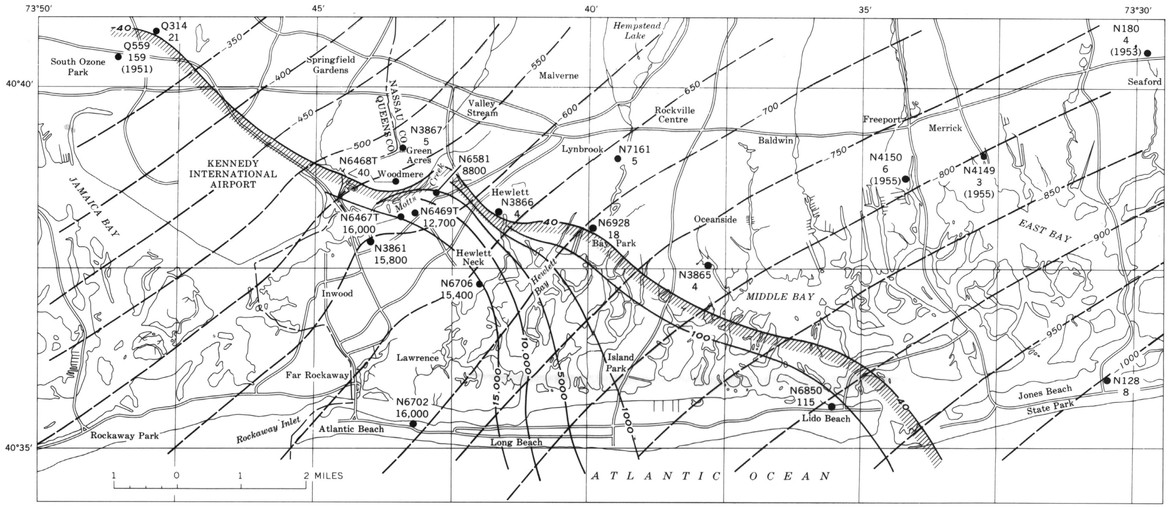
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER-SUPPLY PAPER 1613-F
PLATE 5



EXPLANATION

N128
8
Well or test-hole
Upper number is well or test-hole number; lower number is chloride content in parts per million, in 1960-61, unless otherwise indicated

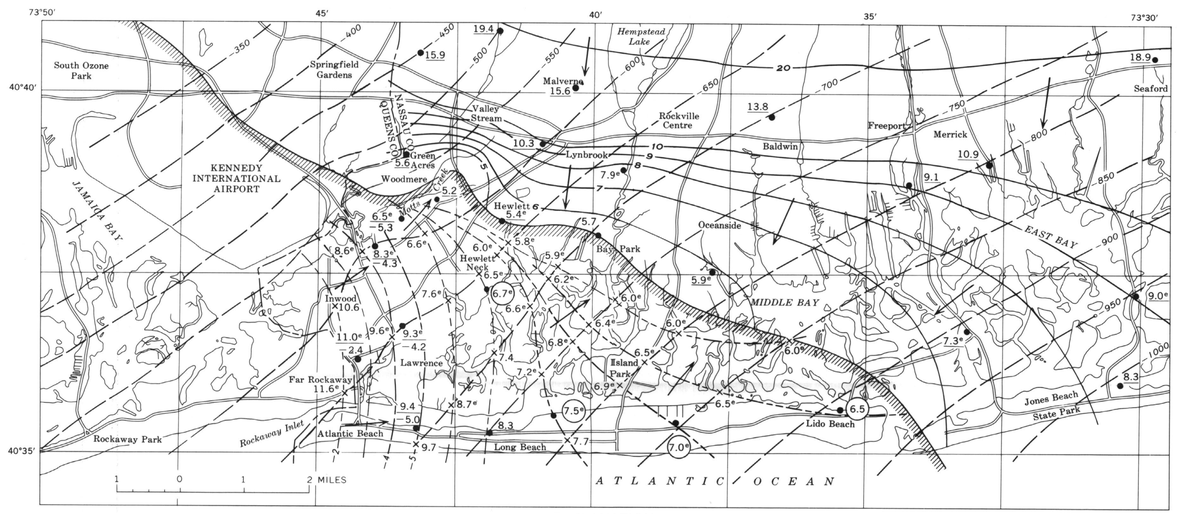
15,000
Isochlor, in parts per million

750
Structure contour
Drawn on surface of clay member of Raritan Formation, in feet below mean sea level

40
Approximate landward limit of deep salty-water wedge on surface of clay member of Raritan Formation

Heads and altitudes given in feet with reference to mean sea level at Sandy Hook, N. J.

DISTRIBUTION OF CHLORIDE IN THE DEEP SALTY-WATER WEDGE



EXPLANATION

6.5 11.0°
−2.4
Well
Upper figure is fresh-water head, in feet; lower figure is salt-water head, in feet; e, estimated. Figure in circle is fresh-water head, in feet, at well site, used for control of zerovel in diffused water

Approximate landward limit of deep salty-water wedge on surface of clay member of Raritan Formation

9
Fresh-water isopotential in fresh water, in feet

Zerovel in diffused water

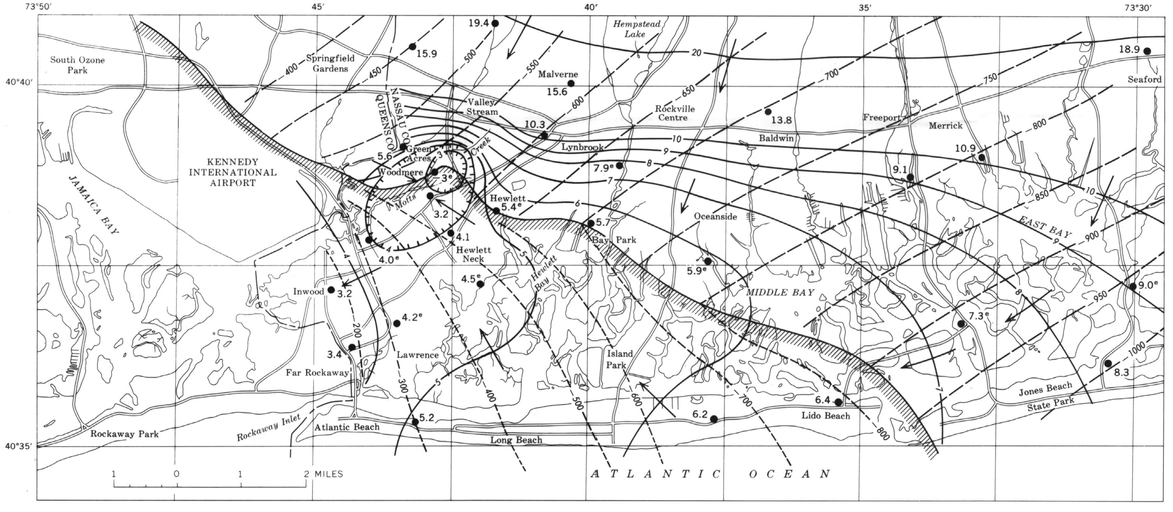
4
Salt-water isopotential in salt water, in feet

Direction of flow

600 6.6°
Structure contour
Drawn on surface of clay member of Raritan Formation, in feet. Fresh-water head, in feet, given at intersection of contours on the clay member with zerovels and salt-water isopotentials

Heads and altitudes given in feet with reference to mean sea level at Sandy Hook, N. J.

ISOPOTENTIAL SURFACE AND SURFACE OF ZERO VELOCITY IN THE LOWER PART OF THE MAGOTHY(?) FORMATION



EXPLANATION

10.3
Well
Number shows fresh-water head, in feet, at base of the Magothy(?) Formation, and at or near the upper surface of the deep salty-water wedge; e, estimated

450
Structure contour
Drawn on surface of clay member of the Raritan Formation, in feet

600
Salty-water contour
Drawn on upper surface of deep salty-water wedge, in feet

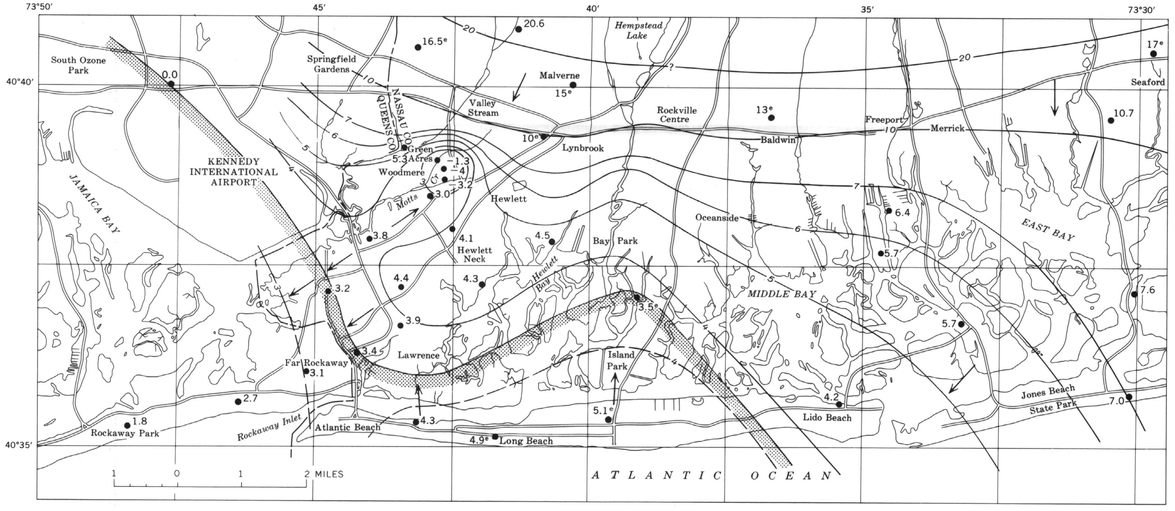
6
Fresh-water isopotential, in feet, at base of the Magothy(?) Formation, and at the upper surface of the deep salty-water wedge

Direction of flow of fresh water

Approximate landward limit of deep salty-water wedge on surface of clay member of Raritan Formation

Heads and altitudes given in feet with reference to mean sea level at Sandy Hook, N. J.

DISTRIBUTION OF HEAD AT BASE OF FRESH WATER IN THE MAGOTHY(?) FORMATION



EXPLANATION

5.1°
Well
Number shows fresh-water head in fresh or diffused water, in feet, e, estimated

4
Fresh-water isopotential in fresh water, in feet

3
Fresh-water isopotential in diffused water, in feet

Heads and altitudes given in feet with reference to mean sea level at Sandy Hook, N. J.

Approximate landward limit of salty water at −150 feet

Direction of component of flow at −150 feet

FRESH-WATER HEAD AND EXTENT OF SALTY WATER AT −150 FEET

CONTOUR MAPS SHOWING SUBSURFACE STRUCTURE, HYDRAULIC-HEAD RELATIONSHIPS, AND EXTENT AND CHLORIDE CONTENT OF SALTY WATER IN THE LOWER PART OF THE MAGOTHY(?) FORMATION AND AT −150 FEET, MARCH 1961

787-735 O - 66 (In pocket) No. 5