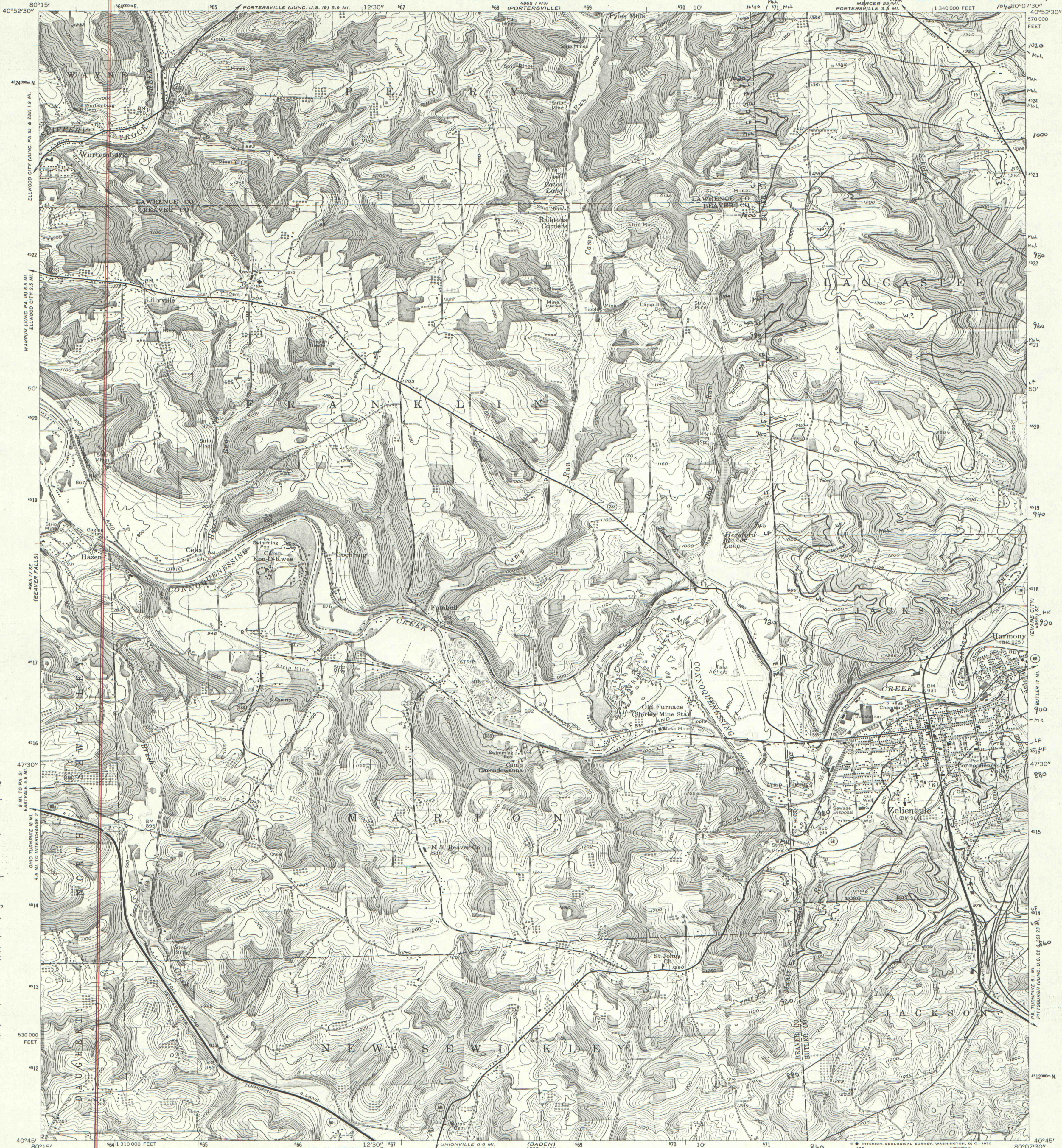


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF PENNSYLVANIA
DEPARTMENT OF INTERNAL AFFAIRS
TOPOGRAPHIC AND GEOLOGIC SURVEY

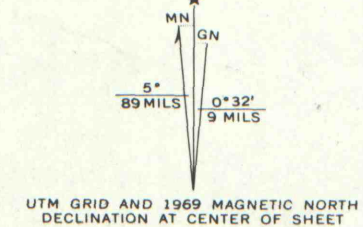
ZELIENOPLE QUADRANGLE
PENNSYLVANIA

7.5 MINUTE SERIES (TOPOGRAPHIC)
M 4561 SW 1/4 ZELIENOPLE 15' QUADRANGLE



Structure contours on base of Middle Kittanning coal. Contour reliability appears to be good. Contours compiled by C.H. Dodge using J.A. Van Liew and E.D. Patterson (USGS) field maps and field notes, G.A. Richardson (USGS) field maps and field notes, drill-hole and TAZIC records, selected oil and gas well records, USGS Bull 873, 1936, and USGS Bull 1143-A, 1963, USGS Bull 1143-B, 1964, and USGS Bull 1143-C, 1971.

Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography from aerial photographs by ER-55
Aerial photographs taken 1952. Field check 1958
Polyconic projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system,
south zone
1000-meter Universal Transverse Mercator grid ticks,
zone 17, shown in blue
Fine red dashed lines indicate selected fence and field lines
visible on aerial photographs. This information is unchecked
Unchecked elevations are shown in brown
Contours in strip mine areas compiled from 1952 photography



SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20422
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Heavy-duty ——— Light-duty ———
Medium-duty ——— Unimproved dirt ———
U.S. Route ——— State Route ———
Interstate Route ———
ZELIENOPLE, PA.
SW 1/4 ZELIENOPLE 15' QUADRANGLE
N 4045-W 8007.5/7.5
1958
PHOTOREVISED 1969
AMS 4965 I SW-SERIES V831

IMAPS # 11057