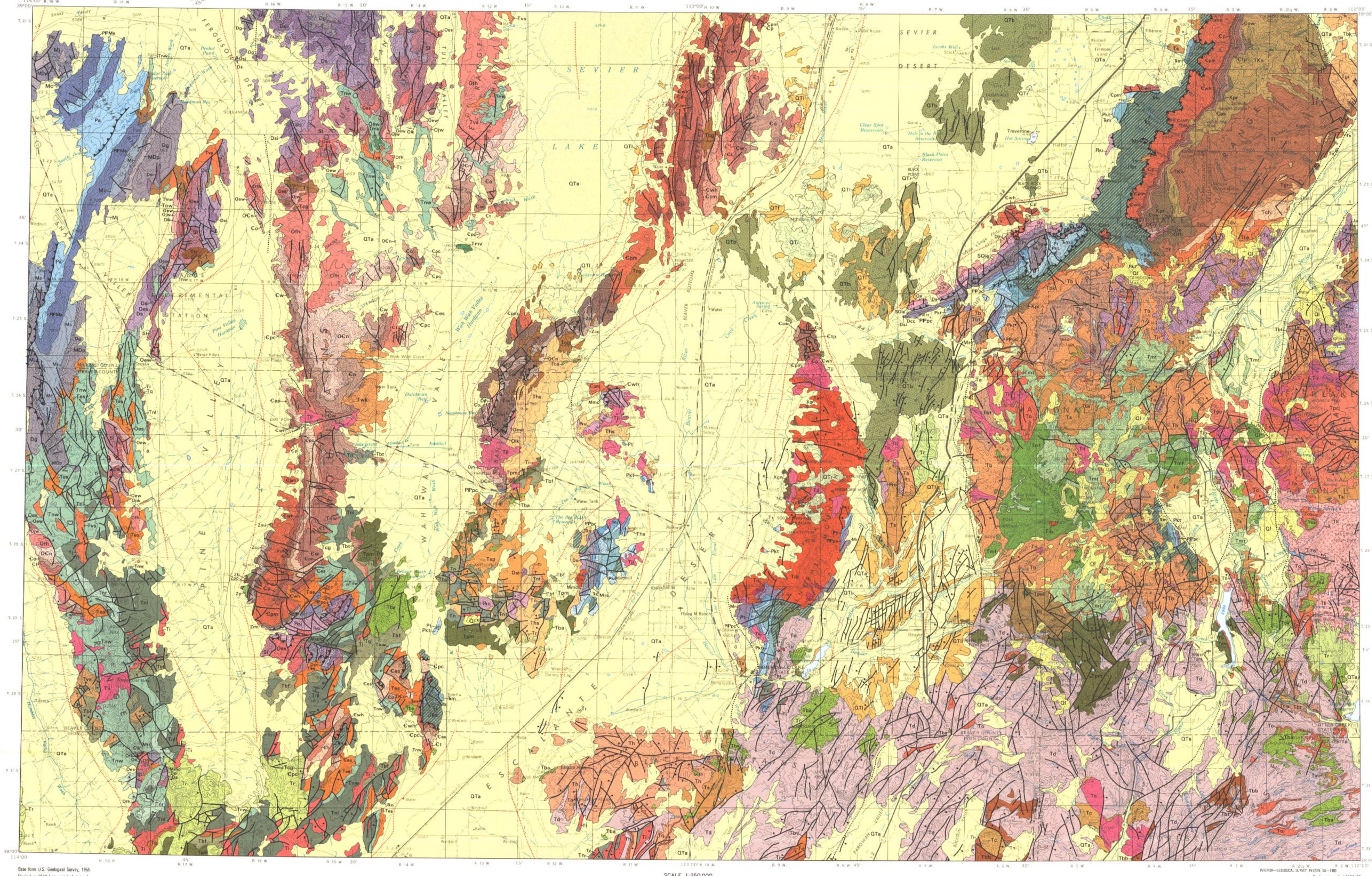
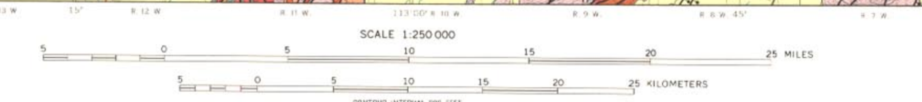
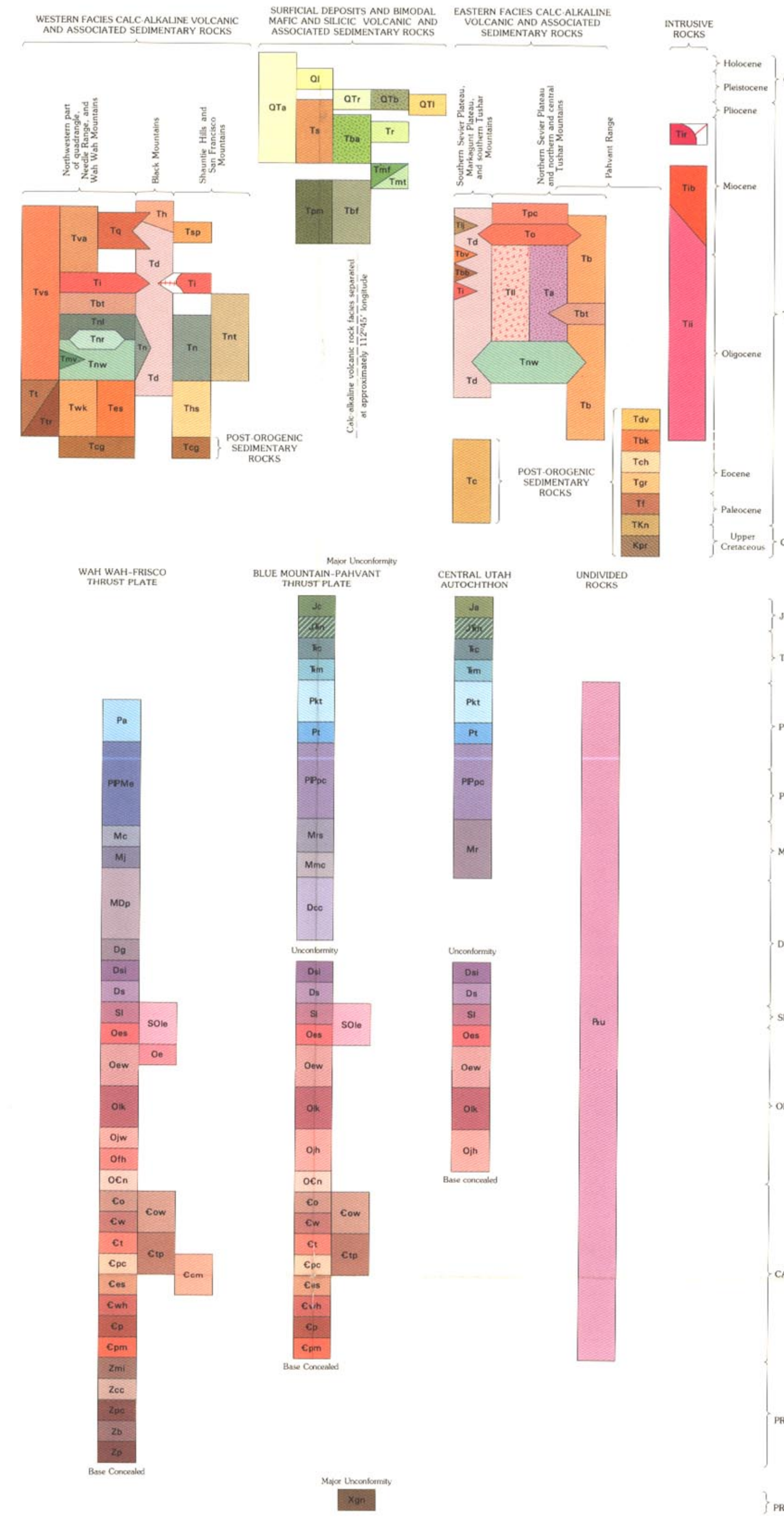
MISCELLANEOUS INVESTIGATIONS SERIES
MAP I-1901





CORRELATION OF MAP UNITS



GENERALIZED GEOLOGIC MAP OF THE RICHFIELD 1° × 2° QUADRANGLE SHOWING OUTLINES OF CALDERAS AND SHORELINES OF GLACIAL LAKE BONNEVILLE

SCALE 1:500 000

Shorelines from Currey (1982). Calderas from Steven, Rowley, and Cunningham (1984) and M. G. Best (unpub. data, 1985)

EXPLANATION

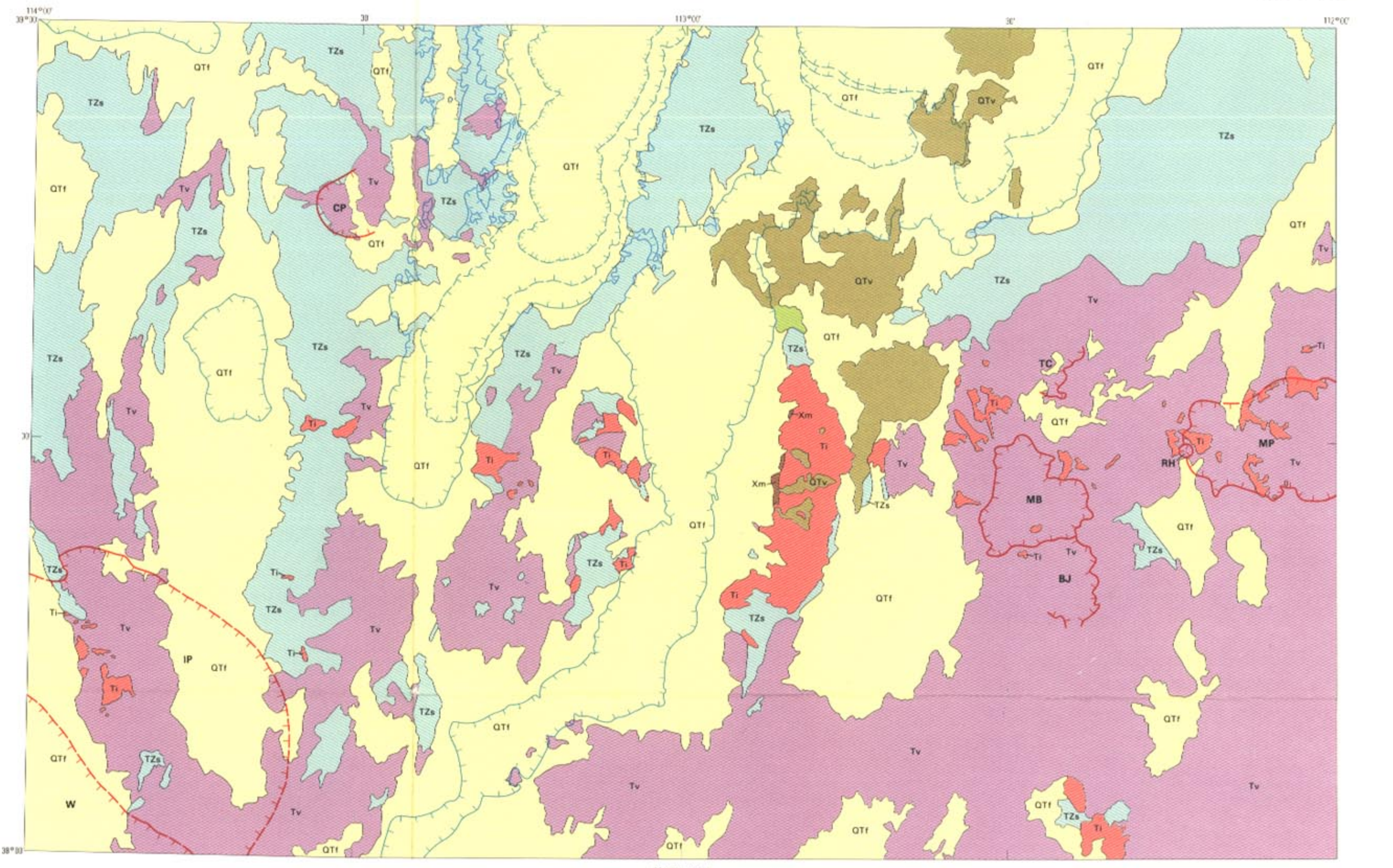
Caldera margin—Solid where location is closely controlled; dashed where covered or poorly controlled

	Caldera	Related ash-flow tuff unit
RH	Red Hills caldera (youngest)	Red Hills Tuff Member, Mount Belknap Volcanics
MB	Mount Belknap caldera	Joe Lott Tuff Member, Mount Belknap Volcanics
MP	Monroe Peak caldera	Osiris Tuff
BJ	Big John caldera	Delano Peak Tuff Member, Bullion Canyon Volcanics
TC	Three Creeks caldera	Three Creeks Tuff Member, Bullion Canyon Volcanics
W	White Rock caldera	Lund Formation
IP	Indian Peak caldera	Wah Wah Springs Formation
CP	Crystal Peak caldera (oldest)	Tunnel Spring Tuff

QTf — Quaternary and Tertiary basin-fill sediments
QTv — Quaternary and Pliocene mafic and silicic volcanic rocks
Tv — Late Miocene to early Oligocene volcanic rocks
Ti — Tertiary intrusive rocks
TZs — Early Tertiary to Late Proterozoic sedimentary rocks
Xm — Early Proterozoic gneissic metamorphic rocks

Contact

Lake Bonneville shorelines—Hachures on lakeward side
Gunnison shoreline (younger)



GENERALIZED GEOLOGIC MAP OF THE RICHFIELD 1° × 2° QUADRANGLE SHOWING KNOWN AND INFERRED POSITIONS OF MAJOR THRUST FAULTS

SCALE 1:500 000

Thrust faults compiled by H. T. Morris, 1984

EXPLANATION

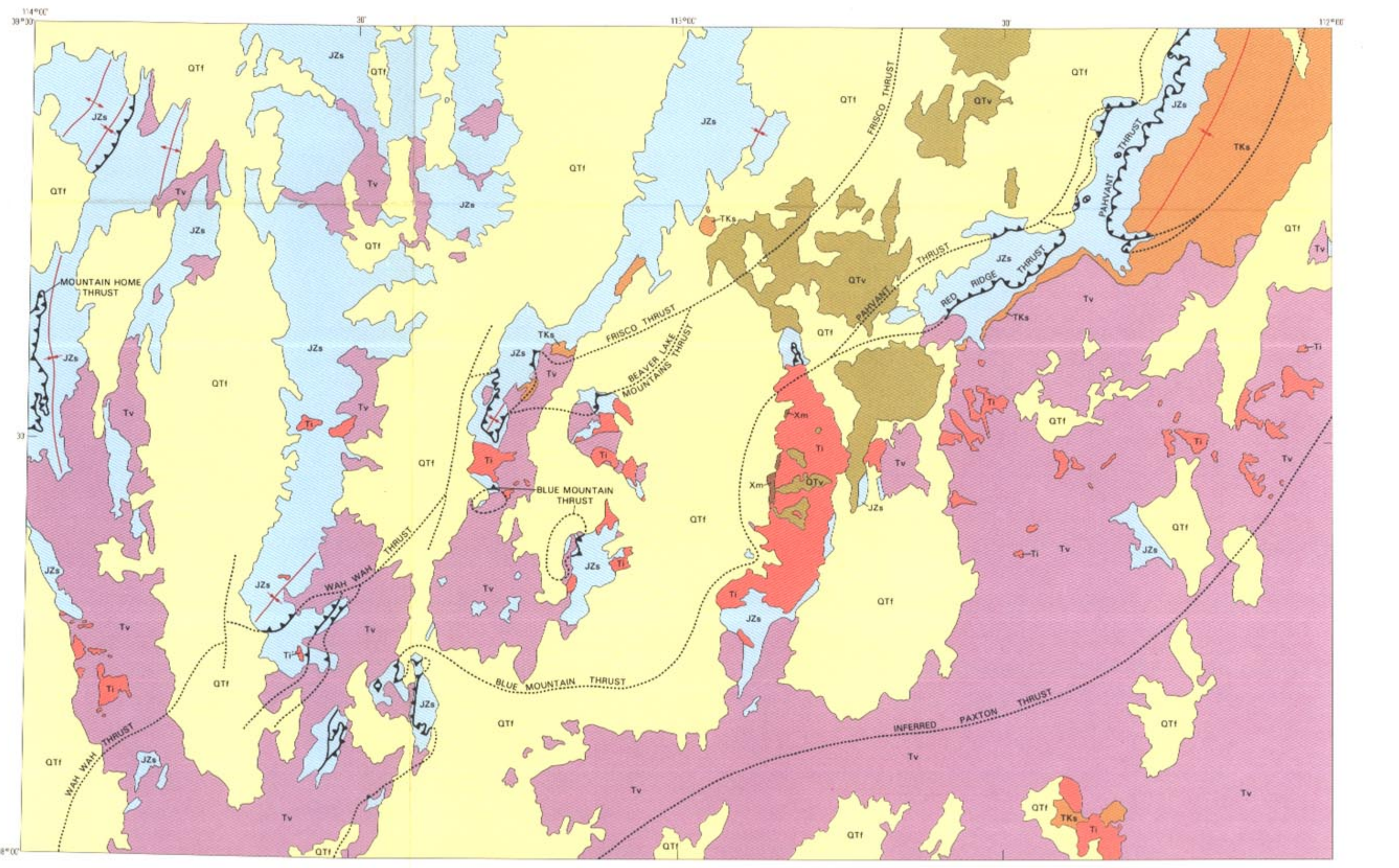
QTf — Quaternary and Tertiary basin-fill sediments
QTv — Quaternary and Pliocene mafic and silicic volcanic rocks
Tv — Late Miocene to early Oligocene volcanic rocks
Ti — Tertiary intrusive rocks
TKs — Early Tertiary to Cretaceous sedimentary rocks
JZs — Jurassic to Late Proterozoic sedimentary rocks
Xm — Early Proterozoic gneissic metamorphic rocks

Contact

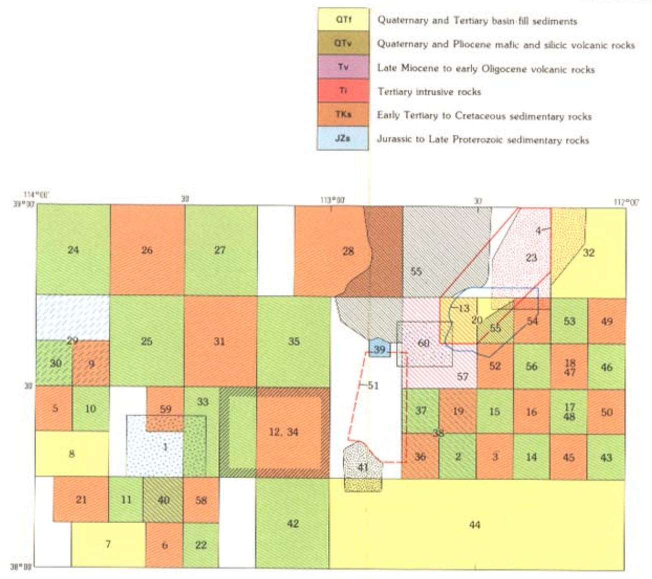
Trace of thrust fault—Dotted where covered by younger units. Sawteeth on upper plate

Axis of anticline

Axis of syncline



INDEX TO MAIN SOURCES OF DATA USED IN COMPILING THE GEOLOGIC MAP OF THE RICHFIELD 1° × 2° QUADRANGLE



QUADRANGLE LOCATION

NOTE

DESCRIPTION OF MAP UNITS

SI — Laketown Dolomite (Silurian)—Light- to medium-gray, medium- to thick-bedded, medium- to coarse-grained, sparsely cherty dolomite. Thickness ranges from 300 to 400 m

SOle — Laketown and Ely Springs Dolomites, undivided (Silurian and Ordovician)—Shown chiefly in areas where the two formations are not individually distinctive

Oes — Ely Springs Dolomite (Upper Ordovician)—Mostly black dolomite with some medium- to light-gray dolomite, medium to coarse grained, and medium bedded to massive. Sparsely fossiliferous. Thickness ranges from 50 to 150 m

Oe — Eureka Quartzite (Middle Ordovician)—White, buff, or pinkish-gray, fine to very fine grained, medium-bedded orthoquartzite. Commonly is stained black or purple by iron and manganese oxides. Thickness ranges from 25 to 125 m

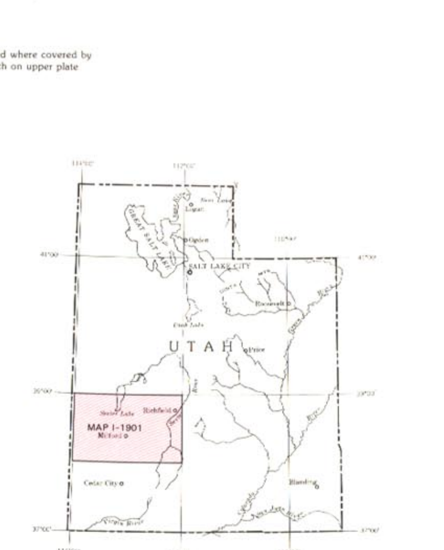
Contact

Fault—Bar and ball on downthrown side. Dotted where covered

Thrust fault—Sawteeth on upper plate

Buried fault indicated by gravity data

REFERENCES CITED



GEOGRAPHIC INDEX MAP SHOWING MAJOR FEATURES DISCUSSED
(Yellow, generally alluviated areas; blue, predominately bedrock)

POINTS OF REFERENCE

B	Beaver	CP	Crystal Peak	Mv	Minersville
BLM	Beaver Lake Mountains	F	Fillmore	Mr	Monroe
BRD	Black Rock desert	J	Junction	PV	Parowan Valley
CV	Circle Valley	KC	Kingston Canyon	R	Richfield
C	Circleville	Ma	Marysvale	RR	Rocky Range
CC	Clear Creek	MV	Marysvale Valley	TSM	Tunnel Spring Mountains
CF	Cove Fort	M	Milford	WWS	Wah Wah Summit

SOURCES OF DATA

GEOLOGIC MAP OF THE RICHFIELD 1° × 2° QUADRANGLE, WEST-CENTRAL UTAH

Compiled by
T. A. Steven, H. T. Morris, and P. D. Rowley

1990