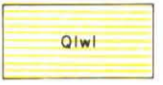


EXPLANATION

Sedimentary Rocks



Alluvium
(Floodplain and recent valley-bottom deposits of gravel, sand and silt)



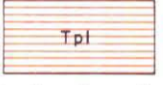
Landslide deposits
(Slumped White River and Ludlow material)



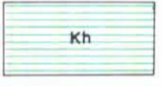
Terrace deposits
(Rounded quartz sand and mainly gravel, composed of ironstone pebbles 0-11 feet thick)



White River Group
Chadron Formation
(Light-greenish to purplish bentonitic clay with two ledges of calcareous cemented fine-grained sandstone and limestone, about 55 feet apart, forming the cap rock for Signal Butte and Fox Ridge. Basal white to iron-stained poorly cemented massive to cross-bedded quartz-feldspar grit. About 130 feet thick on Fox Ridge)



Ludlow Formation
(Cream to gray massive fine- to medium-grained sand and clay-shale in shades of red, brown and yellow; lenses of carbonaceous shale of the Shadehill coal facies at base. Gypsum associated with the carbonaceous shale. About 90 feet thick)



Hell Creek Formation
(Inter-bedded massive to cross-bedded interbedded bentonitic sand, silt, and clay. Locally the sand has calcareous cement, forming ledges and cap rock. Weathers to badlands topography with popcorn and fluted surfaces. Angular to rounded fragments of ironstone scattered on the surface. Lenses of carbonaceous shale throughout the unit. About 450 feet thick)



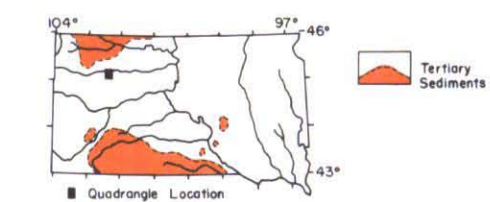
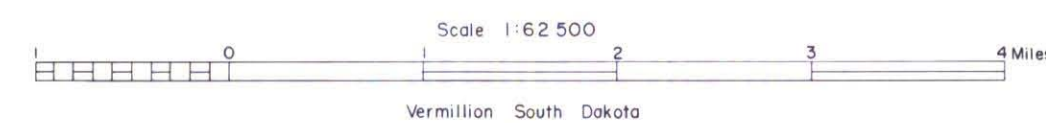
Fox Hills Formation
Bullhead Member
(Alternating beds of dark-gray fissile silt and light-gray fine-grained sand. Near the top is a gray to buff fine- to medium-grained graywacke. Fifty-five feet exposed)

Geologic Contact
(dashed where approximately located)

- X Gravel Pit
- X BM 2801 Bench Mark
(monument showing exact altitude above sea level)
- X 3103 Spot Altitude
- ▲ SIGNAL BUTTE
Triangulation Station
(monument marking exact geographic location)
- ■ ■ House, School, and Church

Geology by Alan U. Lange, 1961
Assisted by Charles J. Mickel
Vertical and horizontal control surveyed from U.S. Geological Survey topographic maps and triangulation and level lines of Federal Surveys.
Drafted by Bruno C. Petsch, 1962

APPROXIMATE MEAN DECLINATION, 1962



SIGNAL BUTTE QUADRANGLE

