

GEOLOGICAL SURVEY, WATER RESOURCES DIVISION

WRSIC Abstract

TITLE: POTENTIOMETRIC SURFACE OF THE LOWER PATAPSCO AQUIFER IN SOUTHERN MARYLAND, SEPTEMBER 1998

AUTHORS: Curtin, S.E., Andreasen, D.C., and Mack, F.K.

AUTHORS' ORIGINATING OFFICE: Annapolis, Maryland

DATE SENT TO NR:

NO. PAGES: 1

NO. ILLUSTRATIONS: 1

NO. TABLES: 0

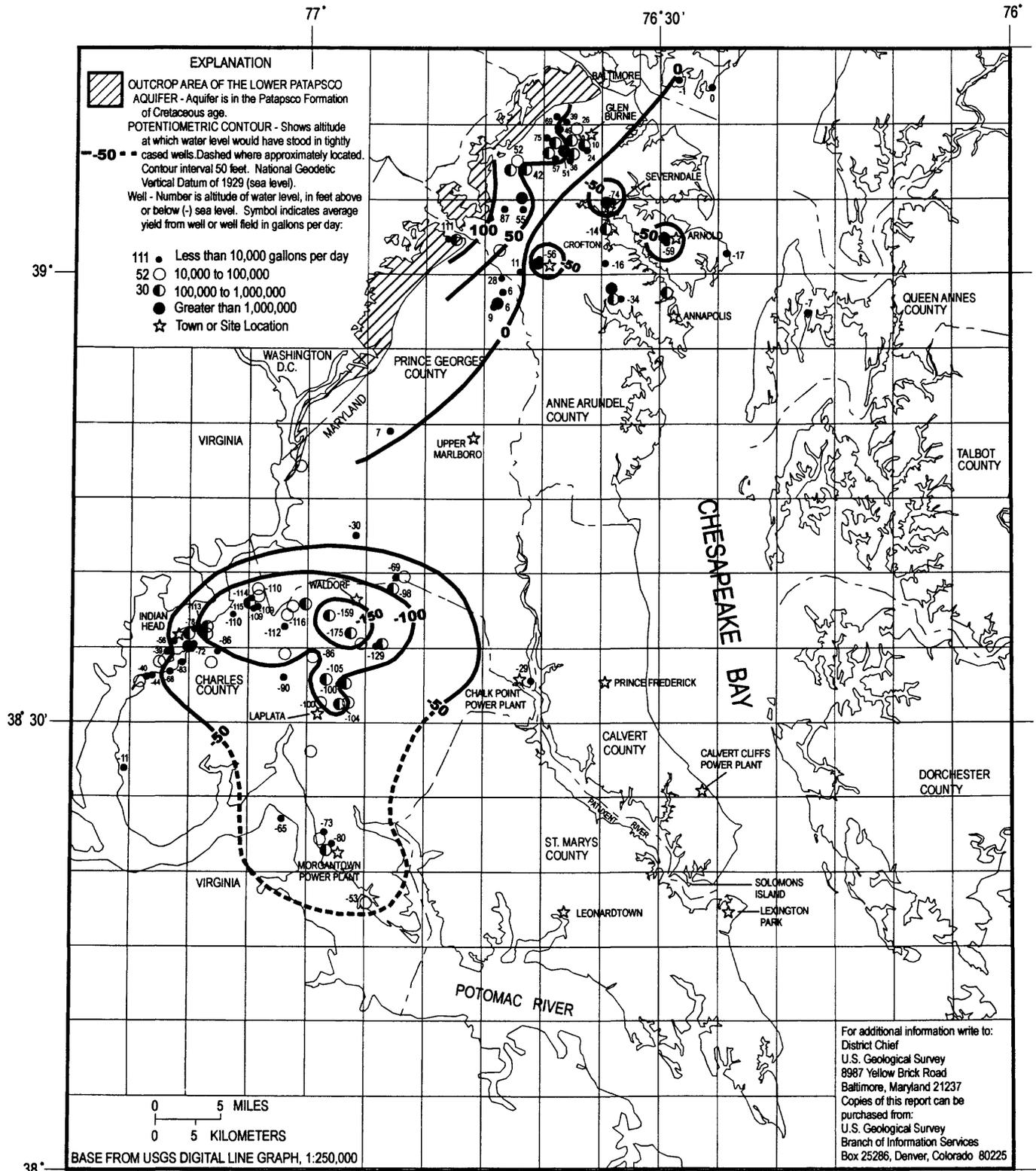
NO. REFERENCES: 0

DESCRIPTORS: \*Potentiometric surface, \*Artesian aquifer, \*Coastal Plain, Maryland, Wells, Anne Arundel County, Prince Georges County, Calvert County, Charles County, St. Marys County, Cone of depression, Lower Patapsco aquifer, Ground-water levels

TYPE OF PUBLICATION: Open-File Report

ABSTRACT:

This report presents a map showing the potentiometric surface of the Lower Patapsco aquifer in the Patapsco Formation of Cretaceous age in Southern Maryland during September 1998. The map was prepared from water-level measurements in 68 wells. The potentiometric surface was 87 feet above sea level near the northwestern boundary and outcrop area of the aquifer in a topographically high area of Anne Arundel County, and 111 feet above sea level in a similar setting in Prince Georges County. From these high areas, the potentiometric surface declined towards large well fields at Crofton, Severndale, Arnold, and Annapolis. The ground-water levels declined to 56 feet below sea level at Crofton, 74 feet below sea level at Severndale, 59 feet below sea level at Arnold, and 34 feet below sea level west of Annapolis. There was also a cone of depression covering a large area including Waldorf, LaPlata, Indian Head and the Morgantown powerplant. The ground-water levels were as low as 175 feet below sea level at Waldorf, 105 feet below sea level at LaPlata, 113 feet below sea level at Indian Head, and 80 feet below sea level at the Morgantown powerplant.



POTENTIOMETRIC SURFACE OF THE LOWER PATAPSCO AQUIFER IN SOUTHERN MARYLAND

SEPTEMBER 1998

Stephen E. Curtin, David C. Andreasen, and Frederick K. Mack