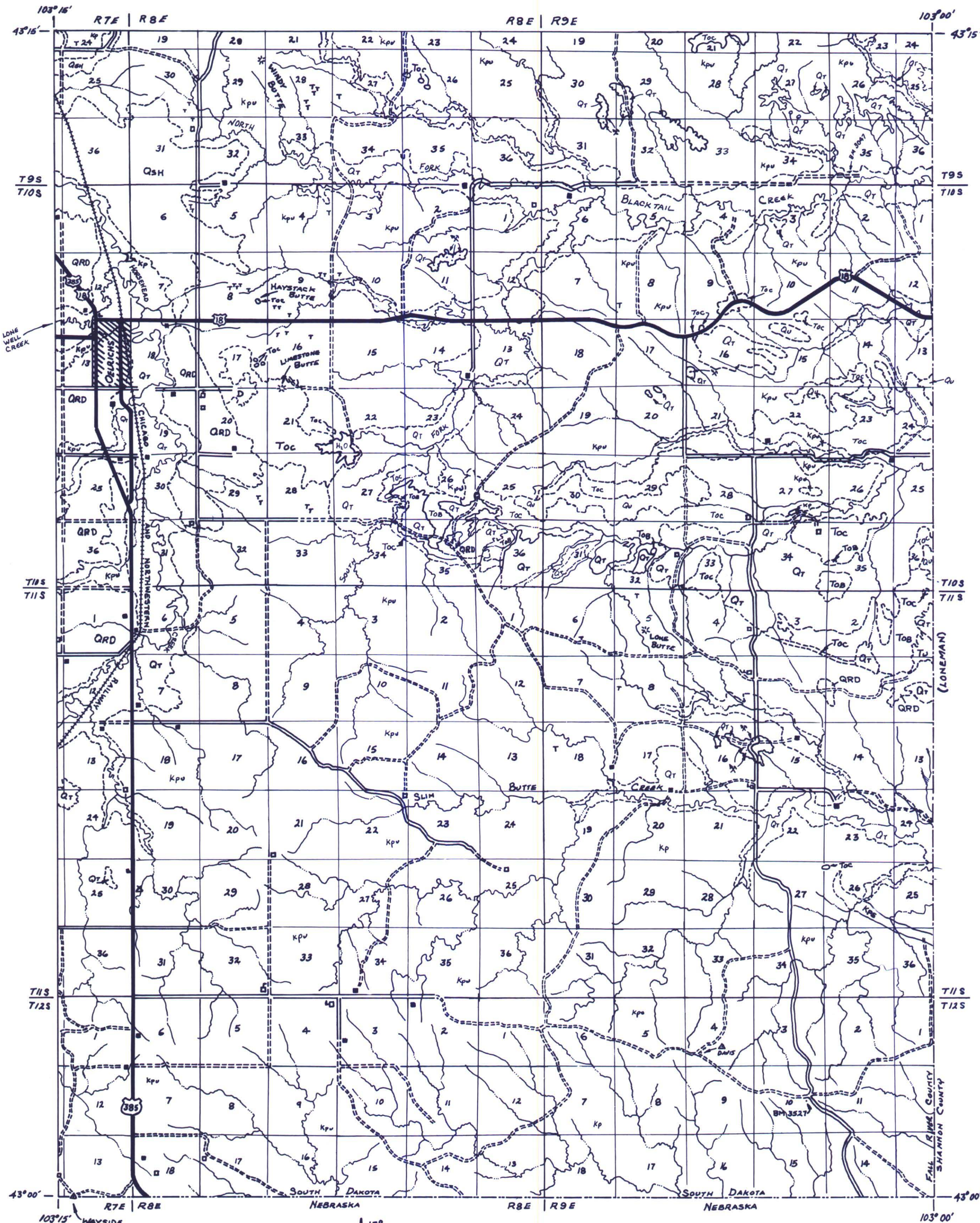


South Dakota Geological Survey
Duncan J. McGregor, State Geologist

State of South Dakota
Richard F. Kneip, Governor

**Geology of the
Oelrichs Quadrangle
South Dakota**

Explanation



Qt

ALLUVIAL TERRACE DEPOSITS
Floodplain deposits of unconsolidated poorly sorted silt, sand and gravel in present and ancient stream valleys. Estimated maximum thickness 30 feet (10 meters).

QRD

RED DOG LOESS
Vertical-weathering, eolian unconsolidated tan silt. Maximum thickness 30 feet (10 meters).

QSH

SAND HILLS FORMATION
Fine to medium unconsolidated wind-blown sand characterized by grass-stabilized dunes and blowouts. Maximum thickness 50 feet (17 meters).

Qu

UNDIFFERENTIATED QUATERNARY DEPOSITS
Loess, dune sand and alluvial terrace deposits which were not differentiated in mapping.

Tu

UNDIFFERENTIATED TERTIARY DEPOSITS
Tan conglomerates to light green clayey siltstone; blue volcanic ash bed near base. Maximum thickness 230 feet (70 meters).

Tob

BRULE FORMATION
Tan to reddish-brown calcareous massively-bedded silty clay with minor green mottling. High volcanic ash content; locally contains many random four to six-inch calcareous concretions; unit is highly faulted. Maximum thickness 300 feet (92 meters).

Toc

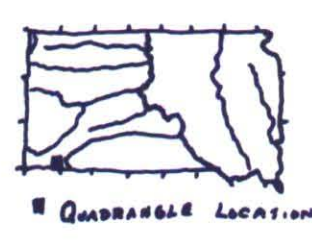
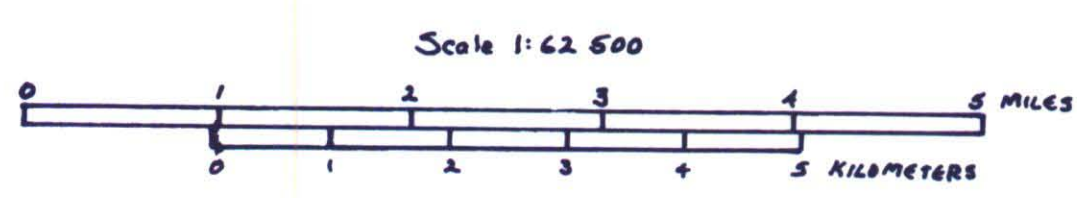
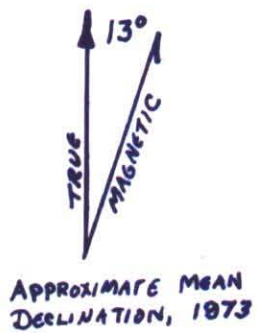
CHADRON FORMATION
Green to reddish-brown noncalcareous waxy clay and silty clay; weathers to a popcorn surface; contains local beds of dense light green limestone. Maximum thickness 150 feet (46 meters).

Kpu

PIERRE SHALE
Gray to dark gray noncalcareous shale and mudstone. Exposed thickness 980 to 1960 feet (300 to 600 meters). Kpb, bentonitic zone, is tan bentonite and gray bentonitic mudstone. Maximum thickness 100 feet (30 meters).

- T - TEREE BUTTE
- GEOLOGIC CONTACT
DASHED WHERE APPROXIMATE
- INTERMITTENT STREAM
- HARD SURFACED ROAD
GRADED ROAD AND TRAIL
- RAILROAD TRACK
- △ DAVIS TRIANGULATION STATION
- BM 3527 - BENCH MARK
- X ROADSIDE PARK
- D DUMP
- HOUSE, SCHOOL, COMMERCIAL BUILDING
- ⊗ GRAVEL PIT
- COUNTY LINE
- STATE LINE

Geology by J.C. HARKSEN 1969-1970
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