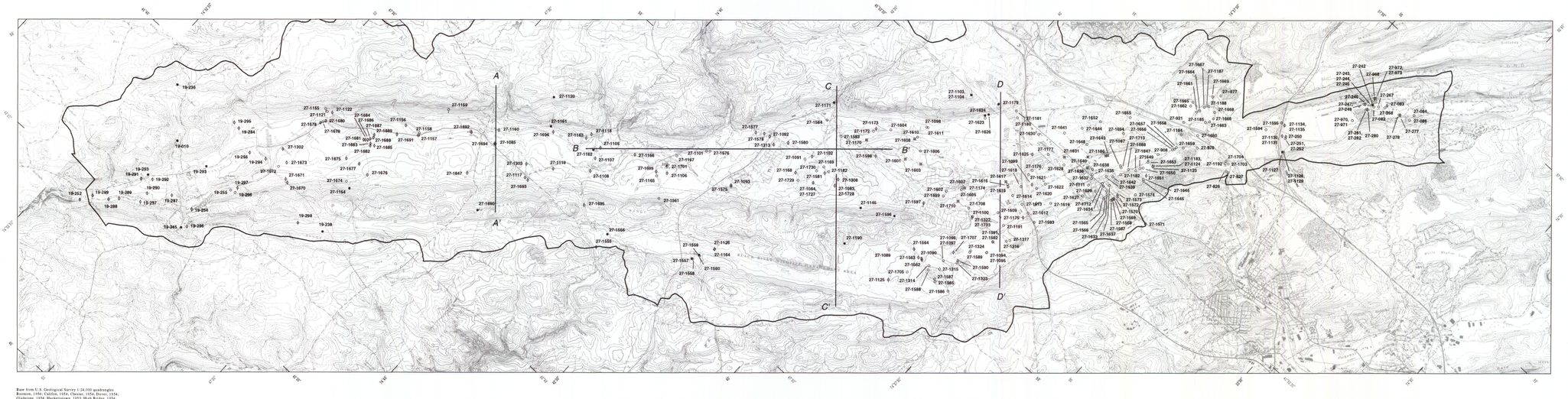
PREPARED IN COOPERATION WITH THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION



Base from U.S. Geological Survey 1:24,000 quadrangles: Remsen, 1954; Califon, 1954; Chester, 1954; Dover, 1954; Gladstone, 1954; Hackettstown, 1955; High Bridge, 1954; Mendham, 1954; Stanhope, 1954

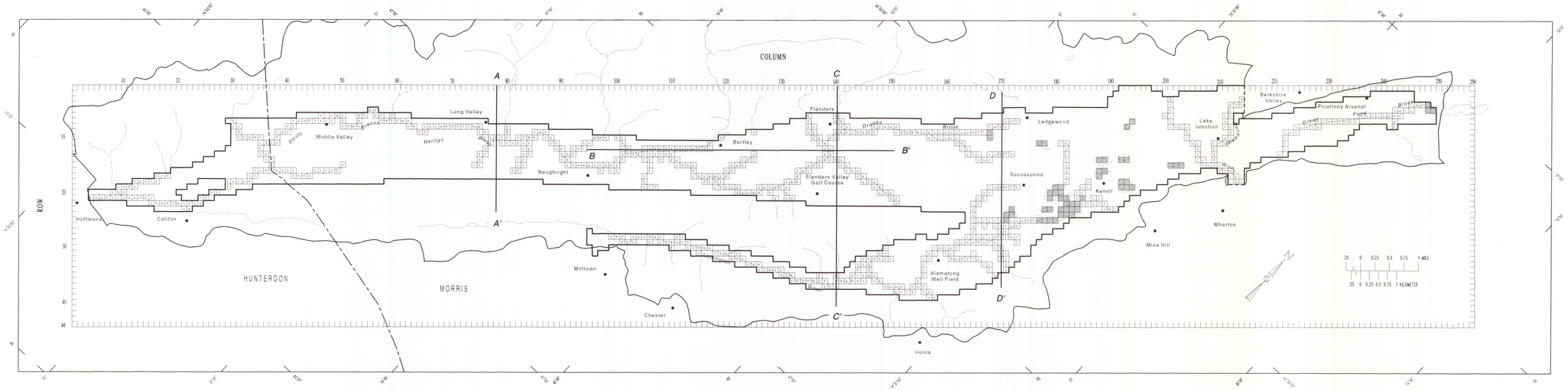
1a. Locations of wells and springs used to assess the hydrogeology of the study area in the New Jersey Highlands.

EXPLANATION

- STUDY-AREA BOUNDARY
- B — B' TRACE OF GENERALIZED HYDROGEOLOGIC SECTION
- WELL OPEN TO A VALLEY-FILL AQUIFER OR UNDIFFERENTIATED OVERBURDEN
- WELL OPEN TO CONGLOMERATE ROCK (PALEOZOIC CONFINING UNIT)
- WELL OPEN TO CARBONATE-ROCK AQUIFER
- WELL OPEN TO NON-CARBONATE ROCK
- SPRING

(Numbers are identifiers listed in appendix 1)

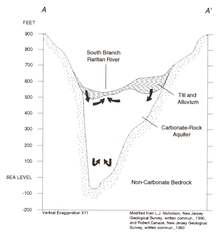
.25 0 0.25 0.5 0.75 1 MILE
.25 0 0.25 0.5 0.75 1 KILOMETER



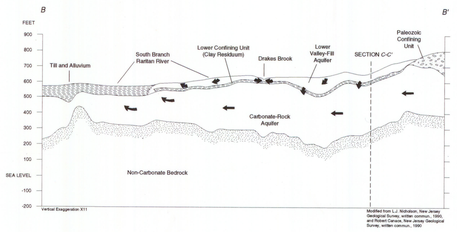
1b. Model-grid extent, traces of generalized hydrogeologic sections, and boundaries used in simulations of ground-water flow.

EXPLANATION

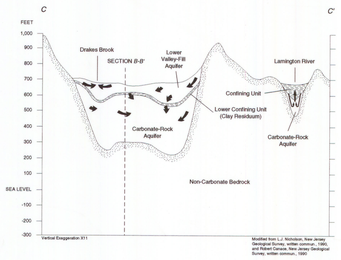
- EXTENT OF MODEL GRID AND GRID SPACING
- STREAM REACH REPRESENTED IN THE MODEL AS A HEAD-DEPENDENT-FLOW BOUNDARY--Number is the aquifer layer interacting with the stream reach
- LAKE, OR PART OF A LAKE REPRESENTED IN THE MODEL AS A HEAD-DEPENDENT-FLOW BOUNDARY--All lakes interact with aquifer layer 1
- BOUNDARY SPECIFYING FLUX FROM AQUIFER LAYERS 1 AND 2 TO VALLEY-FILL AQUIFERS OF THE UPPER ROCKAWAY RIVER BASIN--Layer 3 boundary is specified-flux, no-flow
- SPECIFIED-FLUX, NO-FLOW BOUNDARY
- STUDY-AREA BOUNDARY
- B — B' TRACE OF GENERALIZED HYDROGEOLOGIC SECTION



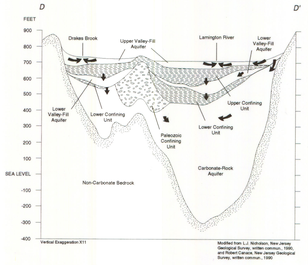
1c. Generalized hydrogeologic section *A - A'*.



1d. Generalized hydrogeologic section *B - B'*.



1e. Generalized hydrogeologic section *C - C'*.



1f. Generalized hydrogeologic section *D - D'*.

EXPLANATION

- GENERALIZED DIRECTION OF GROUND-WATER FLOW--Thicknesses of units shown reflect discretized values used in model

.5 0 .5 1 1.5 MILES
.5 0 .5 1 1.5 KILOMETERS

LOCATIONS OF WELLS AND SPRINGS, MODEL-GRID EXTENT, MODEL BOUNDARIES, AND GENERALIZED HYDROGEOLOGIC SECTIONS

By
Robert S. Nicholson, Steven D. McAuley, Julia L. Barringer, and Alison D. Gordon
1996