DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

GEOPHYSICAL INVESTIGATIONS
MAP GP-572

NATURAL GAMMA AERORADIOACTIVITY MAP OF PARTS OF THE LAMBERTVILLE, LUMBERVILLE AND STOCKTON QUADRANGLES, NEW JERSEY AND PENNSYLVANIA

By
G. R. Boynton, D. R. Pittillo, and G. L. Zandle

EXPLANATION

Radioactivity contours

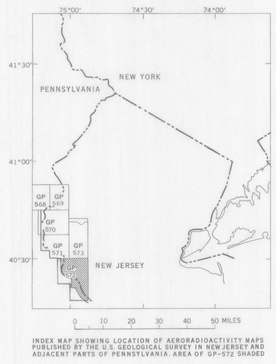
Showing net intensity in counts per second after removal of cosmic component and adjustment for deviations from surveying altitude. Hachured to indicate closed areas of lower radioactivity. Contours are dashed where data are incomplete. Contour interval 50 counts per second

Flight path

Showing location and spacing of data

NOTE

The aeroradioactivity data were obtained with continuously recording scintillation detection equipment which utilizes thallium-activated sodium iodide crystals. The equipment measures gamma radiation with energy levels greater than 50 kev (thousand electron volts). The effective area of response of the scintillation equipment at an altitude of 500 feet above ground is approximately 1000 feet in diameter. The presence of water within the area of response will lower the terrestrial radioactivity, as water absorbs gamma radiation. The amount of fallout present is negligible and assumed to be uniformly distributed



INDEX MAP SHOWING LOCATION OF AERORADIOACTIVITY MAPS PUBLISHED BY THE U.S. GEOLOGICAL SURVEY IN NEW JERSEY AND ADJACENT PARTS OF PENNSYLVANIA. AREA OF GP-572 SHADED

APPROXIMATE MEAN DECLINATION, 1966

SCALE 1:24 000

1 MILE

1 KILOMETER

1966

Aeroradioactivity survey made at 500 feet above the ground, 1963

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1966—G66227

For sale by U.S. Geological Survey, price 50 cents