

Base from U.S. Geological Survey, 1951-62

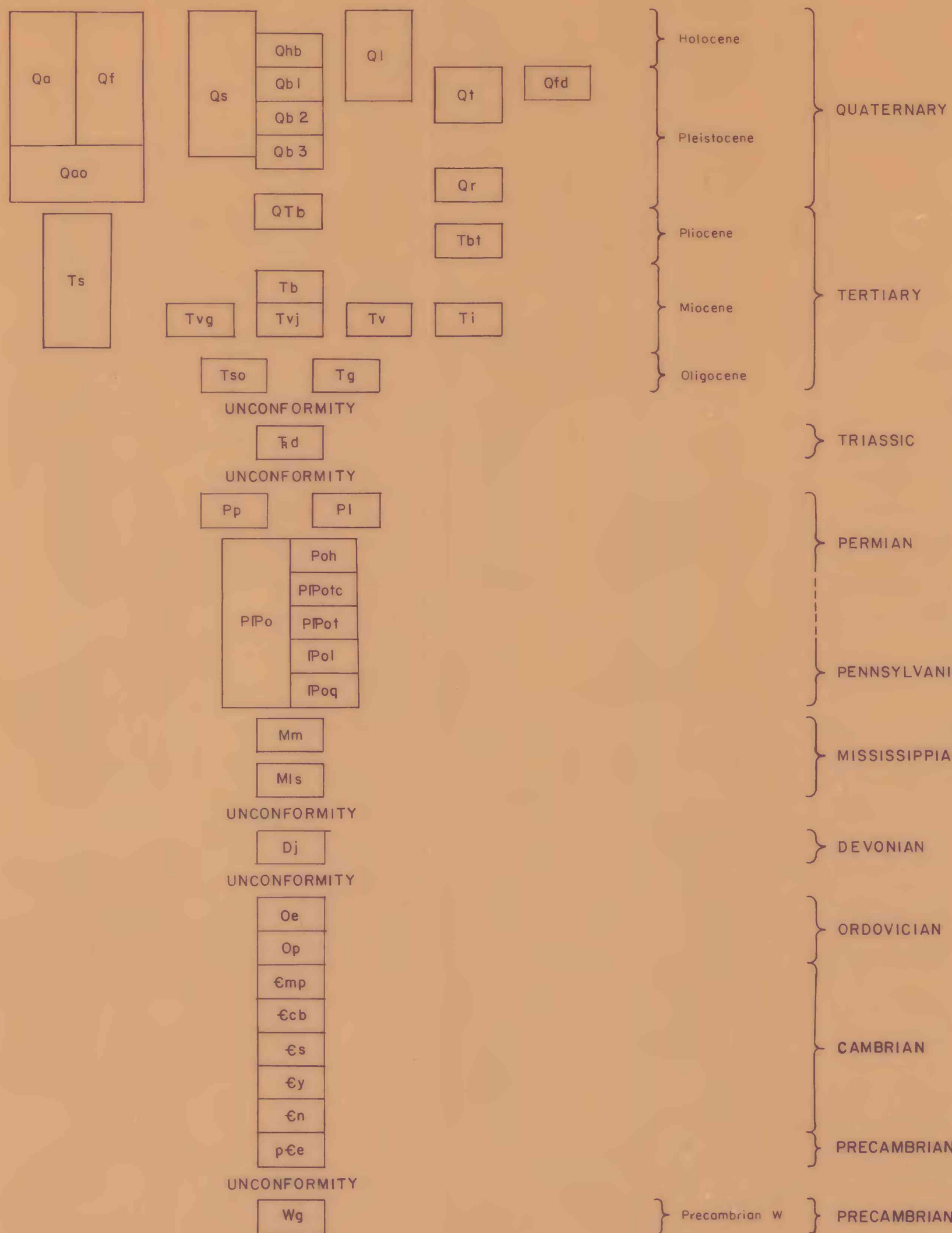
PRELIMINARY GEOLOGIC MAP OF THE WEST HALF OF THE POCATELLO 1° X 2° QUADRANGLE, IDAHO

By

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1978

CORRELATION OF MAP UNITS



UNITS OF UNKNOWN AGE AND CORRELATION

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DESCRIPTION OF UNITS

	DESCRIPTION OF UNITS	Tb	BASALT (HUCOCENE)--Gray to light-gray lava that weathers to a reddish-gray or reddish-brown color. Fine grained and dense to medium grained, aphyritic. Phenocrysts very sparse and as much as 1 mm in length. Olivine phenocrysts are abundant, generally less than 0.5 mm in diameter and light green to yellow in color. Dated by Armstrong and others (1975) as 8.2±0.3 m.y. old, and by Dalrymple (written commun.) as 9.8±0.6 m.y. old.
Qa	ALLUVIUM (HUCOCENE AND PLEISTOCENE)--Unconsolidated clay, silt, sand, and gravel deposited in valley bottoms and low fan-like areas of major drainages.	Tc	TUFFS OF THE GORGE CHIEF AREA (HUCOCENE)--Welded ash flow tuffs as prominent single or composite ash flow units. Porphyritic to brownish lithoidal rhyolite, black rhyolite glass, and gray glassy rhyolite ash. Dated by Armstrong and others (1975) as 8.3±0.3 m.y. old.
Qb1	FAN ALLUVIUM AND COLLUVIUM (HUCOCENE AND PLEISTOCENE)--Unconsolidated silt, sand, and gravel deposits in minor drainages and fans; unit includes slope-wash, talus, and minor glacial deposits.	Td	LAVAS OF THE JIM SAGE AND COTTERED MOUNTAINS (HUCOCENE)--Dark-gray to black, porphyritic vitrophyres and red-brown or gray, platy to columnar, aphyritic, porphyritic devitrified flows of rhyolitic composition. Phenocrysts are mostly plagioclase with subordinate quartz and pyroxene. Dated by Armstrong and others (1975) as 8.3±0.4 m.y. old.
Qb2	LANDSLIDE DEPOSITS (HUCOCENE AND PLEISTOCENE)--Includes large slump blocks.	Te	LAVAS AND ASH FLOW TUFFS OF UNKNOWN CORRELATION (HUCOCENE)--Black to gray vitrophyres and gray, brown or reddish devitrified units of rhyolitic composition scattered throughout the map area. These units span a wide range of ages. Armstrong and others (1975) obtained dates from several localities ranging from 8.2 to 10.8 m.y.
Qb3	TILL (PLEISTOCENE)--Unconsolidated, assorted bouldery deposit along land creek on the north flank of Mount Harrison.	Tf	INTRUSIVE ROCKS (HUCOCENE)--Brown-weathering gray and grayish-purple rocks of rhyolitic composition containing phenocrysts of plagioclase and pyroxene. A rim of glassy, lithoidal, brecciated, and silicified rock is present at margins, suggesting emplacement at a shallow level.
Qb4	Snake River Group (HUCOCENE AND PLEISTOCENE)--Basalt flows of craters of the Moon-Kings Bowl-Hapi fields (Hucocene)--Flows of dark-gray to black, olivine-rich pahoehoe basalt. These flows are characterized by a very rough surface texture, almost no soil cover, and very dark tones on aerial photographs.	Tg	OLDER GRAVEL DEPOSITS (OLIGOCENE)--Cemented gravels with a rusty colored matrix. Probably pre-volcanic in age; occur along western flank of Sublett Mountain.
Qc	Silt (Hucocene and Pleistocene)--Silt with washed from the surface of basalt flows and deposited in depression between basalt flows.	Th	GRANDIORITE OF ALMO PLUTON (OLIGOCENE)--Siltstone granodiorite to muscovite diorite, medium grained, equigranular, cut by pegmatitic granite dikes and pegmatite bodies. Dated by Armstrong (1976) as 28.5±1.0 m.y. old.
Qd	Deposits of Bonneville Flood (Pleistocene)--Unconsolidated and poorly sorted to unsorted sand and gravel locally derived and deposited along the floodwater's path.	Ti	SIBBOOD FORMATION (DEVONIAN)--Light- to dark-gray weathering, massive dolomite and limestone.
Qe	Older alluvium and colluvium (Pleistocene)--Unconsolidated silt, sand, and gravel deposited before present fluvial cycle.	Tj	PHOSPHORIA FORMATION (PERMIAN)--Light-gray weathering, dark gray to black, and gray limestone, rare phosphate rock. Badger Peak is present locally.
Qf	Basalt unit 1 (Pleistocene)--Flows of gray to dark-gray olivine-rich pahoehoe basalt. The surface texture of these flows is generally rough with more than 75 percent outcrop exposed through a thin soil cover. On aerial photographs these flows can be distinguished by the darker gray tones.	Tk	LIMESTONE (PERMIAN)--Gray to dark-gray dense limestone that weathers light gray. Locally sandy. Limestoniferous, silicified, or cherty.
Qg	Basalt unit 2 (Pleistocene)--Flows of gray to dark-gray olivine-rich pahoehoe basalt. These flows have a variable thickness of soil cover exposing 25 percent to 75 percent outcrop. On aerial photographs these flows can generally be distinguished by light to dark-gray tones.	Tl	QUINCY FORMATION (PERMIAN AND PENNSYLVANIAN)--Light-gray to light yellowish-gray, poorly sorted calcareous quartz siltstone and sandstone that weathers dark and brown, interbedded with gray and tan silty and sandy limestone some massive, that weathers gray, tan, reddish tan, and brown, and some calcareous. Locally limestoniferous.
Qh	Basalt unit 3 (Pleistocene)--Gray to dark-gray flows of olivine-rich pahoehoe basalt characterized by smooth rolling surfaces and less than 25 percent outcrop exposed through a thick soil cover. On aerial photographs these flows are generally the lighter gray tones.	Tm	UNIT OF UPPER AGE
Qb1	Basalt unit 1 (Pleistocene)--Flows of gray to dark-gray olivine-rich pahoehoe basalt. The surface texture of these flows is generally rough with more than 75 percent outcrop exposed through a thin soil cover. On aerial photographs these flows can be distinguished by the darker gray tones.	Tn	Badger Peak Cutoff Sandstone (Cramer, 1971) (Permian)--Quartzite siltstone and sandstone, non-calcareous, interbedded with dolomite. Limestone and some beds of cherty limestone. Mapping has shown that the Badger Peak and Badger Sandstones of Cramer are, in fact, the same stratigraphic units.
Qb2	Basalt unit 2 (Pleistocene)--Flows of gray to dark-gray olivine-rich pahoehoe basalt. These flows have a variable thickness of soil cover exposing 25 percent to 75 percent outcrop. On aerial photographs these flows can generally be distinguished by light to dark-gray tones.	To	Trail Canyon Limestone (Cramer, 1971) (Permian and Pennsylvanian)--Massive limestoniferous limestone with thin interbeds of silty and sandy limestone capped by a prominent ledge-forming bedded chert.
Qb3	Basalt unit 3 (Pleistocene)--Gray to dark-gray flows of olivine-rich pahoehoe basalt characterized by smooth rolling surfaces and less than 25 percent outcrop exposed through a thick soil cover. On aerial photographs these flows are generally the lighter gray tones.	Tp	Tussock Sandstone (Cramer, 1971) (Permian and Pennsylvanian)--Yellowish-gray, orange and tan, places pale red sandy and silty limestone, and calcareous quartz sandstone locally containing chert grit layers.