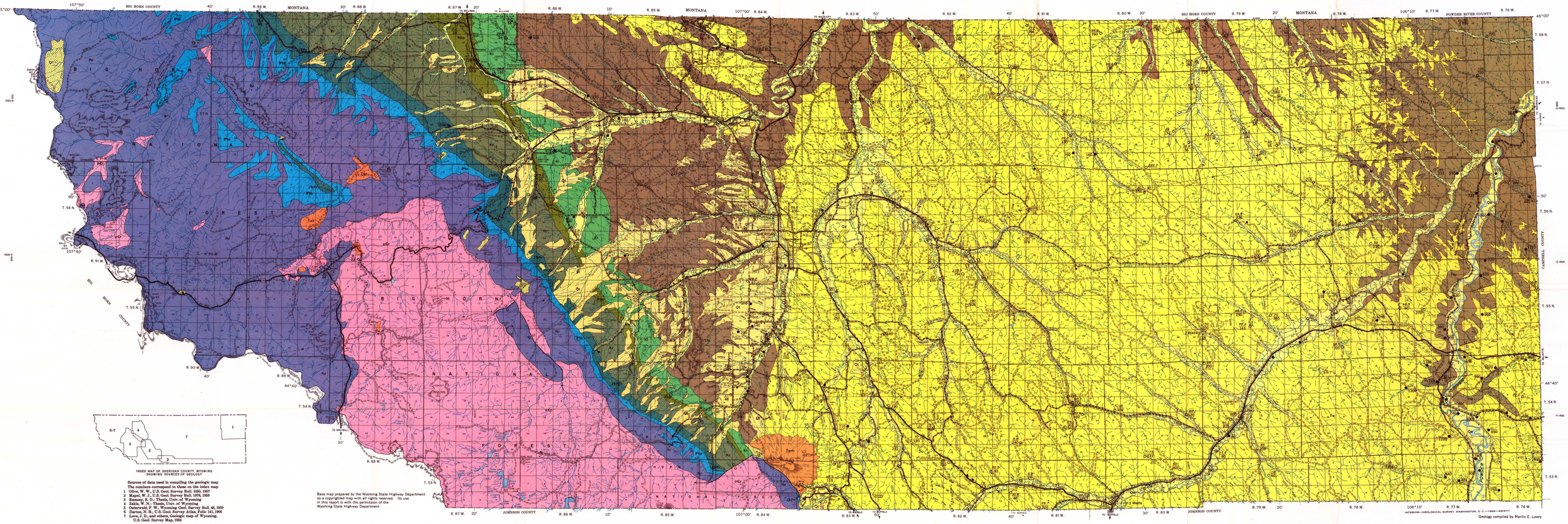
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
WYOMING STATE ENGINEER

WATER-SUPPLY PAPER 1807
PLATE 1



INDEX MAP OF SHERIDAN COUNTY, WYOMING SHOWING SOURCES OF GEOLOGY

Sources of data used in compiling the geologic map
The numbers correspond to those on the index map
1 Olive, W. W., U.S. Geol. Survey Bull. 1050, 1957
2 Mapel, W. J., U.S. Geol. Survey Bull. 1078, 1959
3 Ramsay, R. D.: Thesis, Univ. of Wyoming
4 Zakis, W. N.: Thesis, Univ. of Wyoming
5 Osterwald, F. W., U.S. Geological Survey Bull. 48, 1959
6 Darton, N. H., U.S. Geological Survey Atlas, Folio 141, 1906
7 Darton, N. H., and others, Geologic map of Wyoming, U.S. Geol. Survey Map, 1955

Alluvium and terrace deposits throughout the county were generalized from the Sheridan County soils map by James, Thorp, and others, 1959

Base map prepared by the Wyoming State Highway Department as a copyrighted map with all rights reserved. Its use in this report is with the permission of the Wyoming State Highway Department

SCALE 1:125 000

2 0 2 4 6 8 10 MILES

2 0 2 4 6 8 10 KILOMETERS

Geology compiled by Marlin E. Lowry

EXPLANATION

QUATERNARY

- **Qa** — Alluvium and flood-plain deposits
  Unconsolidated silt, sand, and gravel
- **Ql** — Landslide debris
- **Qt** — Terrace deposits
  Unconsolidated silt, sand, and gravel

TERTIARY

Oligocene

- **Twr** — White River Formation
  Sand, volcanic ash, gravel, clay, and boulders

Eocene

- **Twm** — Wasatch Formation
  Tw — *Light-gray and yellowish-gray sandstone, dark shale and coal; Twm, Moncrief Member consists of coarse-grained sandstone and siltstone, grading upwards into boulder beds*

Paleocene

- **Tfu** — Fort Union Formation
  Light sandstone, dark shale, and coal

CRETACEOUS

Upper Cretaceous

- **Kl** — Lance Formation
  Light-gray to yellowish-gray sandstone and dark-gray to green shale
- **Kbp** — Bearpaw Shale and Parkman Sandstone undivided
  The Bearpaw Shale consists of dark-greenish-gray shale, in part sandy; the underlying Parkman Sandstone consists of tan concretionary sandstone, shaly in the upper part

Lower Cretaceous

- **Kr** — Sedimentary rocks
  Dark-gray shale, fine-grained sandstone and thin bentonite beds of the Upper Cretaceous Cody Shale; dark-gray shale and light-gray sandstone of the Upper Cretaceous Frontier Formation; siliceous shale, siltstone, black-shale, and thin bentonite beds of the Lower Cretaceous Mowry Shale; light-gray sandstone, dark shale, and thin bentonite beds of the Lower Cretaceous Muddy Sandstone; greyish-black shale and siltstone of the Lower Cretaceous Skull Creek Shale; and interbedded greyish-black shale and siltstone, and sandstone of the Lower Cretaceous Cloverly Formation

PERMIAN, TRIASSIC AND JURASSIC

- **JTRPz** — Sedimentary rocks
  Variegated shale and claystone, and light-gray sandstone of the Upper Jurassic Morrison Formation; green micaceous shale and light-gray micaceous sandstone of the Upper Jurassic Sundance Formation; red claystone and shale, gypsum, and limestone of the Middle Jurassic Gypsum Spring Formation; red sandstone, siltstone, shale, and ledge-forming limestone of the Triassic Chugwater Formation; Permian red shale and siltstone with gypsum

PENNSYLVANIAN — CARBONIFEROUS

- **IPtn** — Tensleep Sandstone and Amsden Formation undivided
  The Tensleep Sandstone consists of light-gray sandstone with minor amounts of dolomite; the underlying Amsden Formation consists of red and purple shale, red sandstone, and dolomite

CAMBRIAN, ORDOVICIAN, MISSISSIPPIAN

- **Ꞓr** — Sedimentary rocks
  Light-gray limestone; dolomitic limestone, and dolomite of the Mississippian Madison Limestone; light-gray cliff-forming dolomite with sandstone at base of the Upper Ordovician Bighorn Dolomite; thin-bedded glauconitic flat-pebble limestone conglomerate, green micaceous shale, and brown glauconitic sandstone of the Upper and Middle Cambrian Gallatin and Gros Ventre Formations; light-yellowish-gray sandstone, green shale and siltstone of the Middle Cambrian Flathead Sandstone

PRECAMBRIAN

- **pЄr** — Igneous and metamorphic rocks

Contact
Dashed where approximately located

U D — Fault
Dashed where approximately located; dotted where concealed. D, downthrown side; U, upthrown side

Strike and dip of beds

A ——— A′ — Location of cross sections
Sections shown on figure 15 and 16

Stock, domestic, industrial, or unused well
Upper number indicates depth to water below land surface; lower number indicates depth of well. Units where reported, tenths where measured

Flowing well

Irrigation or public supply well

Flowing irrigation well

Spring

GEOLOGIC MAP OF SHERIDAN COUNTY, WYOMING, SHOWING LOCATION OF WELLS, SPRINGS, AND LINES OF CROSS SECTIONS