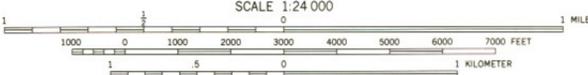


Base from U.S. Geological Survey
Bear River City 7.5' Quadrangle, 1972

Field mapping by author, 1986-88
Cartography by J. Parker



CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

**GEOLOGIC MAP OF
THE BEAR RIVER CITY QUADRANGLE,
BOX ELDER COUNTY, UTAH**

by
Mark E. Jensen
1994



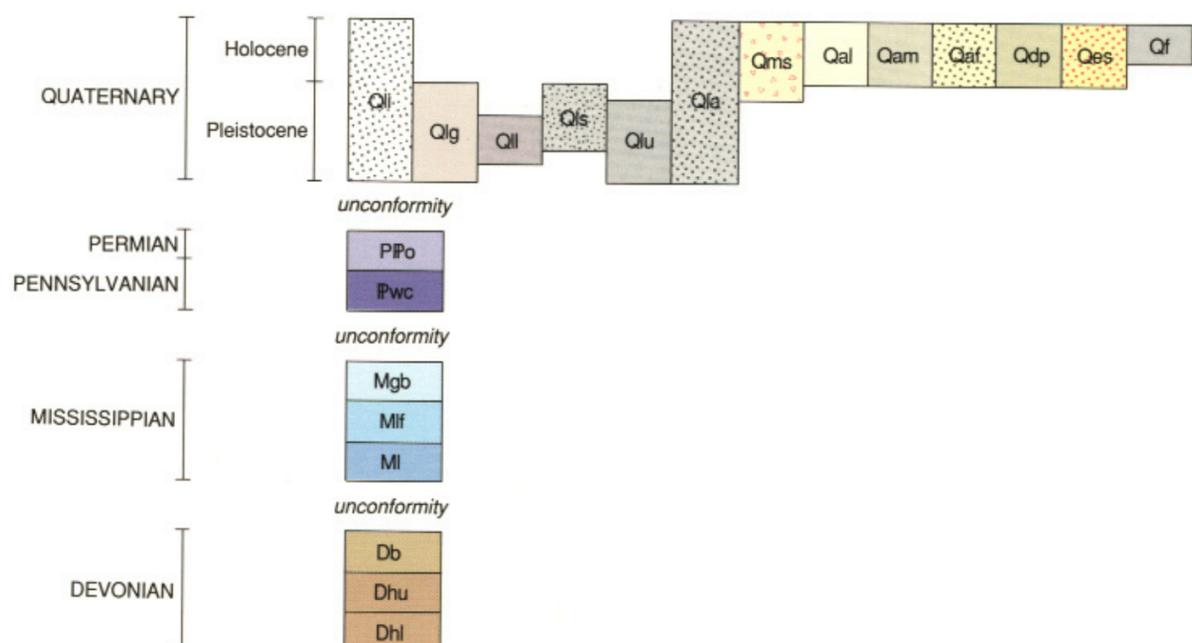
UTAH GEOLOGICAL SURVEY
3567 N.W. (TREMONTON)
1820000 FEET '84
41° 37' 30\"/>

470 000 FEET
41° 37' 30\"/>

(SOUTH OF BEAR RIVER)
3567 N.W.
1820000 FEET '84
41° 30\"/>

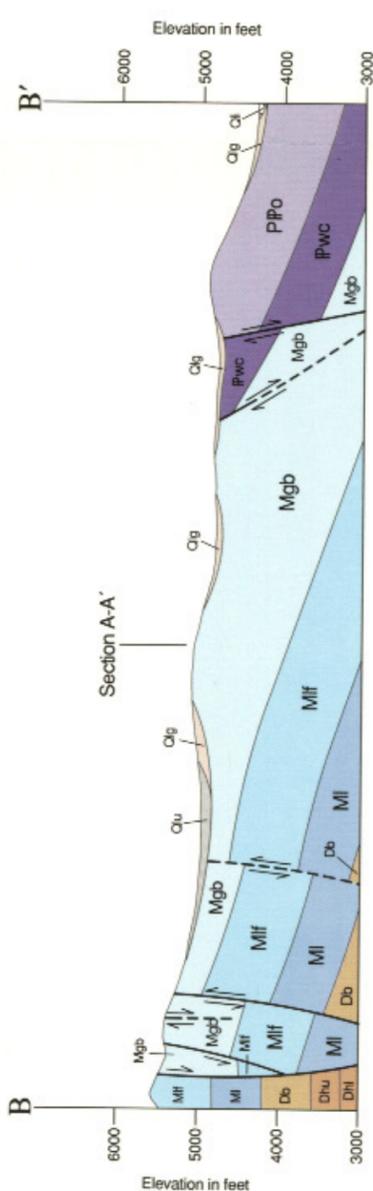
41° 30\"/>

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qf** Fill material - Silt, clay, sand, and gravel fill in dikes.
- Qal** Alluvium - Sand, silt, clay, and gravel. Deposited along stream channels and flood plains of active and inactive streams.
- Qam** Alluvial-mud and marsh deposits - Silt, clay, and sand deposited by low-gradient streams in mud flats and marshes. Near North Bay this unit also includes interbedded lacustrine clay and silt.
- Qaf** Alluvial-fan deposits - Poorly sorted sand, silt, and gravel (granules, pebbles, cobbles, and occasional boulders). Formed on or near Little Mountain from local floods and debris flows.
- Qdp** Deltaic-plain deposits - Sand, silt, and clay deposited in the Bear River delta. Includes deposits in marshes, oxbow lakes, channels, point bars, and natural levees.
- Qes** Eolian-sand deposits - Very fine to fine sand and silt, forming mounds along edges of mud flats and shallow lakes.
- Qla** Mixed lacustrine and alluvial deposits - Lacustrine silt, sand, and clay, overlain by alluvial channels and marsh deposits.
- Qli** Lacustrine-silt deposits - Silt, clay, and very fine to fine sand deposited in Lake Bonneville.
- Qlg** Lacustrine-gravel deposits - Subrounded to well-rounded gravel and sand, deposited in the shore zone of Lake Bonneville.
- Qll** Lacustrine lagoon-fill deposits - Sand, silt, and clay deposited in lagoons behind lacustrine gravel bars.
- Qls** Lacustrine-sand deposits - Very fine-grained sand overlying interbedded clay, silt, and sand. Deposited in Lake Bonneville.
- Qlu** Lacustrine deposits undifferentiated - Sand, silt, clay, and gravel deposited in Lake Bonneville.
- Qms** Landslide deposits - Poorly sorted to well-sorted lacustrine gravel and sand on Little Mountain.
- PIPo** Oquirrh Formation, undivided - Interbedded yellowish-brown sandstone and light- to medium-gray limestone; forms slopes and ledges.
- IPwc** West Canyon Limestone - Interbedded medium- to dark-gray, sandy limestone and sandstone, fossiliferous and cherty.
- Mgb** Great Blue Limestone - Medium-gray to medium-dark-gray, ledge-forming limestone, fossiliferous and locally cherty.
- Mlf** Little Flat Formation - Interbedded sandstone and cherty limestone; dominantly limestone in upper part.
- MI** Lodgepole Limestone - Medium-dark- to dark-gray limestone and cherty limestone, fossiliferous.
- Db** Beirdneau Formation - Interbedded light-gray dolomite and dark-yellowish-orange quartzite.
- Dhu** Upper member of the Hyrum Dolomite - Interbedded light- and dark-gray dolomite.
- Dhl** Lower member of the Hyrum Dolomite - Dark-gray to grayish-black, cliff-forming dolomite.



MAP SYMBOLS

- CONTACT - Dashed where approximately located.
- .-.- NORMAL FAULT - Dashed where approximately located, dotted where concealed, bar and ball on downthrown side.
- 5 STRIKE AND DIP OF BEDS
- HEAD SCARP OF LANDSLIDE - Dashed where approximately located.
- B BONNEVILLE SHORELINE - Dashed where approximately located.
- P PROVO SHORELINE - Dashed where approximately located.
- G GILBERT SHORELINE - Dashed where approximately located.
- H LATE HOLOCENE SHORELINE - Dashed where approximately located.
- 5 LOCATION OF PALEONTOLOGICAL SAMPLE - See table 1.

LITHOLOGIC COLUMN

SYSTEM	SERIES/ STAGE	FORMATION	SYMBOL	THICKNESS Feet (Meters)	LITHOLOGY
PERM.	Lower				
PENNSYLVANIAN	Desmoinesian-Virgilian	Oquirrh Formation	PIPo	2000+ (610+)	
	Mor.-At.	West Canyon Limestone	IPwc	643+ (196+)	
MISSISSIPPIAN	Chesterian	Great Blue Limestone	Mgb	1300+ (396+)	
	Meramecian	Little Flat Formation	Mlf	854 (260)	
	Osa-gean	Lodgepole Limestone	MI	466+ (142+)	
	Kinderhookian	Beirdneau Formation	Db	597 (182)	
DEVONIAN	Upper				
	Middle	Hyrum Dolomite	Dhu (upper) Dhl (lower)	759+ (231+) 320 (98) 439+ (134+)	

