DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS GEOLOGIC INVESTIGATIONS
MAP I-514-B (SHEET 2 OF 8)

EXPLANATION

See accompanying table for detailed descriptions and for engineering properties. Heavy border around box indicates unit present on this map. An asterisk (*) precedes the explanation for symbols not present on this sheet

COASTAL PLAIN DEPOSITS IN PART OF MARYLAND, DELAWARE, IN THE DISTRICT OF COLUMBIA, AND IN VIRGINIA

TERTIARY

Tcg — Chesapeake Group undivided
Chiefly silty quartz sand, locally clayey

Tnj — Nanjemoy Formation
Glauconite sand locally interbedded with dark silt

Taq — Aquia Formation
Glauconitic quartz sand; includes Brightseat Formation at base

CRETACEOUS

Kmo — Monmouth Formation
Glauconitic, silty quartz sand

Kma — Matawan Formation
Clayey micaceous silt; somewhat glauconitic

Kmg — Magothy Formation
Interbedded clayey silt and quartz sand, locally very lignitic

Kpa — Patapsco Formation
Interbedded clay, sand, and gravel; clays vary in color from red to black

Ka — Arundel Formation
Very clayey and dark-colored silt; locally contains abundant siderite layers

Kpx — Patuxent Formation
Interbedded gravel, sand, and clay; clays vary in color from red to black

Kp — Potomac Group
Interbedded arkosic sand and clay
Consists of Patapsco and Patuxent Formations where Arundel Formation is absent

COASTAL PLAIN DEPOSITS IN PART OF MARYLAND, DELAWARE, NEW JERSEY, AND ON LONG ISLAND

TERTIARY

Tch — Cohansey Sand
Chiefly quartz sand; with some clay and gravel

Tkw — Kirkwood Formation
Chiefly fine-grained quartz sand; very clayey in southern New Jersey

Tmq — Manasquan Formation
Glauconite sand; mostly somewhat quartzose, locally very clayey

Tvt — Vincentown Formation
Glauconitic quartz sand; locally very calcareous

Tht — Hornerstown Sand
Glauconite sand

CRETACEOUS

Krb — Red Bank Sand
Chiefly quartz sand; base is very silty and locally glauconitic

Kns — Navesink Formation
Clayey, silty glauconite sand

Kml — Mount Laurel Sand
Glauconitic quartz sand, pebbly at top

Kw — Wenonah Formation
Silty and glauconitic quartz sand

Kmt — Marshalltown Formation
Quartzose glauconite sand

Ket — Englishtown Formation
Chiefly clayey silt and glauconitic to quartzose sand

Kwb — Woodbury Clay
Very clayey and somewhat micaceous silt

Kmv — Merchantville Formation
Quartzose glauconite sand; laminated in north, massive and less glauconitic to the south

Kmg — Magothy Formation
Thin-bedded intercalations of clay and sand; very lignitic

Kr — Raritan Formation
Chiefly crossbedded quartz sand interbedded with thick beds of silt; locally laminated

Kp — Potomac Group
Interbedded sand, gravelly sand, and clay

Sand, silt, clay, gravel, and organic material
Alluvium

Lowland deposits
Base 0 to −200(?) feet elevation

Intermediate deposits
Base 0 to 100 feet elevation

Upland deposits
Base ranges from 100 to 200 feet elevation

Terrace deposits of varying thickness overlying Coastal Plain deposits and bedrock

*Silt or clay within or beneath permeable surficial deposits; on Long Island, Staten Island, and in adjacent New Jersey, also includes Coastal Plain deposits beneath surficial deposits

Contact
Dotted where concealed

*Thalweg of buried valley
Number shows elevation of valley bottom, in feet, above or below sea level where data available. Dashed where approximately located

Approximate boundary between fresh and salty ground water in the Potomac-Raritan-Magothy aquifers
Shows maximum advance of salt water in the Coastal Plain

C——C′ Through Coastal Plain deposits; sections shown on sheets 1, 2, 3, and 4

K——K′ Through surficial deposits; sections shown on sheet 6

Line of section

*Contour on bottom of Long Island Sound
Contour drawn from depth-of-water data on U.S. Coast and Geodetic Survey charts 1211–1213. Contour interval 50 feet. Datum is mean low water

*Contours on surface of bedrock or Coastal Plain deposits beneath Long Island Sound
Contours modified from those drawn by Muriel Smith from sparker traverses by the Lamont Geological Observatory, Palisades, New York. Contour interval 100 feet. Datum is mean low water

Base by U.S. Geological Survey

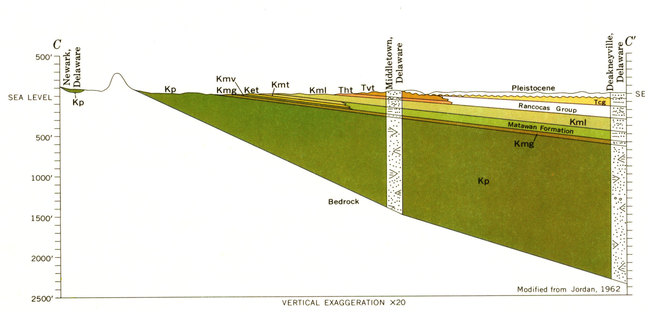
Compiled by J. P. Owens

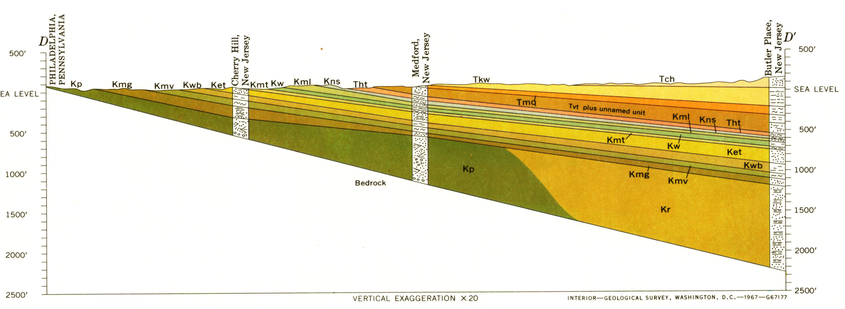
SCALE 1:250 000

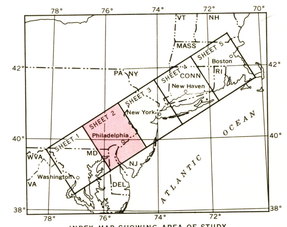
5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 100 FEET
WITH SUPPLEMENTAL CONTOURS AT 50-FOOT INTERVALS
DATUM IS MEAN SEA LEVEL







INDEX MAP SHOWING AREA OF STUDY.
AREA OF THIS SHEET SHADED

ENGINEERING GEOLOGY OF THE NORTHEAST CORRIDOR, WASHINGTON, D.C., TO BOSTON, MASSACHUSETTS

COASTAL PLAIN AND SURFICIAL GEOLOGY

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