UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER
PLATE 39

NORTHWEST Q — Q′ SOUTHEAST

MILES: 7.0 | 8.5 | 2.8 | 11.7 | 5.7 | 11.5 | 10.6 | SCALE CHANGE | 32.0

FEET +100 | FEET +100 | FEET +200 | FEET +200

MEAN SEA LEVEL

DEL-NC-T-4 39°34'20" 75°39'00" +10 — TD 749
DEL-NC-P-3 39°27'15" 75°42'45" +65 +37 — TD 530
DEL-NC-T-1 39°22'15" 75°31'30" +22 — TD 2279, TD 2286
DEL-NC-P-2 39°18'45" 75°36'10" +35 — TD 550
DEL-KT-P-3 39°09'00" 75°29'50" +25 — TD 1397
DEL-KT-P-1 39°03'45" 75°32'45" +55 +23 — TD 555
DEL-SUS-T-7 38°54'57" 75°25'17" +10 — TD 945
DEL-SUS-OT-5 38°43'25" 75°32'00" +25 — 1st sample 165 in Middle Miocene — TD 2560
DEL-SUS-OT-5 38°43'25" 75°32'00" +25 — 1st sample 165 in Middle Miocene — TD 2560
MD-WOR-OT-10 38°18'15" 75°16'30" +45 — TD 7070

POST–MIOCENE ROCKS
ROCKS OF LATE MIOCENE AGE
ROCKS OF MIDDLE MIOCENE AGE
ROCKS OF JACKSON AGE
ROCKS OF CLAIBORNE AGE
ROCKS OF SABINE AGE
ROCKS OF MIDWAY AGE
CRETACEOUS–UNIT A
CRETACEOUS–UNIT B
CRETACEOUS–UNIT C
CRETACEOUS–UNIT D
CRETACEOUS–UNIT E
CRETACEOUS–UNIT F
CRETACEOUS–UNIT G
CRETACEOUS AND LATE JURASSIC(?)–UNIT H
TRIASSIC ROCKS
BASEMENT ROCKS

ROCK TYPES

Note: Only those rock types that are colored appear on this sheet. Grain size of sand is indicated by dot size. Combinations are indicated by superposition of patterns. For example, sandy shell limestone is indicated by combination of sandy limestone and shell limestone patterns.

Coarse sand | Medium sand | Fine sand | Gravel | Shell hash | Boulders
Clay | Clayey sand (sand >clay) | Sandy clay (clay >sand) | Shale | Siltstone | Anhydrite
Limestone | Shell limestone | Sandy limestone | Chalk | Algal limestone | Oolitic limestone
Dolomite | Dolomitic limestone | Coquina | Greensand | Basement | No sample

ACCESSORIES

Note: Only those accessories for which symbols are shown appear on this sheet. Accessories occur throughout a given rock type unless otherwise noted.

Shell fragments | Gypsum | Pyrite | Chert | Lignite
Glauconite | Fragmentary dolomite | Feldspar | Fragmentary basement | Diatoms
Mica | Fragmentary chalk | Calcareous sediment | Siderite | Abundant microfauna
Fragmentary limestone | Phosphate | Limonite | Hematite | Ankerite

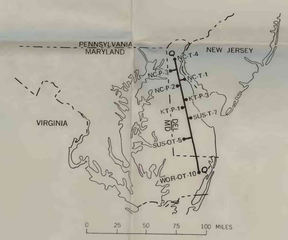
<A-1,5,7 Index fossil occurrence (see table)

Sediment color (Shown on right side of rock types. Sediment color is gray or white where not shown.)

AGE DESIGNATION

QUATERNARY UNIT:	CRETACEOUS UNITS:
Post-Miocene rocks	A
TERTIARY UNITS: Rocks of –	B
Late Miocene age	C
Middle Miocene age	D
Oligocene age	E
Jackson age	F
Claiborne age	G
Sabine age	CRETACEOUS AND LATE JURASSIC(?)
Midway age	UNIT H
	JURASSIC(?)
	UNIT I
	TRIASSIC UNIT:
	Rocks of Triassic age
	Basement rocks

Note: Triassic shales in MD-WOR-OT-10 are silty. Brown glauconite occurs in Jackson in DEL-SUS-OT-5, Claiborne in DEL-SUS-T-7, and Midway in DEL-NC-P-3. White chalk occurs in Midway in DEL-SUS-OT-5. Unit F shales are chiefly red and white in DEL-NC-P-3



GEOLOGIC CROSS SECTION Q–Q′ FROM WRANGLE HILL FARM WELL, NEW CASTLE COUNTY, DEL., TO BETH