



CORRELATION OF MAP UNITS

Qc	Qp	Qw	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53	Q54	Q55	Q56	Q57	Q58	Q59	Q60	Q61	Q62	Q63	Q64	Q65	Q66	Q67	Q68	Q69	Q70	Q71	Q72	Q73	Q74	Q75	Q76	Q77	Q78	Q79	Q80	Q81	Q82	Q83	Q84	Q85	Q86	Q87	Q88	Q89	Q90	Q91	Q92	Q93	Q94	Q95	Q96	Q97	Q98	Q99	Q100
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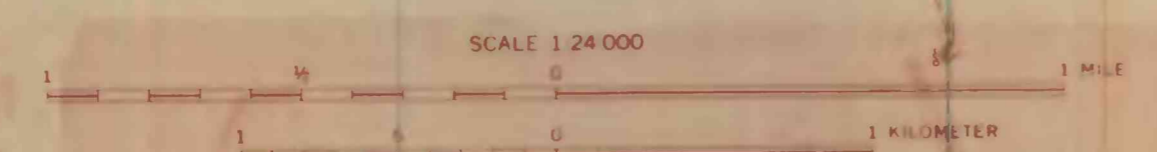
DESCRIPTION OF MAP UNITS

Qc	Calavium--Slopewash of silt- to boulder-sized fragments derived from underlying and adjacent units.	Helocene
Qp	Flood-plain deposits--Sand, silt, and clay; smaller amount of gravel at surface distinguishes these deposits from deposits along topographically lower nearby stream valleys.	QUATERNARY
Qw	Swamp deposits--Clay, silt, and fine sand, dark-gray and brown; rich in vegetal debris.	QUATERNARY OR TERTIARY
Q1	Loess--Light-gray structureless homogeneous wind-deposited silt. Gastropods from several localities have a C ¹⁴ age ranging from 13,000 to 19,000 years.	Pleistocene
Q2	Alluvial fan deposits--Crudely stratified deposits of gravel, sand, silt, and clay that spread outward from mouths of ravines and canyons; shows linear sorting along distributaries; finer grained debris becomes progressively more abundant toward downstream margins of fans.	QUATERNARY OR TERTIARY
Q3	Talus deposits--Locally derived coarse, angular rock fragments that accumulated on steep slopes and at the base of cliffs.	Pleistocene
Q4	Gravel deposits--Gravel deposited along flood channels of major streams; composed chiefly of quartzite roundstones.	QUATERNARY OR TERTIARY
Q5	Landslide debris--Chaotically mixed boulders and finer grained rock debris emplaced by mass movement.	Pleistocene
Q6	Terrace gravel--Predominantly rounded quartzite gravel deposited by meltwater from adjacent glaciers; includes several mappable terrace morphologic units related to specific river systems.	QUATERNARY OR TERTIARY
Q7	Slump blocks--Coherent masses of bedrock that have moved downslope.	Pleistocene
Q8	Outwash gravel deposits from Q ⁸ glaciation--Gravel of quartzite roundstones, crudely stratified; top surface characteristically planar.	QUATERNARY OR TERTIARY
Q9	Glacial debris of third major glaciation--Moraine debris with subdued surface topography; capped by loess and soil in most places.	Pleistocene
Q10	Loess and boulders--Chalky-white formless unstratified deposits consisting of glacial erratics of many sizes and compositions derived from deposits of second major glacial stage; erratics are embedded in a lime-rich white loess matrix; confined to higher hills in the National Elk Refuge.	QUATERNARY OR TERTIARY
Q11	Glacial debris of second major glaciation--Very old formless piles and lag deposits of large and small erratics, in places mixed with outwash gravel, sand, and silt; most erratics are not locally derived.	Pleistocene
Q12	Lacustrine deposits like those near Shooting Iron Ranch--Pink, red, green, yellow, dark-gray, and brown bentonitic mollusk-bearing claystone, gray and yellow tuffaceous sandstone, and siltstone and pebble conglomerate of volcanic rock fragments in bentonite matrix. Mollusks indicate local deep-water environment of deposition. Maximum thickness is more than 100 ft (30.5 m).	QUATERNARY OR TERTIARY
Q13	Andesite of uncertain age--Andesite, pink to brown to black, coarsely porphyritic; chiefly flows and intrusive masses. Thickness at least 500 ft (152 m).	Pliocene
Q14	Obsidian pipe--Black obsidian breccia capped by black perlite.	QUATERNARY OR TERTIARY
Q15	Pumice breccia and sandstone--Pumice breccia, pale-pink and white, composed of frothy pumice clasts and black obsidian in a soft massive shaly matrix; underlain by gray tuff and sandstone, in part very limy. Thickness about 120 feet (36.6 m).	QUATERNARY OR TERTIARY
Q16	Basalt--Dark-green to red, dense to vesicular, hard; intruded into Tensleep Formation directly east of quadrangle boundary but overlying Pennsylvanian rocks within quadrangle.	QUATERNARY OR TERTIARY
Q17	TEENNOT FORMATION (PLIOCENE)--Limestone, claystone, and pumice, chalky-white to light-gray, soft, porous; lower two-thirds is chiefly nodular porous limestone in beds 100-200 ft (30-61 m) thick interbedded with pumice in beds 20-75 ft (6-23 m) thick. Upper part is very fossiliferous thin-bedded claystone, marlstone, and tuff. Thickness more than 6,000 ft (1,829 m).	Pliocene
Q18	Limestone, quartzite, and obsidian pebble conglomerate--In middle part of formation; 110 ft (33.5 m) thick.	QUATERNARY OR TERTIARY

OTHER FEATURES

-----	Location of measured and sampled section--Dotted where offset. In places where outcrops are too narrow to show symbol, area measured is bracketed. Unit numbers are shown in some sections.
-----	Mappable bed of limestone in Teennot Formation
-----	Scalez (fossil gastropod operculum) marker bed in Teennot Formation
-----	Obsidian grit marker bed
-----	Selected stream channel--Many have been beheaded by faulting or were abandoned because of subsequent drainage changes
○	Wells
○	Water well
○	Warm water well
○	Spring in or near outcrop of Teennot Formation
○	Natural salt lick used chiefly by elk
○	J. C. Reed, Jr., station in Precambrian rocks
-----	Terrace margin--Hachures on downslope side
-----	Terrace sequence--Dots mark outer boundary of terrace surface except where terrace marks contact between two mappable units; in these places the contact is shown as solid line with hachures on downslope side; T-1 is the youngest, T-4 is oldest
T-1	Terraces related to Gros Ventre River:
T-1a	At and within 10 ft (3 m) of present stream level
T-1b	5 ft (1.52 m) above terrace T-1
T-2	7 ft (2.13 m) above terrace T-1a
T-2	5 ft (1.52 m) above terrace T-1a
T-1	Terraces related to Snake River (ET-4 is probably related to both the Snake and Gros Ventre Rivers):
ET-1b	10 ft (3 m) above Snake River flood channels
ET-3	40 ft (12.2 m) above terrace ET-1b (terrace ET-2 is not recognizable in this quadrangle)
ET-4	Approximately 100 ft above terrace ET-3 but about half of that amount may be the result of fault displacement which down-dropped the ET-3 surface
○	Dipoides site
○	Site of vertebrate fossils of Pliocene age

Base from U.S. Geological Survey
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Geology mapped in 1951-71
U.S. Geological Survey
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This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

GEOLOGIC MAP OF GROS VENTRE JUNCTION QUADRANGLE, TETON COUNTY, WYOMING