

Sheet No. 1

VDMR WELL NO. 0165
Sample Interval 1-1006 (5)
Total Depth 1006

PROP: NESTLE CO. PLANT
COUNTY: NANSEMOND
COMP: LAYNE ATLANTIC CO.
TEST WELL #1
VDMR WELL NO: 0165
FROM: TO:

Oil ___ Gas ___ Water Exploratory ___
Cuttings Core ___ Other ___

From-To	From-To	From-To	From-To	From-To
1 - 8 ²⁷	350 - 370 ²⁹	815 - 823 ¹⁴	-	-
8 - 10 ²⁹	370 - 391 ²¹	823 - 965 ⁵⁹	-	-
10 - 20 ²⁵	391 - 432 ²²	965 - 1006 ¹⁸	-	-
20 - 28 ⁶	432 - 453 ⁷	-	-	-
28 - 32 ³⁵	453 - 476 ³⁶	-	-	-
32 - 37 ²⁰	476 - 493 ³⁵	-	-	-
37 - 45 ³⁵	493 - 514 ³⁷	-	-	-
45 - 58 ²⁷	514 - 535 ¹²	-	-	-
58 - 72 ²⁵	535 - 555 ³³	-	-	-
72 - 97 ²⁸	555 - 602 ⁴⁸	-	-	-
97 - 102 ¹⁸	602 - 617 ³⁶	-	-	-
102 - 143 ³⁶	617 - 637 ²¹	-	-	-
143 - 150 ²⁷	637 - 658 ²⁰	-	-	-
150 - 180 ²⁴	658 - 679 ¹⁴	-	-	-
180 - 183 ²⁷	679 - 699 ²⁸	-	-	-
183 - 271 ²¹	699 - 735 ²²	-	-	-
271 - 301 ²⁷	735 - 745 ³⁵	-	-	-
301 - 310 ⁴⁴	745 - 807 ³⁸	-	-	-
310 - 350 ³⁴	807 - 815 ⁴⁹	-	-	-

OWNER:
DRILLER:
COUNTY:

Nestle Company Plant # 1
Layne Atlantic
Nansemond Co.

VDMR #0165
WWCR # 5
Depth: 1006'

SAMPLE EXAMINATION
(washed)

PLEISTOCENE

COLUMBIA GROUP

- 0-8 Sand, very fine grained, silty, argillaceous, yellow. Few large quartz grains
- 8-20 Sand, quartz, fine to medium grained, angular, frosted, with shell fragments
- 20-57 Sand, fine grained with abundant calcareous clay and shell fragments. Few large quartz grains

MIOCENE

CHESAPEAKE GROUP

- 57-73 Shell bed
- 73-150 Sand, quartz, fine grained, slightly glauconitic, argillaceous, minor shell fragments
- 150-180 Clay, yellow-brown, very sandy, grading in part to very argillaceous sand. With shell fragments
- 180-183 Sand, fine grained, very argillaceous
- 183-273 Clay, brown-green-gray, very sandy, slightly glauconitic with minor shell fragments

EOCENE

PAMUNKEY GROUP

- 273-310 Sand, quartz, fine to medium grained, clear to frosted, angular to rounded, argillaceous. Occasional black pellets of phosphate. Slightly glauconitic becoming glauconitic at base
- 310-350 Sand, green-black, glauconite and quartz argillaceous
- 350-392 Sand, quartz, fine to medium grained, angular, slightly glauconitic becoming argillaceous at base and grading into below;

- 392-476 Clay, brown, very sandy, slightly glauconitic
- 476-514 Sand, quartz, fine to medium grained, angular, clear to frosted, micaceous, slightly glauconitic, few shell fragments, argillaceous at base
- 514-536 Clay, brown, slightly glauconitic, silty to sandy
- 536-616 Sand, very fine to coarse grained, argillaceous, clear to frosted, micaceous, slightly glauconitic
- 616-736 Clay, brown, with minor red and ochre in part, glauconitic, sandy, micaceous in part.
- 736-746 Sand, quartz, white, fine to medium grained, angular, clear to frosted
- 746-806 Clay, brown, sandy, glauconitic, micaceous
- 806-816 Sand, quartz, medium grained, angular to rounded, white. traces pyrite and shell fragments
- 816-826 Clay as above
- 826-965 Sand, quartz, white, medium grained, subangular, clear to frosted, very slightly glauconitic
- 965-1006 Clay, brown-pink, slightly micaceous, very sandy, glauconitic. One large crystal of white feldspar imbedded in clay.

GEOLOGIC SUMMARY

Pleistocene
Miocene
Eocene

Columbia Gp.
Chesapeake Gp.
Pamunkey Gp.

Surface-57?
577-273
273 - ?

VIRGINIA DIVISION OF MINERAL RESOURCES
William Dudley, Geologist
September 1958

Prop: Nestle Company Plant
Contractor: Layne Atlantic

<u>Interval</u>	<u>Description</u>
	PLEISTOCENE COLUMBIA GROUP
0-8	sand, very fine grained, silty, argillaceous, yellow. Few large quartz grains
8-20	sand, quartz, fine to medium grained, angular, frosted. With shell fragments
20-57	sand, fine grained with abundant calcareous clay and shell fragments. Few large quartz grains
	MYOCENE CHESAPEAKE GROUP
57-73	shell bed
73-150	sand, quartz, fine grained, slightly glauconitic, argillaceous, minor shell fragments
150-180	clay, yellow-brown, very sandy, grading in part to very argillaceous sand. With shell fragments
180-183	sand, fine grained, very argillaceous
183-273	clay, brown-green-gray, very sandy, slightly glauconitic with minor shell fragments
	EOCENE PANUNKEY GROUP
273-310	sand, quartz, fine to medium grained, clear to frosted, angular to rounded, argillaceous. Occasional black pellets of phosphate? slightly glauconitic becoming glauconitic at base
310-350	sand, green-black, glauconite and quartz argillaceous
350-392	sand, quartz, fine to medium grained, angular, slightly glauconitic becoming argillaceous at base and grading into below:
392-476	clay, brown, very sandy, slightly glauconitic
476-514	sand, quartz, fine to medium grained, angular, clear to frosted, micaceous, slightly glauconitic, few shell fragments, argillaceous at base
514-536	clay, brown, slightly glauconitic, silty to sandy
536-616	sand, very fine to coarse grained, argillaceous, clear to frosted, micaceous, slightly glauconitic
616-736	clay, brown, with minor red and ochre in part, glauconitic, sandy, micaceous in part.
736-746	sand, quartz, white, fine to medium grained, angular, clear to frosted
746-806	clay, brown, sandy, glauconitic, micaceous

Well No. 0165

- 806-816 sand, quartz, medium grained, angular to rounded, white.
Traces pyrite and shell fragments
- 816-826 clay as above
- 826-965 sand, quartz, white, medium grained, subangular, clear to frosted,
very slightly glauconitic
- 965-1006 clay, brown-pink, slightly micaceous, very sandy, glauconitic. One
large crystal of white feldspar imbedded in clay.

SUMMARY

Pliocene	Colombia Gp.	Surface - 577
Miocene	Chesapeake Gp.	57 ? - 273
Eocene	Panunkey Gp.	273 - ?