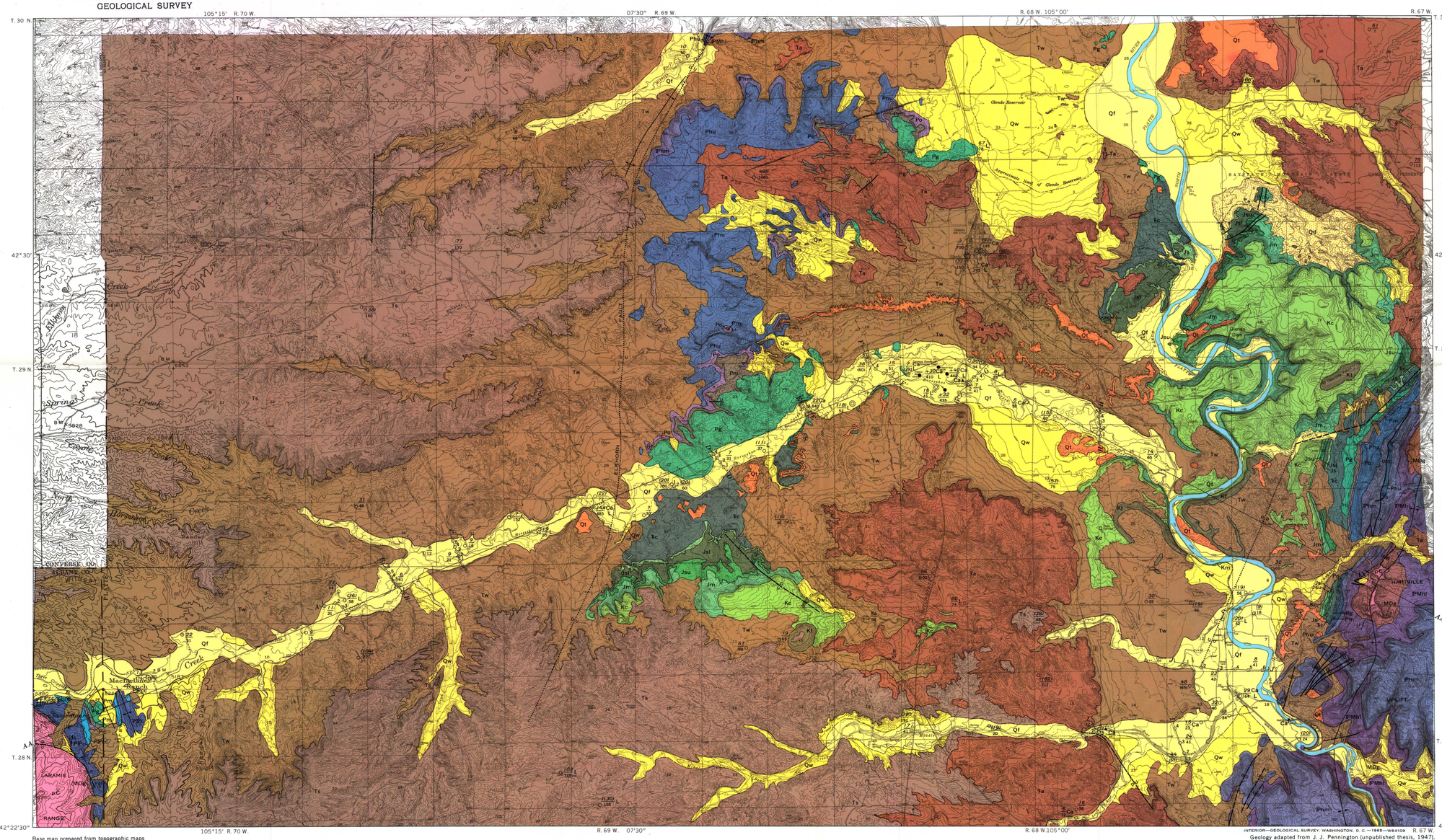


Base map prepared from topographic maps of the U.S. Geological Survey

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1965—W64109

Geology adapted from J. J. Pennington (unpublished thesis, 1947), Love and others (1949), Rapp and Babcock (1953), Morris and Babcock (1960), and N. M. Denson (unpublished data)

EXPLANATION

QUATERNARY

Recent

Qd — **Dune sand**
Fine windblown sand

Qw — **Slope wash**
Unsorted clay, silt, sand, and gravel

Qf — **Flood-plain deposits**
Clean sand and gravel and beds of clay and silt. Includes some slope wash

Pleistocene

Qt — **Terrace deposits**
Unconsolidated beds of silt, sand, gravel, cobbles, and boulders. Not mapped in detail

TERTIARY

Miocene and Pliocene

Ts — **Siltstone, sandstone, and conglomerate**
Loosely consolidated. In part equivalent to Ogallala Formation

Miocene

Ts — **Arikaree Formation**
Light brown silty sandstone

Oligocene

Tw — **White River Formation**
Buff siltstone and claystone

CRETACEOUS

Lower Cretaceous

Km — **Mowry Shale**
Dark bentonitic shale. Single exposure in sec. 1, T. 29 N., R. 68 W.

Kt — **Thermopolis Shale**
Black shale and gray sandstone beds. Includes Muddy Sandstone Member

Kc — **Cloverly Formation**
Gray sandstone and claystone

JURASSIC

Upper Jurassic

Jm — **Morrison Formation**
Variegated limestone, claystone, and sandstone

Jsu / Jsl — **Sundance Formation**
Jsu, upper part; locally called "Upper Sundance," shale, siltstone, and sandstone
Jsl, lower part; locally called "Lower Sundance," fine-grained sandstone

Js — **Sandstone and shale**
Fine- to coarse-grained sandstone and shale

TRIASSIC

Tc — **Chugwater Formation**
Red siltstone and shale

Pg — **White gypsum and red shale**

PERMIAN

Pm — **Minnekahta Limestone**
Thin-bedded limestone

Po — **Opeche Shale**
Red shale and silty sandstone

LARAMIE RANGE

PPcc / PPc — **Casper Formation**
Limestone, dolomite, and sandstone
PPcc, "Converse sand" of local usage; white fine-grained clean sandstone

HARTVILLE UPLIFT

Phu / Phm / PMhl — **Hartville Formation**
Phu, upper part; division I, sandstone, dolomite, and breccia; includes "Converse sand" of local usage
Phm, middle part; divisions II and III, dolomite and limestone
PMhl, lower part; divisions IV through VI, limestone, shale, and sandstone

PENNSYLVANIAN AND PERMIAN

MISSISSIPPIAN(?)

MDg — **Guernsey Formation**
Hard cherty limestone and dolomite

DEVONIAN AND MISSISSIPPIAN

CARBONIFEROUS

pC — **Igneous and metamorphic rocks**

PRE-CAMBRIAN

Formation contact
Dashed where approximate. The contacts of geologic formations are generalized with respect to altitude

Fault
Dashed where approximate; dotted where concealed; U, upthrown side; D, downthrown side

Anticline
Showing trace of axial plane

Syncline
Showing trace of axial plane

Strike and dip of beds

Strike and dip of overturned beds

Stock, domestic, or unused well
Ca, water sample taken for chemical analysis; L, well log in table of logs; lower number indicates depth of well; upper number indicates depth to water table or if preceded by + indicates pressure head of artesian well converted to feet above surface; number in parentheses is reported and approximate

Surface-water sampling site

Irrigation well

Public-supply well

Flowing well

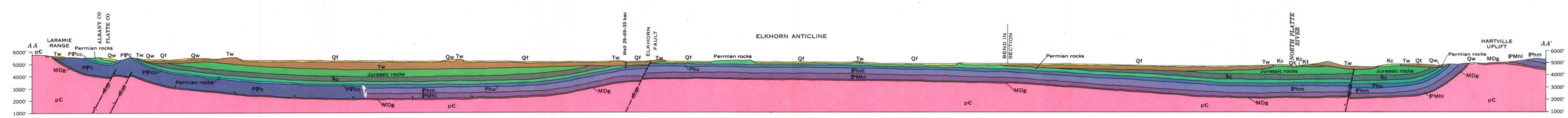
Test hole

Dry oil-test hole

Spring

Location of geologic section

TRUE NORTH
MAGNETIC NORTH
14°
APPROXIMATE MEAN DECLINATION, 1965



GEOLOGIC MAP AND SECTION OF THE GLENDO AREA, PLATTE COUNTY, WYOMING, SHOWING THE LOCATION OF WELLS, TEST HOLES, AND SPRINGS

SCALE 1:48 000

1 ½ 0 1 2 3 MILES

1 .5 0 1 2 3 KILOMETERS

CONTOUR INTERVAL 20 FEET
50 FEET ALONG WEST MARGIN OF MAP
DATUM IS MEAN SEA LEVEL