 585-618 Sand, quartz, medium grained, angular, minor amount lignite, abundant white clay at 600+
- 618-628 Clay, white to buff, sandy, micaceous
- 628-646 Sand, quartz, fine grained, with abundant pink to white clay
- 646-690 Clay varicolored; red pink ochre gray, firm, micaceous

690-705 Clay, pink red and yellow, soft, sandy

705-725 Sand, quartz, fine to medium grained, angular, slightly micaceous, minor clay and trace of lignite

GEOLOGIC SUMMARY

Miocene	Chesapeake Gp.	?-225
Eocene	Pamunkey Gp.	225-522
Paleo-Cret	Mattaponi Fm.	222-T. D.

VIRGINIA DIVISION OF MINERAL RESOURCES
William Dudley, Geologist
November 1958

Prop: Somers

<u>Interval</u>	<u>Description</u>
	MIOCENE
	CHESAPEAKE GROUP
54-76	sand, quartz, very fine grained, angular, with abundant shell fragments and silt 60'-76'
76-85	clay, brown, soft, silty
85-96	no sample
96-108	clay as above
108-118	sand, quartz, very fine grained, silty, argillaceous
118-128	clay, brown, soft, silty to sandy
128-137	sand, quartz, very fine to fine grained, argillaceous, with shell fragments
137-147	clay, brown, soft, silty
147-182	no sample
182-204	clay, brown, soft, silty, calcareous, with foraminifera and shell fragments and abundant clay
210-218	no sample
218-225	sand, quartz, fine to medium grained, angular, with foraminifera, shell fragments and abundant brown clay
	EOCENE
	PAMUNKEY GROUP
225-238	no sample
238-248	clay, brown, marly, very sandy, slightly glauconitic, finely pyritic, with shell fragments
248-258	no sample
258-268	clay, varicolored: ochre, brown, pink, marly, very sandy, glauconitic, with shell fragments
268-310	sand, very fine
310-315	no sample
315-340	sand, quartz, fine to coarse grained, rounded, glauconitic, with shell fragments. Foraminifera at base

- 340-390 sand, predominantly glauconite, minor amount gray clay, with foraminifera and shell fragments 340-350
- 390-420 sand, glauconite and quartz, abundant gray clay and shell fragments
- 420-430 clay, gray, soft, waxy when dry
- 430-470 sand, predominantly glauconite, with minor quartz, micaceous, abundant foraminifera and shell fragments. Traces of pyrite replacing glauconite.
- 470-490 sand, quartz, very fine to fine grained, white, glauconitic, micaceous
- 490-500 as above with abundant gray clay and carbonized wood
- 500-510 predominantly glauconite and coarse rounded quartz grains. With shell fragments
- 510-522 clay, pink-yellow, soft, slightly sandy

PALEOCENE-UPPER CRETACEOUS

MATTAPONI FM

- 522-535 sand, quartz, very fine to fine grained, angular, glauconitic, abundant clay and carbonized wood
- 535-550 sand, quartz, fine to medium grained, angular, micaceous, slightly glauconitic
- 550-585 as above fine grained with abundant biotite. Non glauconitic
- 585-618 sand, quartz, medium grained, angular, minor amount lignite. Abundant white clay at 600⁴
- 618-628 clay, white to buff, sandy, micaceous
- 628-646 sand, quartz, fine grained, with abundant pink to white clay
- 646-690 clay varicolored: red pink ochre gray, firm, micaceous
- 690-705 clay, pink red and yellow, soft, sandy
- 705-725 sand, quartz, fine to medium grained, angular, slightly micaceous, minor clay and trace of lignite

SUMMARY

Miocene	- Chesapeake Gp.	?-225
Eocene	Pamunkey Gp.	225-522
Paleo-Cret	Mattaponi Fm.	522-T.D.