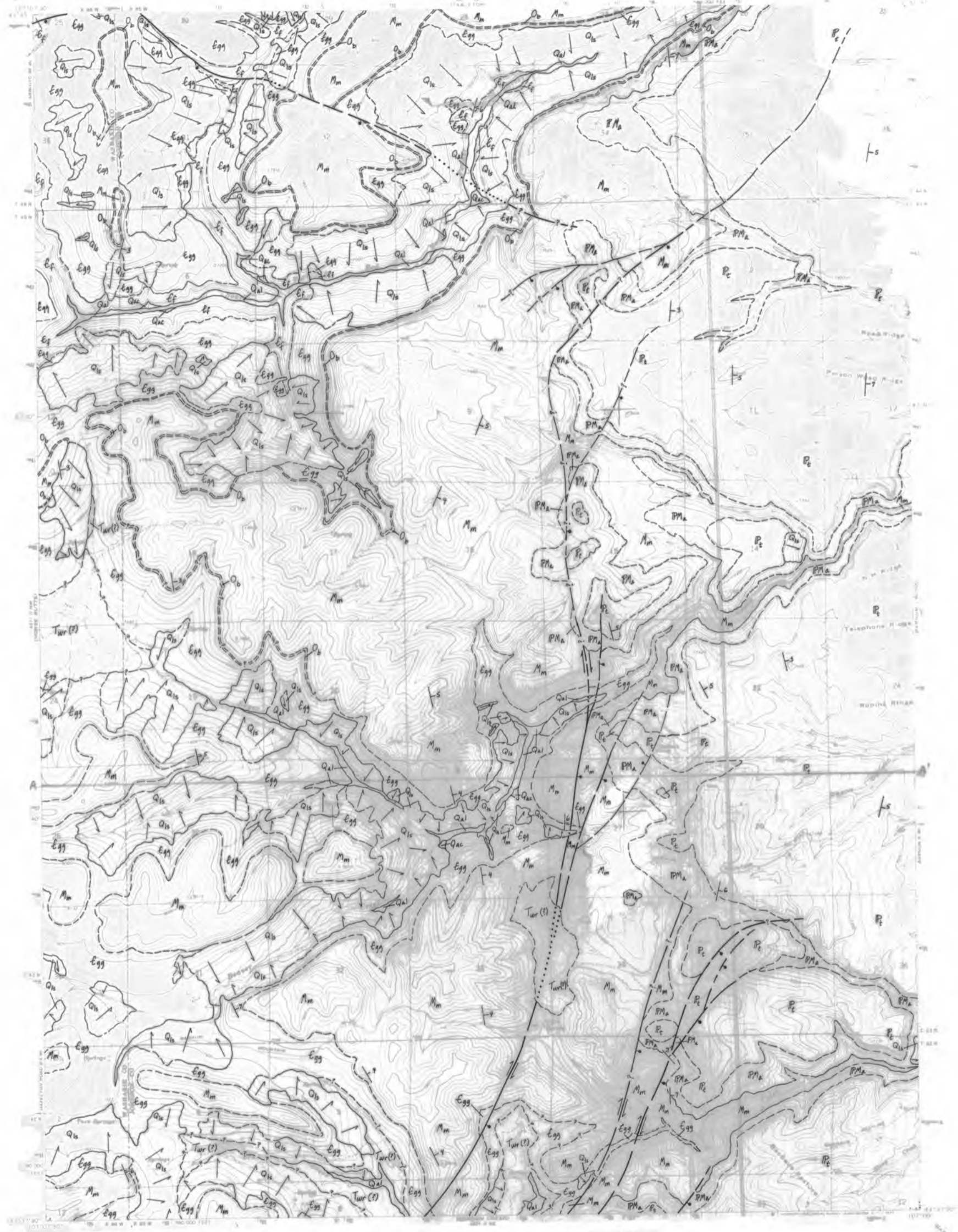


PREPARED IN COOPERATION WITH THE U.S. GEOLOGICAL SURVEY



EXPLANATION

- QUATERNARY**
 - Qa1** Alluvium
Unconsolidated deposits of alluvium along stream valleys at or near present stream levels.
 - Q1s** Landslide deposits
Blocks of bedrock or loose slope debris; arrows point in the inferred direction of movement.
 - TERTIARY**
 - Tur** White River Formation
Bentonitic tuff. Altered volcanic ash composed of swelling clays with minor quartz, feldspar, mica, and catch glass shards visible under microscope; very pale orange to light gray. Conglomerate or cobble zone noted at one outcrop near Carr Spring. Cobbles made up of igneous and metamorphic rocks and some Cambrian rocks. Deposited in valleys into Paleozoic rocks. Variable thickness.
 - PENNSYLVANIAN**
 - Pt** Tenseep Sandstone
Sandstone and dolomite. Sandstone—mostly fine grained, very light gray to yellowish gray, medium- to large-scale crossbeds, some planar and rippled beds, mostly friable but some hard well-cemented zones, especially in the middle and lower portion. Dolomite—gray, yellowish orange, and pinkish gray, thin bedded to massive, occurring mostly in the lower portion of the formation. Thickness from 350 to 400 feet.
 - PENNSYLVANIAN AND MISSISSIPPIAN**
 - PMA** Amaden Formation
Includes three members (not mapped separately):
Ranchester limestone—(uppermost member) dolomite, gray to grayish orange, with thin interbeds of very dark red and olive gray shale and mudstone. This member is quite thin in this area.
Horseshoe Shale—mudstone and shale, moderate red to reddish orange; includes thin beds of gray, finely crystalline limestone.
Darwin Sandstone—(lowermost member) sandstone, fine to medium-grained, light gray to reddish brown, cross-bedded to planar bedded, variable thickness and locally absent. Total formation thickness from 200-250 feet.
 - MISSISSIPPIAN**
 - Mm** Madison Limestone
Limestone and dolomite, gray to yellowish gray, thin bedded to thick bedded, fossiliferous in most intervals, chert nodules and lenses common in some zones. Dolomitic limestone at base and karst surface developed on top. Thickness from 300 to 400 feet.
 - ORDOVICIAN**
 - Ob** Bighorn Dolomite
Dolomite with basal sandstone. Dolomite—calcareous in part, gray to light olive gray, light red to pink mottling locally, very hard, medium bedded to massive, characteristically pitted on weathered surfaces. Sandstone—quartzitic, fine to coarse grained; very light gray with mottled spots, dusky red, or moderate yellowish brown; friable to well cemented; conglomerate layer 15 to 30 feet. Total thickness varies from zero in the south to 50 feet in the north.
 - CAMBRIAN**
 - Egg** Gallatin Limestone and Gros Ventre Formation undivided
Uppermost unit contains resistant grayish red limestone and thin beds of flat-pebble conglomerate underlain by olive green to yellowish brown, glauconitic shale and siltstone. The middle unit includes light gray limestone, silty and glauconitic, interbedded with soft grayish green shale and beds of flat-pebble conglomerate. The basal unit consists of yellowish brown to reddish brown, friable, medium- to coarse-grained glauconitic sandstone. The two formations are not distinguishable in this area. Landslides are common in this unit. Total thickness from 500 to 600 feet.
 - Cf** Flathead Sandstone
Tan, brown, and reddish gray quartz sandstone, medium- to coarse-grained and crossbedded to planar bedded. Thin interbeds of green, mafic, and tan siltstone, mainly in the upper portion; arkosic conglomerate in lower part. Thickness is 300 to 400 feet.
- Formation contact
Dashed where approximately located.
- Fault
Dashed where approximately located and dotted where concealed. Bar and ball on downthrown block. Arrows denote strike-slip motion.
- Anticline
Trace of axial plane and direction of plunge defined by field dip measurements and by air photo interpretation. Dashed where approximately located. Short arrow denotes steep limb of asymmetrical anticline.
- Strike and dip of beds, showing angle of dip

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Topographic base by U.S. Geological Survey



PRELIMINARY GEOLOGIC MAP OF THE TURK SPRINGS QUADRANGLE, WASHAKIE AND JOHNSON COUNTIES, WYOMING

By Alan J. Ver Ploeg and Phillip L. Greer 1989