

EXPLANATION

Quaternary

- Qc** Colluvium
Unconsolidated rock debris at foot of slopes. Derived from overlying terrace deposits or bedrock. Not known to yield water to wells in the area.
- Qal** Alluvium
Unconsolidated gravel, sand, and silt. Predominantly gravel in Greybull River valley and sand and silt in Dry Creek and Big Horn River valleys. Moderate to large yields obtained in Greybull River valley.
- Qte** Deposits of Greybull terrace
10 to 40 feet above present stream level. Unconsolidated gravel, sand, and silt. Capable of yielding moderate to large quantities of water.
- Qts** Deposits of Sunshine terrace
150 to 225 feet above present stream level. Unconsolidated gravel, sand, and silt underlying YU Bench, Bridger Butte, and Table Mountain. Moderate to large yields obtained on Emblem Bench.
- Qn** Deposits of numbered terraces
Thin unconsolidated sand and gravel containing small areas.
- Qr** Thin gravel deposits
Thin veneer of gravel mantling bedrock slope south of YU Bench.
- Tr** Deposits of Rim terrace
100 to 550 feet above present stream level. Unconsolidated gravel, sand, and silt underlying YU Bench, Bridger Butte, and Table Mountain. Not water bearing at present (1958).

Tertiary

- Tw** Willwood formation
Interbedded red, yellow, brown, and variegated sandstone, mudstone, and conglomerate. Yields small to moderate quantities of water to stock and domestic wells.
- Tfu** Fort Union formation
Interbedded sandstone and shale. Probably capable of yielding small to moderate quantities of water.
- Kim** Lance and Metcalf formations
Sandstone and shale of Lance formation underlain by shale, sandstone, coal, and bentonite of Metcalf formation. Sandstone beds probably capable of yielding small to moderate amounts of water.

Upper Cretaceous

- Kmv** Mesaverde formation
Interbedded sandstone and shale in upper part, massive sandstone with coal beds in lower part. Probably capable of small to moderate yields.
- Kc** Cody shale
Sandy shale, sandstone, and bentonite. Probably capable of very small yields.
- Kit** Frontier formation, Mowry shale, and Thermopolis shale
Sandstone, shale, coal, and bentonite. Probably capable of small yields.
- Kju** Cloverly and Morrison formations
Sandstone, shale, and conglomerate. Probably capable of small to moderate yields.

Lower and Upper Cretaceous

- Jtu** Sundance, Gypsum Spring, and Chuagwater formations
Sandstone, shale, limestone, and gypsum. Probably capable of small yields.

CONTACT

U. S. Bureau of Reclamation test hole on YU Bench
Number in thickness, in feet, of deposits of the Rim terrace, Tr

Domestic or stock well producing water from unconsolidated alluvial or terrace deposits

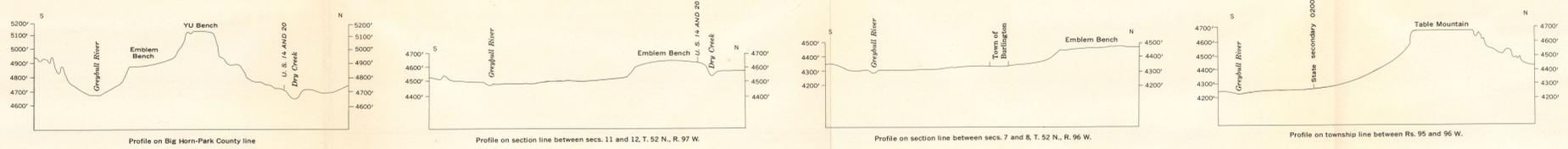
NOTE: Slant number is depth of well, in feet. Upright number is depth to water, in feet below land surface.
L, log of well in table of well logs.
Ca, chemical analysis of water in table of chemical analyses.

Well obtaining water from consolidated sedimentary rocks

Irrigation well

Observation well

Spring



TOPOGRAPHIC PROFILES ACROSS THE GREYBULL RIVER VALLEY AND ADJACENT TERRACES

VERTICAL EXAGGERATION X 18.1

SCALE 1:63 360

Base map from maps and aerial photographs of the U. S. Geological Survey

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D. C. 20549
Geology modified from Andrews and others, 1947; hydrology by C. J. Robinson

MAP OF THE GREYBULL RIVER-DRY CREEK AREA, WYOMING, SHOWING GEOLOGY, DEPTH TO WATER (1956-57), AND LOCATION OF WELLS, SPRINGS, AND TEST HOLES