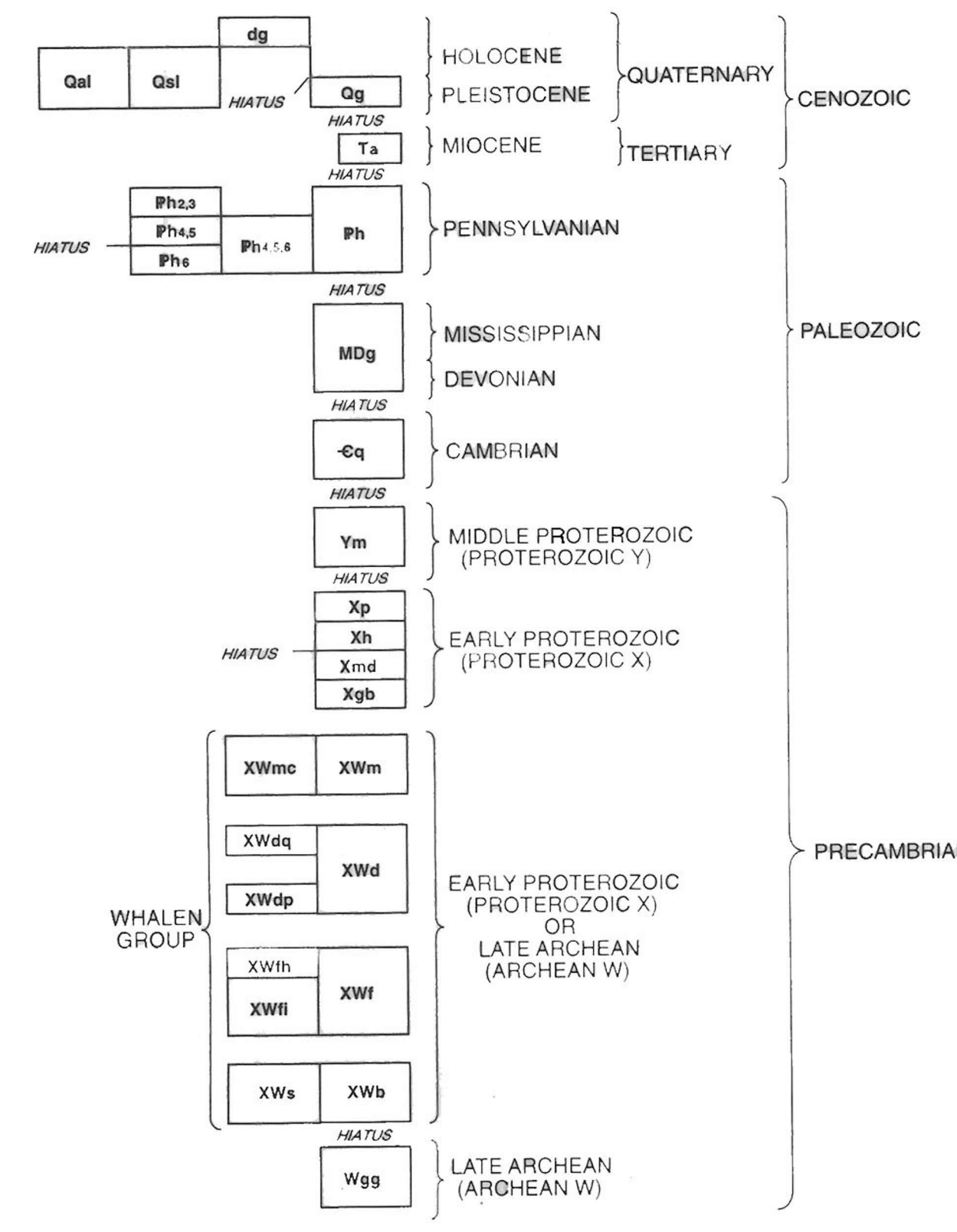


EXPLANATION

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- dg disturbed ground - areas covered by urban or industrial development.
Qal Alluvial deposits - Sand, silt, gravel, and clay deposited mainly along the North Platte River...
Qel Silty loess - Brown to dark brown deposits of windblown silt with minor clay and very fine sand...
Qg Gravel deposits - Boulder to pebble conglomerate deposited in a fluvial environment...
Ta Arkkaree Formation - Light gray tuffaceous sandstone containing occasional limy concretions...
Ph Hartville Formation, undivided - Limestone, siltstone, sandstone, claystone, black shale, and maroon to red or white orthoquartzite...
Ph2,3 Hartville Formation, divisions 2 and 3 - Interbedded gray limestone, buff to chalky white limestone and dolomite...
Ph4,5 Hartville Formation, divisions 4 and 5 - Interbedded maroon, red, pink, and gray siltstones and claystones...
Ph6 Hartville Formation division 6 - Well-indurated maroon to red to locally white orthoquartzite...
MDg Guernsey Limestone - Gray limestone with local beds and zones of chert...
Cq Quartzite of probable Cambrian age - Gray to red to cream-colored coarse grained cross-bedded orthoquartzite...
Ym Metadiabase - Dark-green, medium-grained diabase, with marginal chill zones...
Xp Pegmatite related to Haystack Range Granite - White to gray, coarse-grained, zoned to unzoned feldspar-quartz-muscovite-tourmaline granitic dikes...
Xh Haystack Range Granite - Pink, coarse- to medium-grained, massive to foliated, inequigranular biotite granite...
Xmd Metadiabase - Dark-greenish-black, medium-grained hornblende-plagioclase-quartz metadiabase...
Xgb Metagabbro - Dark grayish-green, variably fine- to coarse-grained, weakly layered, and weakly to strongly foliated metagabbro...
XWm Metabasalt - Dark-green, fine-grained actinolite-biotite-chlorite schist...
XWmc Calc-silicate rock - White to light-green pods, commonly 10 to 15 cm in diameter...
XWd Metadolomite - Gray, pink, white, and yellow, medium-grained dolomite and marble...
XWdq Quartzite - Common near stratigraphic top of dolomite unit in area north of Chicago mine...
XWdp Metapelite - Thin, gray to brown, plagioclase-quartz-biotite-muscovite schist...
XWf Ferruginous schist - Includes biotite-chlorite schist, phyllite, and ferruginous quartzite...
XWwh Hematite bodies - hematite bodies at top of ferruginous schist unit...
XWfi Banded iron formation - of Lake Superior type...
XWs Quartzofeldspathic schist - West of Wheatland fault system...
XWb Quartzofeldspathic schist - East of Wheatland fault system...
Wgg Granite gneiss - Pink, medium-grained granite gneiss...

Mapped, edited and published by the Geological Survey as part of the Department of the Interior program for the development of the Missouri River Basin Control by USGS and USC&GS

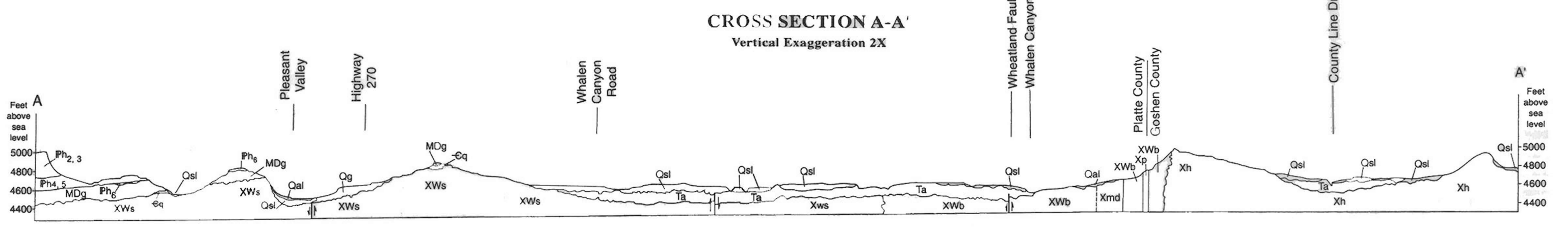
Topography from aerial photographs by multiple methods. Aerial photographs taken May-June 1947 and September 1948. Field check 1950. Polyconic projection: 1927 North American datum, 10,000 foot grid based on Wyoming coordinate system, east zone.

ROAD CLASSIFICATION: Heavy duty, Medium duty, Light-duty, Unimproved dirt. U.S. Route, State Route. GUERNSEY, WYO. N4215-W10437.5/7.5. 1990 PHOTOREVISED 1978.

- Contact - dashed where covered or inferred, dotted where concealed.
High-angle fault - dashed where covered or inferred, dotted where concealed; bar and ball on downthrown side.
High-angle reverse fault - arrow indicates dip of fault plane; dashed where covered or inferred; U, upthrown side; D, downthrown side.
Thrust fault of Early Proterozoic age - arrows indicate relative horizontal movement on fault with oblique slip.

- Asymmetrical, downward-facing anticline, showing bearing and plunge of axis; shorter arrow indicates limb of fold with steeper dip; dashed where approximately located.
Downward-facing syncline, showing plunge of axis.
Asymmetrical, downward-facing syncline, showing bearing and plunge of axis.
Inclined bedding, showing dip; direction of stratigraphic top not determined.
Overturned bedding, showing dip.
Vertical bedding; top of beds known.

- Vertical bedding; direction of stratigraphic top not determined.
Foliation, showing dip.
Vertical foliation.
Bearing and plunge of lineation. May be combined with foliation or bedding symbol.
Bearing and plunge of symmetrical fold.
Bearing and plunge of asymmetrical fold.
Mine, prospect, or mineral occurrence.



Preliminary Geologic Map of the Guernsey Quadrangle, Platte and Goshen Counties, Wyoming

by Ray E. Harris 1997

Denson, N.M., and Botnely, Theodore. 1949. Geology of the Hartville uplift, eastern Wyoming. U.S. Geological Survey Oil and Gas Investigations Preliminary Map 102, scale 1:48,000.
McGrew, L.W. 1963. Geology of the Fort Laramie area, Platte and Goshen Counties, Wyoming. U.S. Geological Survey Bulletin 1141-F, 39p., map, scale 1:31,680.
McGrew, L.W. 1967. Geologic map of the Casebier Hill Quadrangle, Goshen County, Wyoming. U.S. Geological Survey Geologic Quadrangle Map GQ-621, scale 1:24,000.
Sims, P.K., Day, W.C., Snyder, G.L., and Wilson, A.B., in press. Geologic map of Precambrian rocks along part of the Hartville uplift, Guernsey and Casebier Hill quadrangles, Platte and Goshen Counties, Wyoming. U.S. Geological Survey Miscellaneous Investigations Series Map I-2567, scale 1:24,000.
Snyder, G.L. 1993. Hartville uplift, in Houston, R.S., and others, editors, The Wyoming Province, in Reed, J.C., and others, editors, The Precambrian of the conterminous United States. Geological Society of America, Boulder, Colorado, The Geology of North America, vol. C2, p. 147-149.
Snyder, G.L., and Peterman, Z.E. 1982. Precambrian geology and geochronology of the Hartville uplift, Wyoming. 1982 Archaean Geochemistry Field Trip Guide, p. 64-64.

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