

UNIVERSITY OF UTAH
RESEARCH INSTITUTE
EARTH SCIENCE LAB.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRELIMINARY GEOLOGIC MAP OF THE LANDER 1° x 2° QUADRANGLE
CENTRAL WYOMING

Compiled by

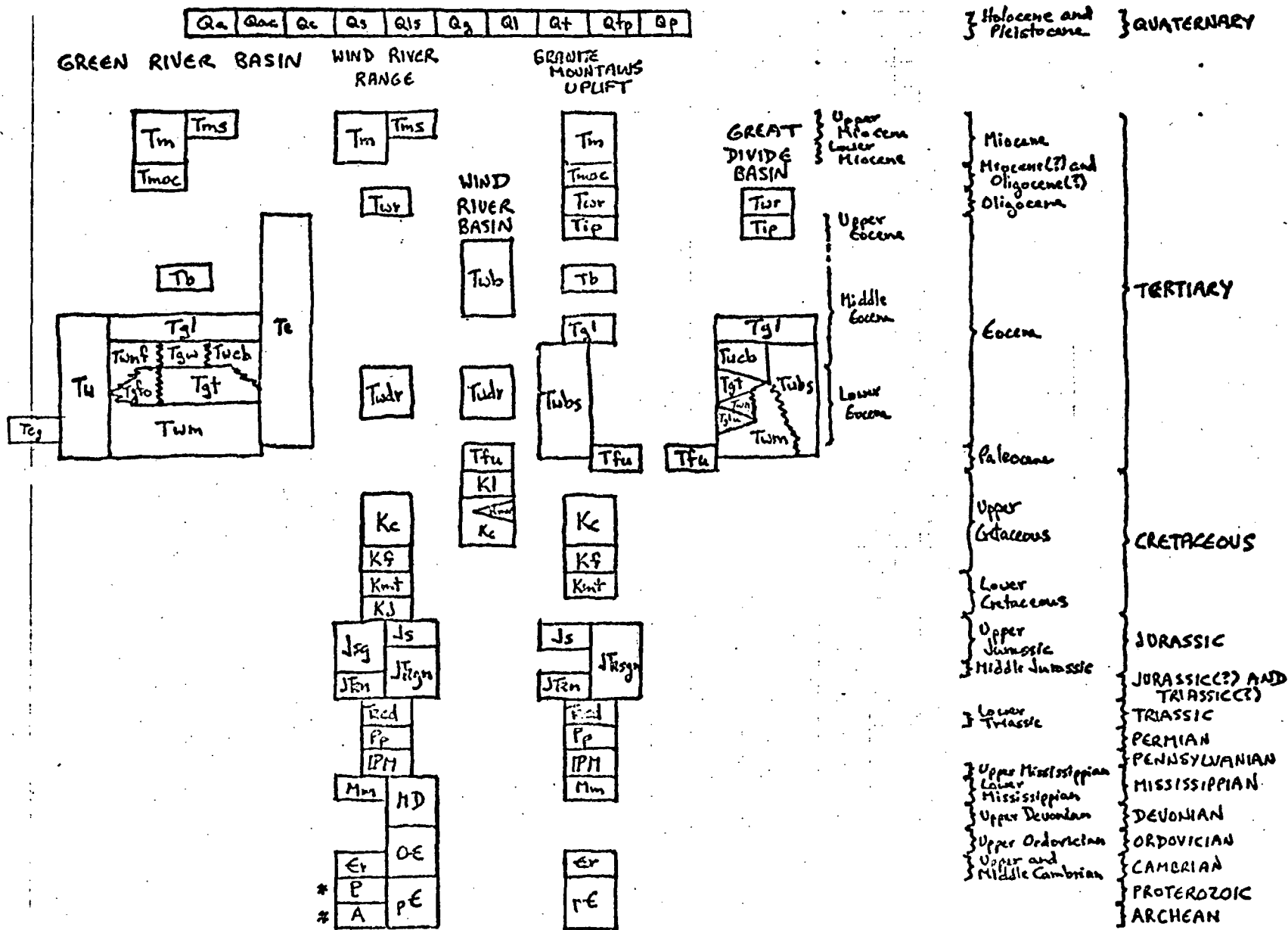
J. D. Love, Ann Coe Christiansen, and Richard W. Jones

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This map has not been technically reviewed
nor has it been edited for conformity
with Geological Survey standards.

CORRELATION OF MAP UNITS



LIST OF MAP UNITS

[The Miocene-Pliocene boundary is used in the European sense, as applied to marine rocks (Berggren and Van Couvering, 1974), the separation being at about 5 m.y. (million years).]

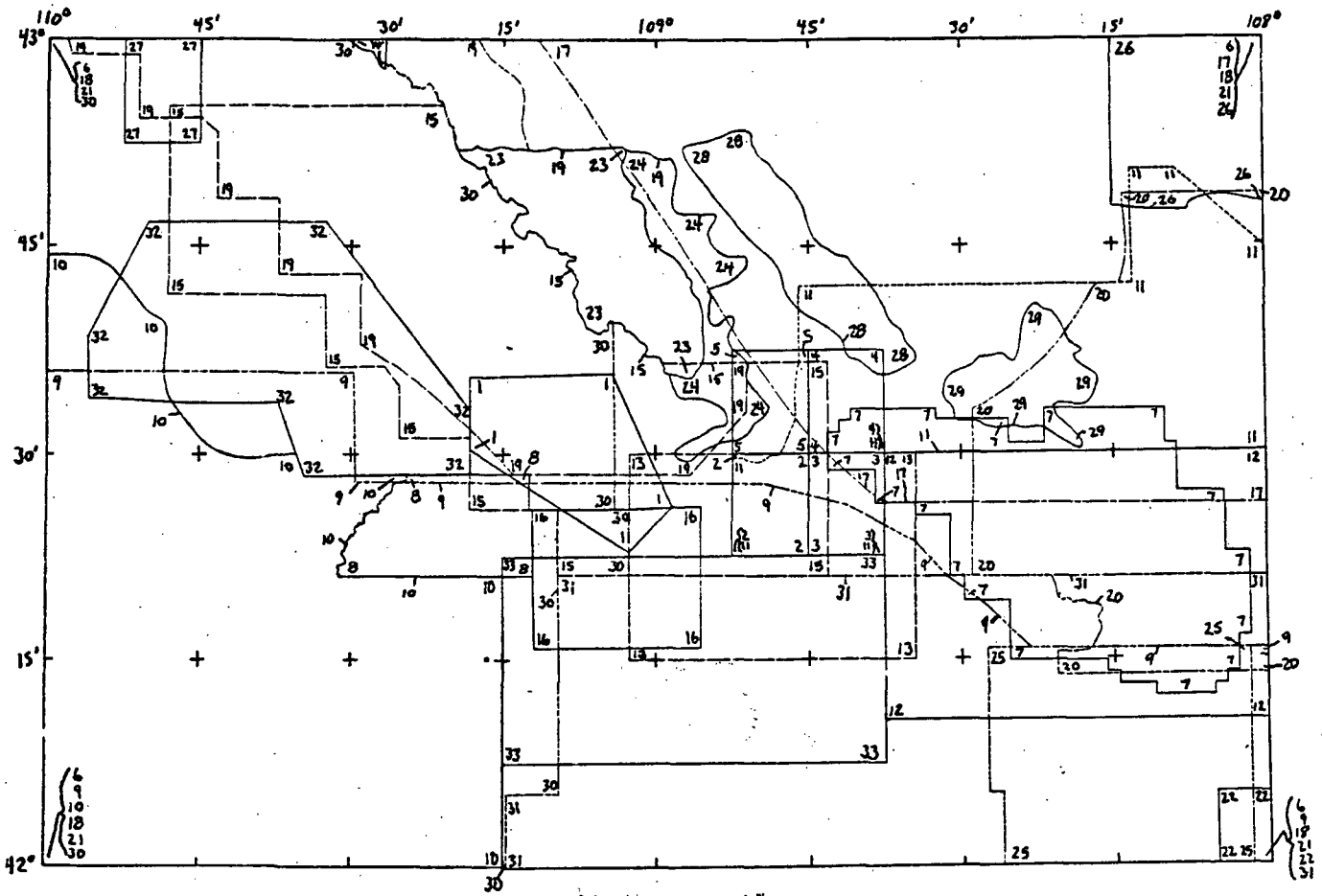
	SURFICIAL DEPOSITS (HOLOCENE AND PLEISTOCENE)
Qa	Alluvial deposits
Qac	Alluvial and colluvial deposits
Qc	Colluvial deposits
Qs	Windblown sand
Qls	Landslide deposits
Qg	Glacial deposits
Ql	Lacustrine or playa deposits
Qt	Terrace deposits
Qtp	Terrace and pediment deposits
Qp	Pediment deposits
Tms	MOONSTONE FORMATION (UPPER MIOCENE)--Includes the South Pass Formation
Tm	MIOCENE ROCKS UNDIVIDED
Tmoc	MIOCENE(?) AND OLIGOCENE(?) CONGLOMERATE
Twr	WHITE RIVER FORMATION (OLIGOCENE)
Te	EOCENE ROCKS
Tip	Ice Point Conglomerate (upper Eocene)
Twb	Wagon Bed Formation (upper and middle Eocene)
Tb	Bridger Formation (middle Eocene) Green River Formation
Tgl	Laney Member (middle Eocene)
Tgw	Wilkins Peak Member (middle Eocene)
Tgt	Tipton Tongue or Shale Member (lower Eocene)
Tgfo	Fontenelle Tongue (lower Eocene)
Tglu	Luman Tongue (lower Eocene)
Tw	WASATCH FORMATION (EOCENE AND PALEOCENE)
Twnf	New Fork Tongue (middle and lower Eocene)
Twcb	Cathedral Bluffs Tongue (middle and lower Eocene)
Twn	Niland Tongue (lower Eocene)
Twm	Main body (lower Eocene and Paleocene)
Tcg	CONGLOMERATE BEDS (LOWER EOCENE)
Twdr	WIND RIVER FORMATION (LOWER EOCENE)
Twbs	WASATCH AND BATTLE SPRING FORMATIONS (EOCENE AND PALEOCENE)
Tfu	FORT UNION FORMATION (PALEOCENE)
Kl	LANCE FORMATION (UPPER CRETACEOUS)
Kmv	MESAVERDE FORMATION (UPPER CRETACEOUS)
Kc	CODY SHALE (UPPER CRETACEOUS)
Kf	FRONTIER FORMATION (UPPER CRETACEOUS)
Kmt	MOWRY AND THERMOPOLIS SHALES (LOWER CRETACEOUS)
KJ	CLOVERLY FORMATION (LOWER CRETACEOUS) AND MORRISON FORMATION (UPPER JURASSIC)
Js	SUNDANCE FORMATION (UPPER AND MIDDLE JURASSIC)
Jsg	SUNDANCE FORMATION (UPPER AND MIDDLE JURASSIC) AND GYPSUM SPRING FORMATION (MIDDLE JURASSIC)
J P n	NUGGET SANDSTONE (JURASSIC? AND TRIASSIC?)

J~~r~~sgn SUNDANCE, GYPSUM SPRING, AND NUGGET FORMATIONS (UPPER AND MIDDLE JURASSIC AND JURASSIC? AND TRIASSIC?)
J~~r~~gn GYPSUM SPRING AND NUGGET FORMATIONS (MIDDLE JURASSIC AND JURASSIC? AND TRIASSIC?)
K~~r~~cd CHUGWATER FORMATION OR GROUP (TRIASSIC) AND DINWOODY FORMATION (LOWER TRIASSIC)
Pp PHOSPHORIA FORMATION (PERMIAN) AND RELATED ROCKS
PM TENSLEEP SANDSTONE (PENNSYLVANIAN) AND AMSDEN FORMATION (PENNSYLVANIAN AND UPPER MISSISSIPPIAN)
Mm MADISON LIMESTONE (UPPER AND LOWER MISSISSIPPIAN)
MD MADISON LIMESTONE (UPPER AND LOWER MISSISSIPPIAN) AND DARBY FORMATION (UPPER DEVONIAN)
OG BIGHORN DOLOMITE (UPPER ORDOVICIAN) AND UPPER AND MIDDLE CAMBRIAN ROCKS
-Gr CAMBRIAN ROCKS--Includes Gallatin Limestone (Upper Cambrian), Gros Ventre Formation (Upper and Middle Cambrian), and Flathead Sandstone (Middle Cambrian)
pG PRECAMBRIAN ROCKS UNDIVIDED
 INTRUSIVE ROCKS (PROTEROZOIC)--Listed alphabetically by symbol, not in relative order of age
 Diabase, diabasic gabbro, and metagabbro dikes
Efg Fine-grained quartz monzonite
Efp Feldspathic peridotite dike
Eg Granite
Epq Porphyritic quartz monzonite
Eqd Quartz diorite^o
Eqm Biotite quartz monzonite
Ame METAMORPHIC ROCKS (ARCHEAN)--Listed alphabetically by symbol, not in relative order of age
Aag Agmatites
Agn Foliated and banded gneiss
Am Migmatite
Amf Mafic pods and bondins
Aogn Orthogneiss (of intrusive origin)
Appn Paragneiss (of sedimentary origin)

----- CONTACT--Dashed where indefinite or unknown
 - - - - - FAULT--Dotted where concealed. Bar and ball on downthrown side
 - - - - - THRUST FAULT--Dotted where concealed. Sawteeth on upper plate

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