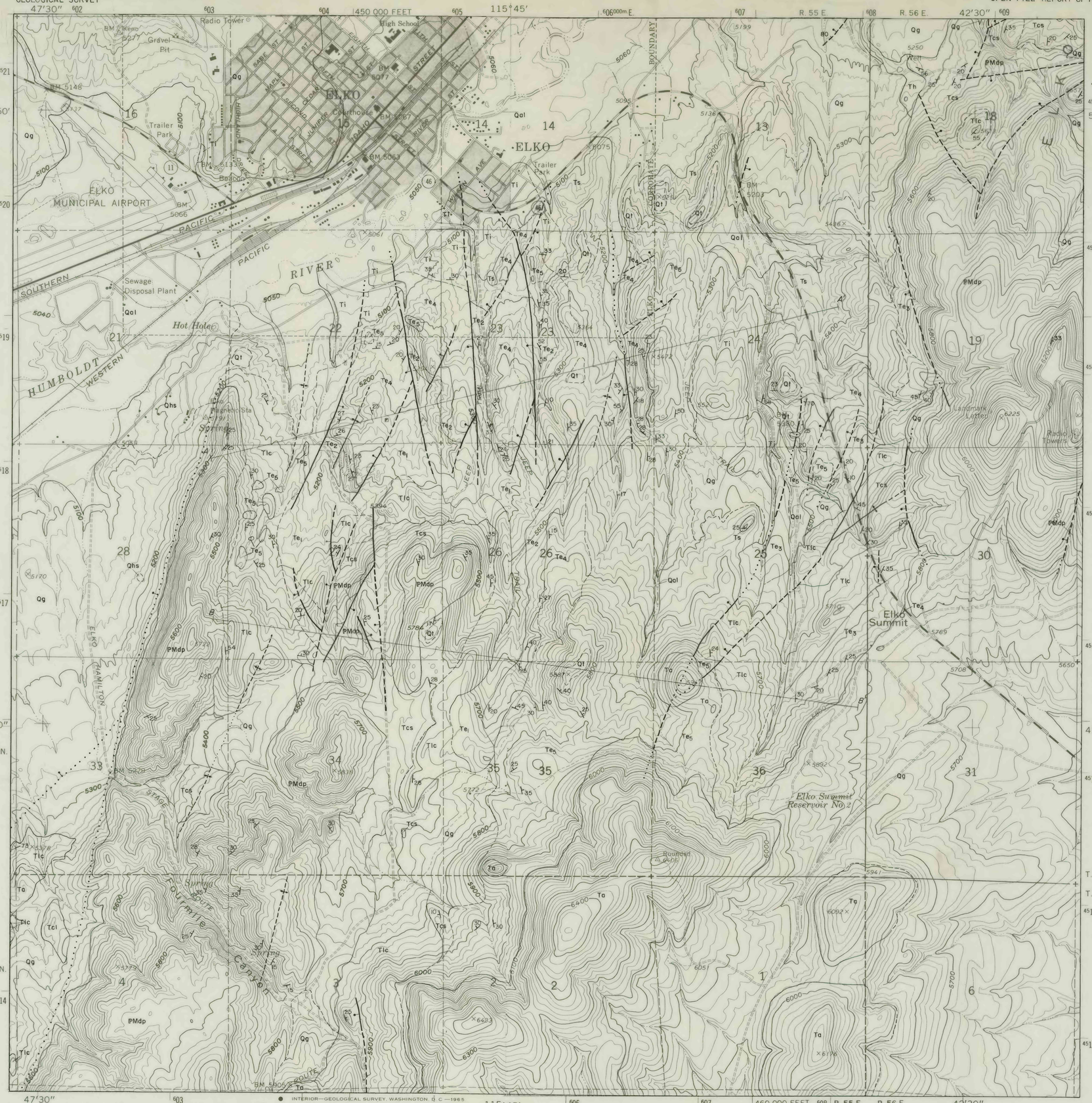
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OPEN-FILE REPORT 81-709



Base from U.S. Geological Survey 7.5' quadrangles; Elko West, 1962, and Elko East, 1962.

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1965

Geology mapped by Barry J. Solomon 1977-1978

SCALE 1:12,000

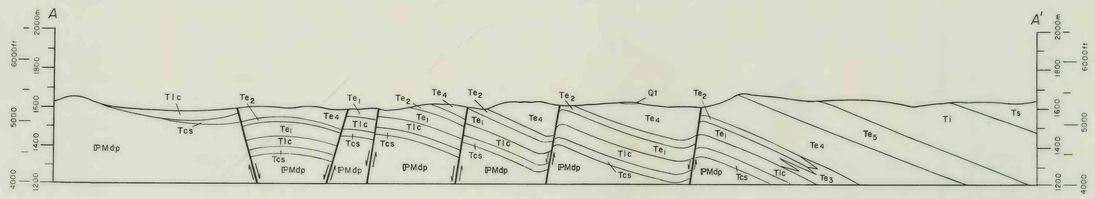
1/2 0 1 MILE

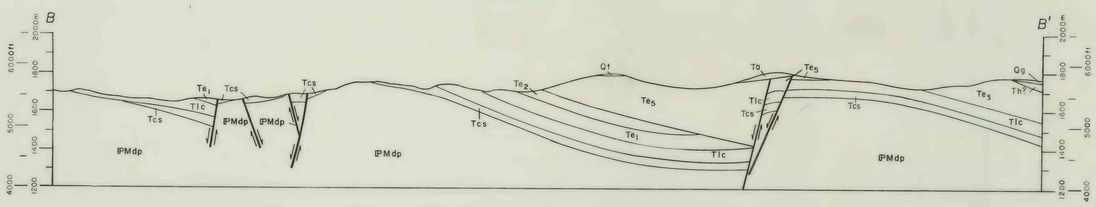
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

.5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1962 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET





QUADRANGLE LOCATION

This report has not been edited for conformity with Geological Survey editorial standards or stratigraphic nomenclature.

EXPLANATION

Qg	Qt	Qal	Qhs	Pleistocene and Holocene — QUATERNARY
Gravel, sand, and silt	Stream terrace deposits: Boulders, gravel, sand, and silt.	Alluvium: Gravel, sand, and silt.	Hot spring deposits: Calcareous tufa.	

Unconformity

Th — Humboldt Formation: Calcareous ash. — Miocene

Unconformity

Ts — Siltstone and sandstone: Includes minor conglomerate and tuff. — Oligocene

Unconformity

Ta — Andesite: Flows and mudflow conglomerate.

Unconformity

Ti — Indian Well Formation: Volcaniclastic sedimentary rocks and ash-flow tuff.

Unconformity

Te5, Te4, Te2, Te3, Te1 — Elko Formation — Eocene and Oligocene (?)

- Te_5, member 5; tuff, shale, and siltstone, with minor limestone.
- Te_4, member 4; shale, oil shale, and siltstone, with minor claystone, limestone, lignite, and tuff.
- Te_3, member 3; shale and oil shale with minor limestone.
- Te_2, member 2; shale and rich oil shale with minor siltstone, lignite, and tuff.
- Te_1, member 1; claystone and conglomerate with minor sandstone.

Tlc — Cherty limestone: Includes claystone and siltstone. — Eocene

Tcs — Conglomerate, sandstone, and shale: Includes claystone, siltstone, and tuff.

Unconformity

Tcl — Limestone and limestone-clast conglomerate — Eocene (?)

Unconformity

PMdp — Diamond Peak Formation: Conglomerate with minor sandstone, mudstone, and limestone. — Upper Mississippian and Lower Pennsylvanian — MISSISSIPPIAN AND PENNSYLVANIAN

- CONTACT - Dashed where approximately located.
- SYNCLINE - Dashed where approximately located; showing direction of plunge.
- ANTICLINE - Dashed where approximately located; showing direction of plunge.
- FAULT - Dashed where approximately located; dotted where concealed; ball on downthrown side.
- 28 STRIKE AND DIP OF BEDS
- A — A' CROSS SECTION
- MINE DUMP

Plate I. Geologic map and cross sections of the Elko area, Elko County, Nevada

by
Barry J. Solomon
1981