

OWNER: Southern Materials Co., Inc. (*Thalin Plant*)
DRILLER: Sydnor Hydrodynamics, Inc.
COUNTY: Princess Anne (Virginia Beach)

VDMR: 2195
WWCR: 59
TOTAL DEPTH: 120'

GEOLOGIC LOG

Depth in
feet

COLUMBIA GROUP (0-7')

0-7 Clay — tan and light-gray, sandy; sand is fine, fairly well-sorted, angular, quartzose

YORKTOWN FORMATION (7-120')

7-15 Sand and Shell — moderately-abundant matrix of gray and orange-brown clay; 25% pelecypod shell fragments; 75% fine- to coarse-grained, poorly-sorted, variably-rounded sand; clear quartz, with traces of muscovite, glauconite, epidote, hornblende and garnet; a very few foraminifers

15-25 "

25-35 Sand and Shell — medium-gray, slightly- to moderately-clayey, 25% shell material (pelecypod > gastropod > bryozoan); 75% fine- to medium-grained, sub-angular, moderately-sorted sand; clear quartz, with traces of glauconite, biotite, muscovite, and hornblende; a few foraminifers and ostracods

35-45 " 85% sand, 15% shell

45-55 Sand — gray, very-slightly clayey, a very few shell fragments; fine- to very coarse-grained, poorly sorted, variably rounded; fine sands are mostly clear quartz, coarse sands are moderately feldspathic, slightly lithic; accessory muscovite, magnetite, green epidote, and hornblende

55-65 Sand — trace of clay; very coarse-grained, fairly well-sorted, subangular to subrounded; feldspathic; slightly- to moderately-lithic

65-75 Sand — gray, clean, a few shell fragments; medium- to coarse-grained, rounded-to very well-rounded clear quartz with appreciable feldspar and minor garnet, tourmaline, epidote, kyanite, hornblende, rutile, and rock fragments

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- 75-85 Sand and Silt — slightly clayey, 5-10% pelecypod shell fragments; fine- to coarse-grained, rather poorly-sorted, angular to well-rounded; predominantly clear quartz; fine fraction contains abundant mica and heavy minerals
- 85-95 Sand — gray, slightly clayey, 5% pelecypod (-echinoid-gastropod) shell material; fine- to medium-grained, fairly well-sorted, angular to subrounded; clear and greenish quartz with abundant sand-size bioclasts; slightly glauconitic; foraminifers and ostracods moderately abundant
- 95-105 Gravel.— gray, slightly clayey, 10% abraded pelecypod shell fragments; well-sorted, subrounded 2-mm gravel comprised of quartz, feldspar, and rock fragments
- 105-115 Sand — gray, slightly-to moderately-clayey, 10% coarse shell material; fine- to medium-grained, fairly well-sorted; predominantly clear, angular to sub-angular quartz, subordinately sand-size shell fragments, foraminifers, and ostracods; very-slightly glauconitic
- 115-120 Sand — gray, clayey; fine- to medium-grained, fairly well-sorted; 50% quartz, 50% combined sand-size shell fragments, foraminifers, echinoid spines, and ostracods; very-slightly glauconitic

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-7'	Columbia Group	Pleistocene
7-120'	Yorktown Formation	Late Miocene

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
July 26, 1968