Compiled Geologic Map of Cedar Valley, Utah County, Utah

by Hugh A. Hurlow

See appendix A for sources of compilation, correlation of map units, and explanation of map units.

SPECIAL STUDY 109
THE GEOLOGY OF CEDAR VALLEY, UTAH COUNTY, UTAH, AND ITS RELATION TO GROUND-WATER CONDITIONS
PLATE 1
2004

Explanation

Contact

Faults

Normal - dashed where inferred or approximately located, dotted where concealed; ball and bar on downthrown side

Thrust - teeth on upper plate

Strike-slip or oblique-slip - arrows show relative sense of horizontal displacement

Displacement sense uncertain; dashed where inferred or approximately located

Wells

Public-supply water well - number corresponds to ID in table 2

Spring

OW1 Petroleum exploration well - plugged and abandoned (table C.2)

Folds

Anticline, showing plunge direction

Syncline, showing plunge direction

A — A' Cross section - 1:100,000, true-scale (plate 2)

E — E' Cross section - 1:24,000, 10x vertical exaggeration, showing basin fill (plate 3)

Map Units

Quaternary

- Qay Younger alluvium
- Qac Alluvium and colluvium
- Qafy Alluvial-fan deposits - late- to post-Lake Bonneville
- Qafo Older alluvial-fan deposits - pre-Lake Bonneville
- Qao Older alluvium
- Qlf Lacustrine fine-grained deposits
- Qlsg Lacustrine sand and gravel
- Qlf/Qafo Lacustrine fine-grained deposits overlying older alluvial-fan deposits
- Qlf/Qafo/Tsl Lacustrine fine-grained deposits and older alluvial-fan deposits overlying Salt Lake Formation
- Qes Eolian sand
- Qg Glacial deposits

Quaternary-Tertiary

- QTs Alluvium and colluvium
- QTp Pediment deposits

Tertiary

- Tb Basalt
- Tsl Salt Lake Formation
- Tio Intrusive rocks - Oligocene
- Tvo Volcanic rocks - Oligocene
- Tve Volcanic rocks - Eocene
- Tc Conglomerate

Pennsylvanian

- IPo Oquirrh Group, undivided
- IPbmm Markham Member of the Bingham Mine Formation
- IPbmc Clipper Member of the Bingham Mine Formation
- IPbpu Upper unit of the Butterfield Peaks Formation
- IPbpl Lower unit of the Butterfield Peaks Formation

Mississippian-Pennsylvanian

- IPMwc West Canyon Limestone
- IPMmc Manning Canyon Shale

Mississippian

- Mgb Great Blue Limestone, undivided
- Mgbu Upper member of the Great Blue Limestone
- Mgbm Middle member of the Great Blue Limestone
- Mgbl Lower member of the Great Blue Limestone
- Mh Humbug Formation
- Md Deseret Limestone
- Mg Gardison Limestone
- Mf Fitchville Formation

Mississippian-Devonian

- MDpv Pinyon Peak Limestone and Victoria Formation, undivided

Devonian, Silurian, and Ordovician

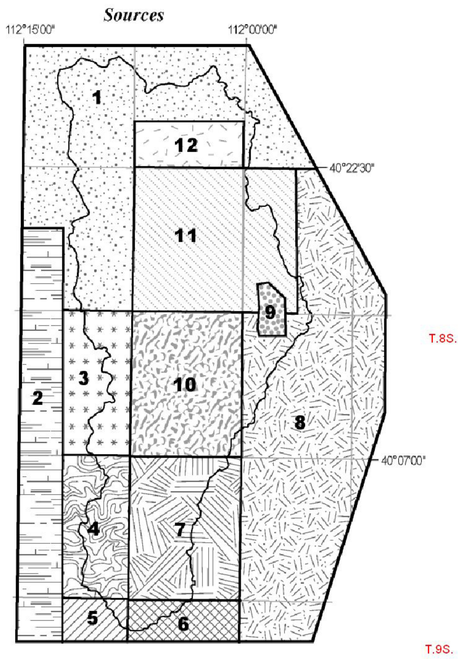
- DSOu Devonian-Ordovician limestone and dolomite, undivided

Cambrian

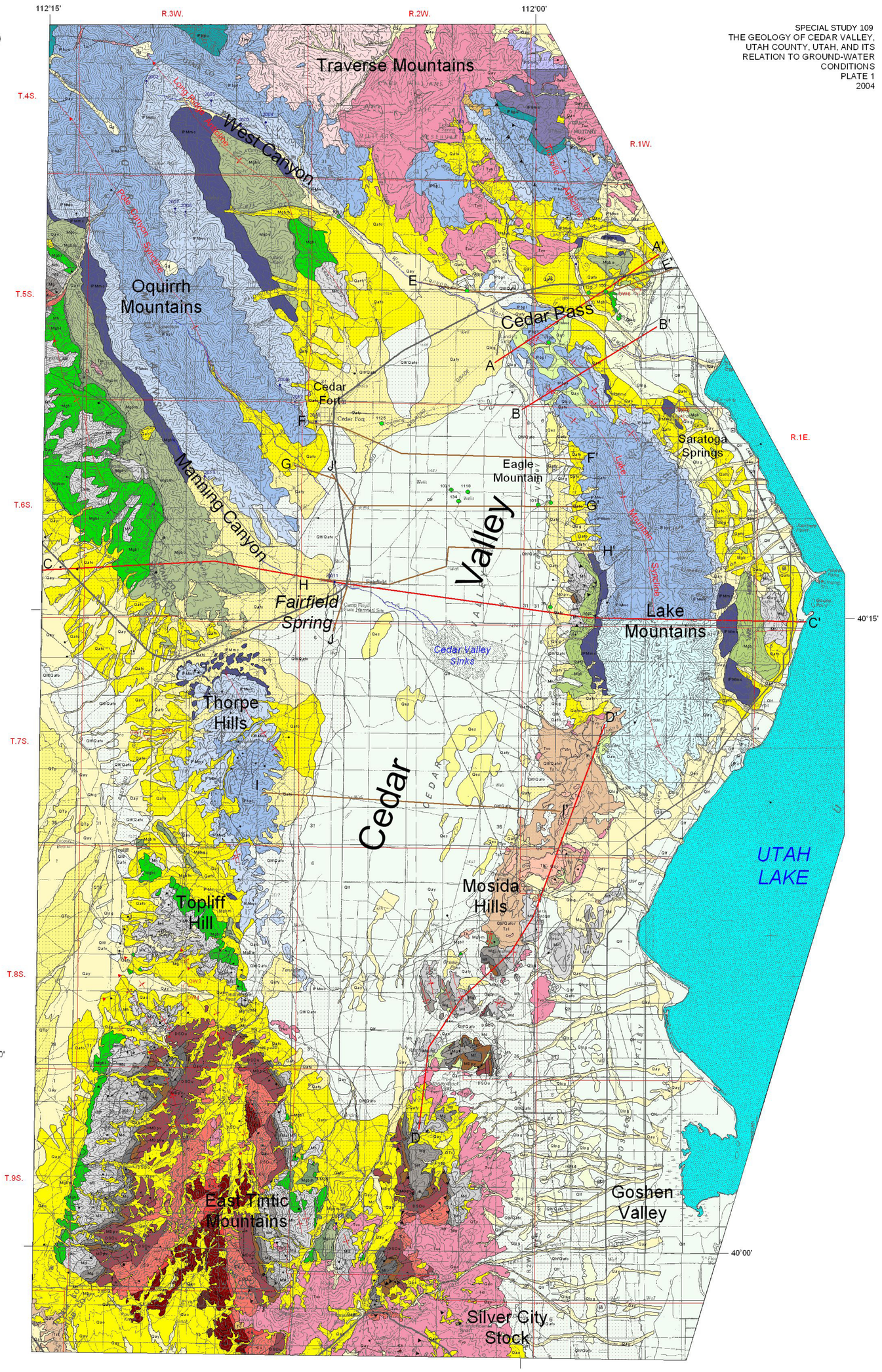
- Єu Cambrian limestone and dolomite, undivided
- Єo Ophir Formation
- Єt Tintic Quartzite

Proterozoic

- Yb Big Cottonwood Formation



1. Laes and others (1997)
2. Everitt and Kaliser (1980)
3. Bissell and Proctor (1959)
4. Disbrow (1961)
5. Morris (1964b)
6. Morris (1964a)
7. Proctor and others (1956) and Proctor (1985)
8. Davis (1983)
9. Calderwood (1951)
10. This study
11. Modified from Biek (2002a, 2002b)
12. Modified from B. Solomon, UGS, unpublished surficial mapping (2003)



1:100,000

Contour Interval = 50 Meters

N

5 0 5 mi

5 0 5 Km

GIS and Cartography by Matt Butler, Alison Corey, and Bryan McCrory

Base map from U.S. Geological Survey
Rush Valley, Provo, Lynndyl, and Nephi
30 x 60 minute quadrangles
Projection: UTM Zone 12
Units: Meters
Datum: 1927 North American
Spheroid: Clarke 1866

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a division of
Department of Natural Resources