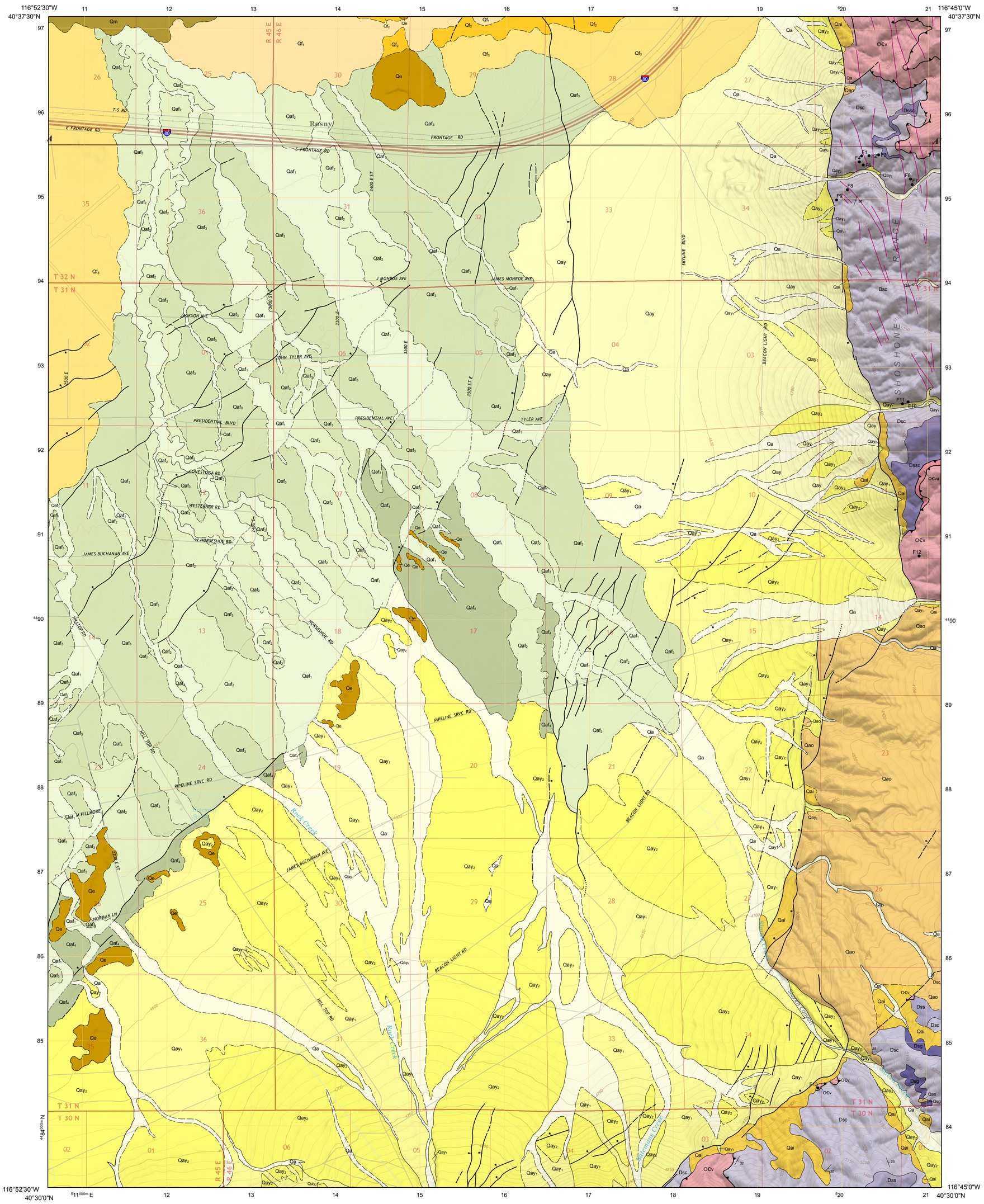
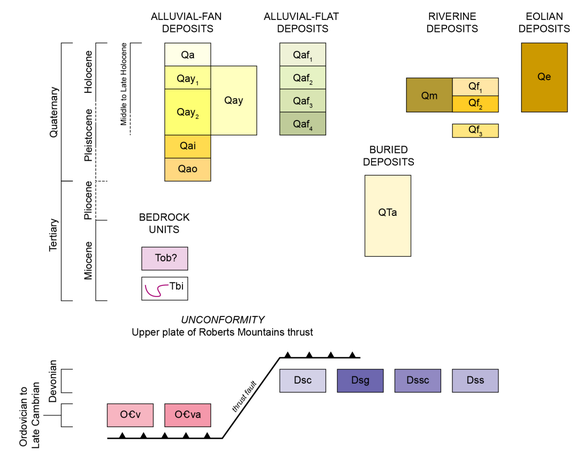
This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program under STATEMAP agreement number 99-HQ-AG-0058.





ALLUVIAL-FAN DEPOSITS

- **Qa** — Deposits of recently active alluvial-fans (modern)
- **Qay** — Young alluvial-fan deposits, undivided (late Holocene to late Pleistocene)
- **Qay_1** — Young alluvial-fan deposits (late to middle Holocene)
- **Qay_2** — Young alluvial-fan deposits (early Holocene to late Pleistocene)
- **Qai** — Intermediate-aged alluvial-fan deposits (late Pleistocene)
- **Qao** — Older alluvial-fan deposits (Pleistocene)

ALLUVIAL-FLAT DEPOSITS

- **Qaf_1** — Deposits of recently active washes (modern)
- **Qaf_2** — Young basin fill (late Holocene)
- **Qaf_3** — Young basin fill (late to middle Holocene)
- **Qaf_4** — Young basin fill (early Holocene to late Pleistocene)

RIVERINE DEPOSITS

- **Qm** — Meander-belt deposits of the Humboldt River (about 2000 to 5600 cal yr BP)
- **Qf_1** — Young floodplain deposits (about 2000 to 3500 cal yr BP)
- **Qf_2** — Young floodplain (about 3500 to 5600 cal yr BP)
- **Qf_3** — Floodplain deposits of the Humboldt and Reese Rivers (late Pleistocene)

EOLIAN DEPOSITS

- **Qe** — Eolian deposits (Holocene)

BURIED DEPOSITS

- **QTa** — Buried alluvial deposits, undivided (Pleistocene to Miocene) (cross section only)

BEDROCK UNITS

- **Tob?** — Olivine basalt (Miocene) (cross section only)
- **Tbi** — Intrusive basaltic andesite (Miocene)

SLAVEN CHERT

- **Dsc** — Chert (Early, Middle and Late? Devonian)
- **Dsg** — Greenstone (Middle or Late? Devonian)
- **Dssc** — Sandstone and chert breccia (Early or Middle Devonian)
- **Dss** — Sandstone (Early? Devonian)

VALMY FORMATION

- **O€v** — Valmy Formation, undivided (Ordovician and Cambrian)
- **O€va** — Argillite (Early? or Middle? Ordovician)

Contact Solid where certain and location accurate, dashed where approximately located, dotted where concealed.

Fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed.

Normal fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Ball on downthrown side. In cross section, arrows show relative motion.

Thrust fault Solid where certain and location accurate, dashed where approximately located. Saw teeth on upper plate.

Lineament Vegetation lineaments and small scarps on unfaulted surfaces.

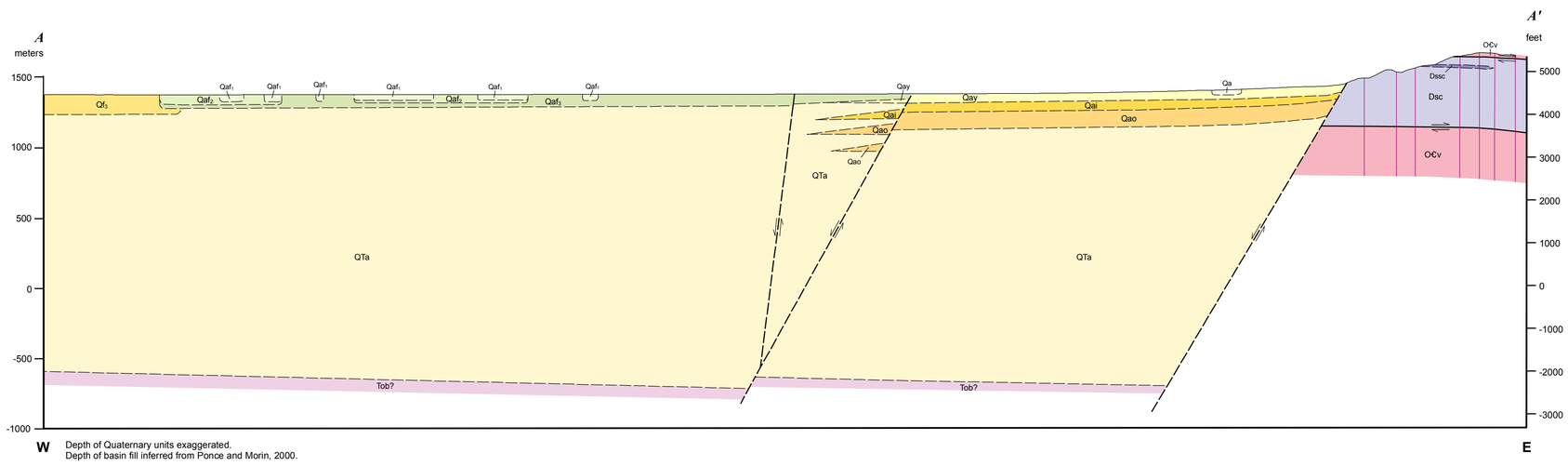
Strike and dip of bedding

41 Inclined

Fossil Locality Showing collection number

F1

A — A′ **Line of cross section**



Depth of Quaternary units exaggerated.
Depth of basin fill inferred from Ponce and Morin, 2000.

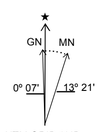
Adjoining 7.5' quadrangle names

1	2	3
4	5	6
7	8	9

1 Battle Mountain
2 Stony Point
3 Argenta
4 Blossom Spring
5 Bateman Spring
6 Mule Canyon
7 Crippen Canyon
8 Mount Lewis
9 Mud Spring Gulch

See accompanying text for full unit descriptions, notes, and references for this map.

Suggested citation:
Ramelli, A.R., Wrucke, C.T., and House, P.K., 2017, Geologic map of the Bateman Spring quadrangle, Lander County, Nevada: Nevada Bureau of Mines and Geology Map 185, scale 1:24,000, 6 p.



UTM GRID AND
2014 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Scale 1:24,000

0 0.5 1 kilometer

0 0.5 1 mile

0 1000 2000 3000 4000 5000 feet

CONTOUR INTERVAL 10 FEET

Projection: Universal Transverse Mercator, Zone 11, North American Datum 1983 (m)

Base map: U.S. Geological Survey Bateman Spring 7.5' quadrangle (2014)

GEOLOGIC MAP OF THE BATEMAN SPRING QUADRANGLE, LANDER COUNTY, NEVADA

Alan R. Ramelli[1], Chester T. Wrucke[2], and P. Kyle House[3]

[1]Nevada Bureau of Mines and Geology, University of Nevada, Reno
[2]U.S. Geological Survey, Menlo Park, CA, retired, [3]U.S. Geological Survey, Flagstaff, AZ

2017

Nevada Bureau of Mines and Geology
Mackay School of Earth Sciences and Engineering
College of Science
University of Nevada, Reno

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Office review by Nicholas H. Hinz (NBMG), Rich D. Koehler (NBMG), and Joseph A. Laravie (Great Basin GIS)

Edited by Jennifer Vlcan
Compilation by Alan R. Ramelli
Cartography and map production in ESRI ArcGIS v10.3 (ArcGeology v1.3) by Katie Ryan, Irene M. Seelye, and Rachel E. Micander
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Nevada Bureau of Mines and Geology
2175 Raggio Pkwy.
Reno, Nevada 89512
ph. (775) 682-8766
www.nbmg.unr.edu; nbmg@unr.edu

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