

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

Compiled by  
J. D. Love, Ann Coe Christiansen, T. M. Bown, and  
J. L. Earle

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This map is preliminary: it is incomplete  
in places and has hanging contacts; it has  
not been reviewed for edge joins.

# CORRELATION OF MAP UNITS

Qa	Qac	Qc	Qt	QtP	Qp	Qls	Qlg	Qtg	Qg	Qs	Qtr	Qf
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ABSAROKA RANGE AND AREA NORTH

WEST OF WIND RIVER RANGE

Qb	Tb	Tcc	Tid	Tia	Tir
			Tiw		
			Tt	Ttpw	
			Ta	Tudr	
			Tcg	Tep	

WIND RIVER BASIN

Ta	Te	Tt	Ta	Tudr	Tim	Tfu	Kl	Km	Kmv	Kc	Kf	Kmt	KJ	Js	Jk	Jkgn	Kcd	Pp

WIND RIVER RANGE

Kc	Kf	Kmt	KJ	Js	Jkn	Kcd	Pp	PM	Mm	DD	Ob	Er

GREEN RIVER BASIN

Tw	Tcg	Tep
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Kc	Kf	Kmt	KJ	Js	Jkgn	Kcd	Pp	PM	Mm	DD	Ob	Er	PE

OWL CREEK MOUNTAINS

KJ	Jk	Kcd	Pp	PM	Mm	Ob	Er	PE	Ar

BIGHORN BASIN

Twi	Tt	Ta	Twl	Tfu	Kl	Km	Kmv	Kc	Kf	Kmt	KJ	Js	Jk	Kcd	Pp

Quaternary  
Holocene  
Pleistocene

Quaternary  
Pleistocene  
Holocene  
Miocene or younger  
Eocene  
Paleocene  
Upper Cretaceous  
Lower Cretaceous  
Upper Jurassic  
Middle Jurassic  
Lower Triassic  
Permian  
Pennsylvanian  
Mississippian  
Devonian  
Ordovician  
Cambrian  
Precambrian  
Archean

## LIST OF MAP UNITS

### SURFICIAL DEPOSITS (HOLOCENE AND PLEISTOCENE)

Qa	Alluvium
Qac	Alluvium and colluvium
Qc	Colluvium
Qt	Terrace deposits
Qtp	Terrace and pediment gravels
Qp	Pediment gravels
Qls	Landslide deposits--Includes some talus deposits
Qlg	Landslide and glacial deposits
Qtg	Terrace gravel and glacial outwash deposits
Qg	Glacial deposits
Qs	Windblown sand
Qtr	Travertine deposits
Qf	Alluvial fan deposits
Qb	BASALT (PLEISTOCENE)
Tb	BASALT FLOWS AND INTRUSIVES (PLIOCENE)
Tcc	CALDWELL CANYON VOLCANICS (MIOCENE OR YOUNGER)
Ti	INTRUSIVE ROCKS (EOCENE)
Tig	Granodiorite
Tid	Dacite
Tia	Andesite
Tir	Rhyolite
Td	POST-WIND RIVER DIKE (POST-LOWER EOCENE)--In T. 2 N., R. 2 W. (Wind River Meridian)
Te	EOCENE ROCKS UNDIVIDED
Teum	UPPER AND MIDDLE EOCENE ROCKS--May include younger rocks locally
Twb	Wagon Bed Formation
	UPPER(?) AND MIDDLE EOCENE ROCKS
Twl	Wiggins Formation
Tt	Tepee Trail Formation
Twt	Wiggins and Tepee Trail Formations
Ta	AYCROSS FORMATION (MIDDLE EOCENE)
Ttpw	TROUT PEAK TRACHYANDESITE (MIDDLE EOCENE) AND WAPITI FORMATION (MIDDLE OR LOWER EOCENE)
Tel	LOWER EOCENE ROCKS
Tw	Wasatch Formation
Twl	Willwood Formation
Twdr	Wind River Formation
Tim	Indian Meadows Formation
Tcg	Conglomerate beds
Tep	LOWER EOCENE AND PALEOCENE ROCKS
Tfu	FORT UNION FORMATION (PALEOCENE)
Kl	LANCE FORMATION (UPPER CRETACEOUS)
Km	MEETEETSE FORMATION (UPPER CRETACEOUS)
Klm	LANCE AND MEETEETSE FORMATIONS (UPPER CRETACEOUS)
Kmv	MESAVERDE FORMATION (UPPER CRETACEOUS)
Kc	CODY SHALE (UPPER CRETACEOUS)
Kmvc	MESAVERDE FORMATION AND CODY SHALE (UPPER CRETACEOUS)

Kf	FRONTIER FORMATION (UPPER CRETACEOUS)
Kmt	MOWRY AND THERMOPOLIS SHALES (LOWER CRETACEOUS)
Kft	FRONTIER FORMATION AND MOWRY AND THERMOPOLIS SHALES (UPPER AND 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 <del>R</del> n	NUGGET SANDSTONE (JURASSIC? AND TRIASSIC?)
J <del>R</del>	SUNDANCE, GYPSUM SPRING, AND NUGGET FORMATIONS (UPPER AND MIDDLE JURASSIC AND JURASSIC? AND TRIASSIC?)
J <del>R</del> gn	GYPSUM SPRING FORMATION AND NUGGET SANDSTONE (MIDDLE JURASSIC AND JURASSIC? AND TRIASSIC?)
<del>R</del> cd	CHUGWATER FORMATION OR GROUP (TRIASSIC) AND DINWOODY FORMATION (LOWER TRIASSIC)
Pp	PARK CITY OR PHOSPHORIA FORMATION AND RELATED ROCKS (PERMIAN)
<del>PM</del>	TENSLEEP SANDSTONE (PENNSYLVANIAN) AND AMSDEN FORMATION (PENNSYLVANIAN AND UPPER MISSISSIPPIAN)
Pzr	MISSISSIPPIAN THROUGH CAMBRIAN ROCKS UNDIVIDED
Mm	MADISON LIMESTONE (UPPER AND LOWER MISSISSIPPIAN)
Dd	DARBY FORMATION (UPPER DEVONIAN)
MD	MADISON LIMESTONE AND DARBY FORMATION (UPPER AND LOWER MISSISSIPPIAN AND UPPER DEVONIAN)
Ob	BIGHORN DOLOMITE (UPPER ORDOVICIAN)
<del>Er</del>	CAMBRIAN ROCKS--Includes Gallatin Limestone (Upper Cambrian), Gros Ventre Formation (Upper and Middle Cambrian), and Flathead Sandstone (Middle Cambrian)
MO <del>E</del>	MADISON LIMESTONE, BIGHORN DOLOMITE, AND CAMBRIAN ROCKS (UPPER AND LOWER MISSISSIPPIAN, UPPER ORDOVICIAN, AND UPPER AND MIDDLE CAMBRIAN)
O <del>E</del>	BIGHORN DOLOMITE (UPPER ORDOVICIAN) AND UPPER AND MIDDLE CAMBRIAN ROCKS
p <del>E</del>	PRECAMBRIAN IGNEOUS AND METAMORPHIC ROCKS
p <del>C</del> d	Diabase
p <del>E</del> gr	Granite
p <del>E</del> m	Migmatite
p <del>E</del> um	Ultramafic rocks
p <del>E</del> gn	Gneiss
p <del>E</del> gm	Gneiss and migmatite into which felsic dike network has intruded
Ar	QUARTZ MONZONITE AND METASEDIMENTARY ROCKS (ARCHEAN)

CONTACT--Dashed where approximately located

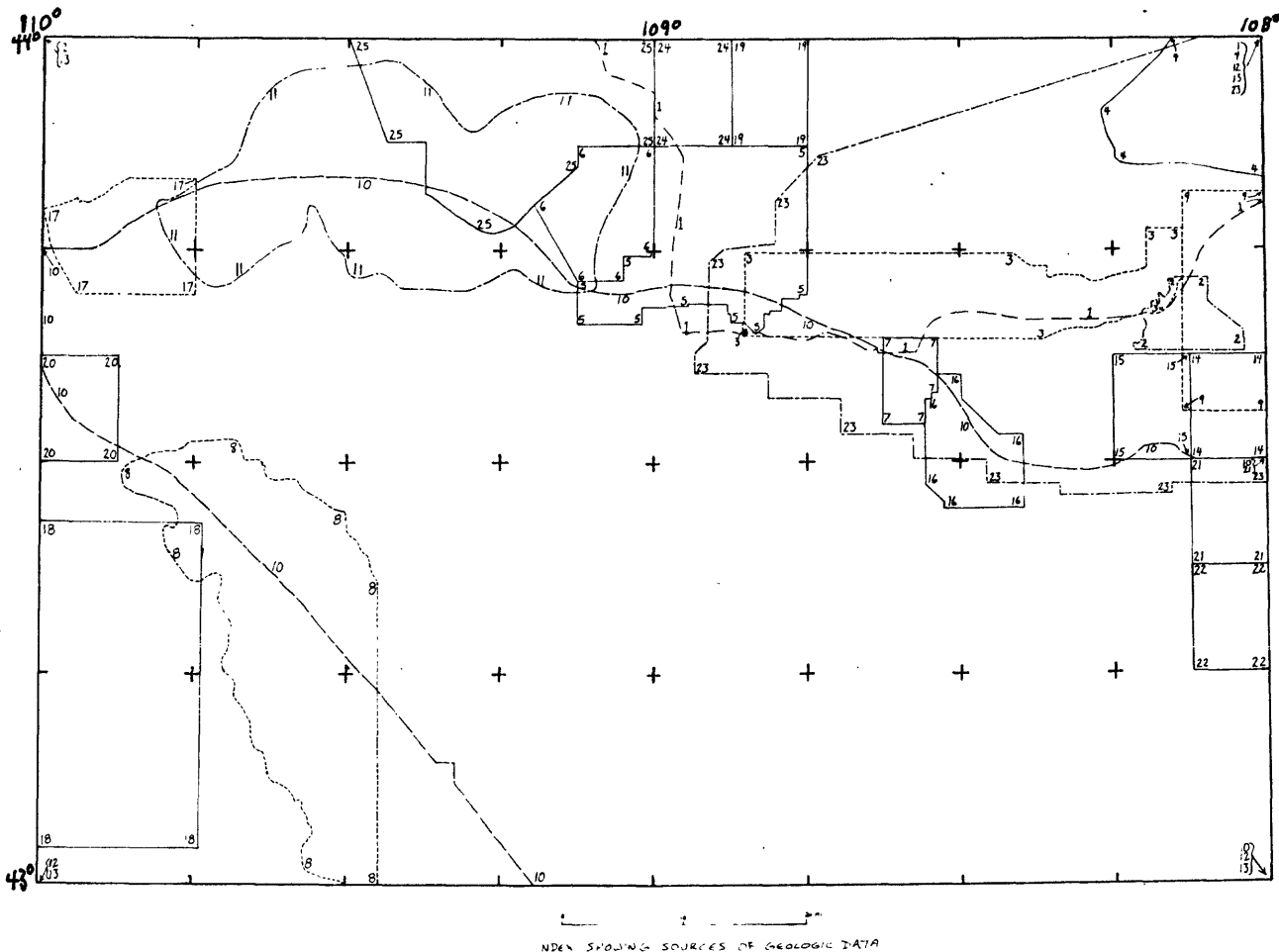
FAULTS--Dotted where concealed

Normal fault--Bar and ball on downthrown side

Thrust fault--Sawteeth on upper plate

LAKE

GLACIER



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