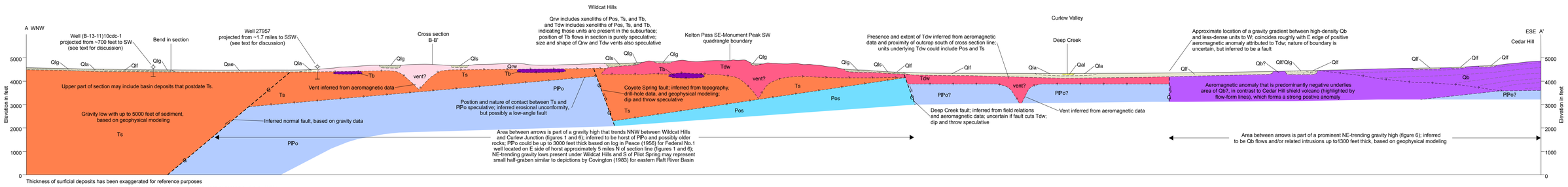
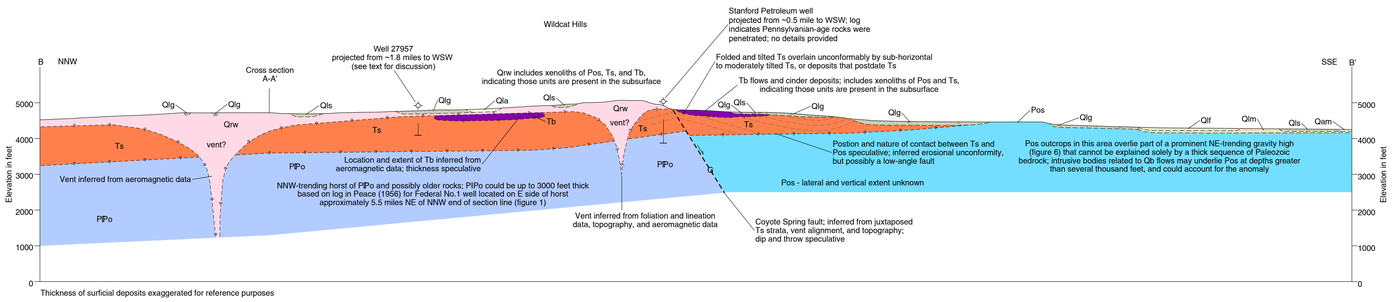
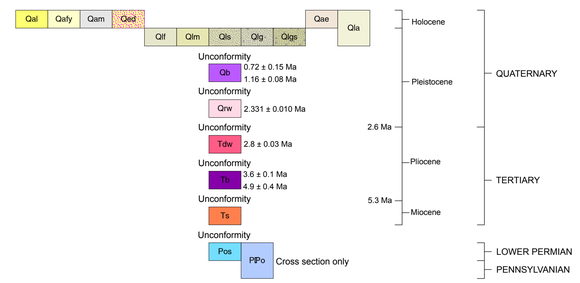
UTAH GEOLOGICAL SURVEY
a division of
Utah Department of Natural Resources
in cooperation with
U.S. Department of the Interior
U.S. Geological Survey





CORRELATION OF MAP UNITS



GEOLOGIC SYMBOLS

- Contact - Dashed where approximately located; queried on cross sections where speculative
- Concealed normal fault - Inferred from geophysical data (G) or other indirect methods; bar and ball on downthrown side; shown as dashed line with arrows on cross section
- Lake Bonneville shorelines - P=Provo; S=Stansbury; G=Gilbert; PV=Pilot Valley; t=transgressive
- Vegetation or topographic lineament of unknown origin
- Concealed syncline - Arrow indicates direction of plunge
- Lava flow direction
- Lava flow and bedding form lines (on cross sections only)
- A — A' Line of cross section
- Sedimentary bedding attitude -
  - 20 Inclined
- Igneous foliation or lineation attitude -
  - Horizontal
  - 35 Inclined
  - Vertical
  - Flow lineation
- Planar feature of uncertain origin -
  - 20 Inclined
  - Vertical
- Paleosol location
- Volcanic vent, very approximately located
- Geochemistry sample location and number
- Geochronology sample location, number, and age (Ma)
- Fossil sample location and number
- Tephrochronology sample location and number
- Drill hole location and identifier

View westward from summit of Cedar Hill, showing the Wildcat Hills in the middle distance, and the east flank of the Raft River Mountains in the background (right side of photo). The Wildcat Hills are formed of Pleistocene rhyolite (2.331 ± 0.010 Ma) and Pliocene dacite (2.8 ± 0.03 Ma) flows that overlie Pliocene basalt (3.6 to 4.9 ma) and Miocene Salt Lake Formation.

Northwest side of Cedar Hill shield volcano. It is the largest and northernmost of three small Pleistocene shield volcanoes that erupted along the east side of Curlew Valley. Basalt flows from the summit yielded a K-Ar whole-rock age of 1.16 ± 0.08 Ma.

Lithophysae in devitrified Rhyolite of Wildcat Hills.

LIST OF MAP UNITS

QUATERNARY SURFICIAL DEPOSITS

Alluvial Deposits

- Qal — Alluvium (Holocene)
- Qafy — Younger alluvial-fan deposits (Holocene)
- Qam — Alluvial mud (Holocene)

Eolian Deposits

- Qed — Eolian sand dunes (Holocene)

Lacustrine Deposits

- Qlf — Lacustrine fine-grained deposits (upper Pleistocene)
- Qlm — Lacustrine marl (upper Pleistocene)
- Qls — Lacustrine sand (upper Pleistocene)
- Qlg — Lacustrine gravel (upper Pleistocene)
- Qlgs — Lacustrine gravel and sand (upper Pleistocene)

Mixed-Environment Deposits

- Qae — Mixed alluvial and eolian deposits (Holocene)
- Qla — Lacustrine and alluvial deposits, undivided (Holocene and upper Pleistocene)

Stacked-Unit Deposits

- Qlf/Qlg — Lacustrine fine-grained deposits over lacustrine gravel (upper Pleistocene over upper Pleistocene)
- Qlg/Tb? — Lacustrine gravel over basaltic lava flows? (upper Pleistocene over Tertiary?)
- Qlgs/Ts — Lacustrine gravel and sand over Salt Lake Formation (upper Pleistocene over Tertiary)
- Qlg/Pos — Lacustrine gravel over Oquirrh Formation, sandstone member (upper Pleistocene over Lower Permian)

QUATERNARY AND TERTIARY VOLCANIC ROCKS

- Qb — Basalt (Pleistocene)
- Qrw — Rhyolite of Wildcat Hills (Pleistocene)
- Tdw — Dacite of Wildcat Hills (Pliocene)
- Tb — Basaltic lava flows (Pliocene)

TERTIARY SEDIMENTARY ROCKS

- Ts — Salt Lake Formation, undivided (Miocene)

PERMIAN AND PENNSYLVANIAN SEDIMENTARY ROCKS

- Pos — Oquirrh Formation, sandstone member (Lower Permian)
- PIPo — Oquirrh Formation, undivided (Lower Permian to Lower Pennsylvanian) - Cross section only