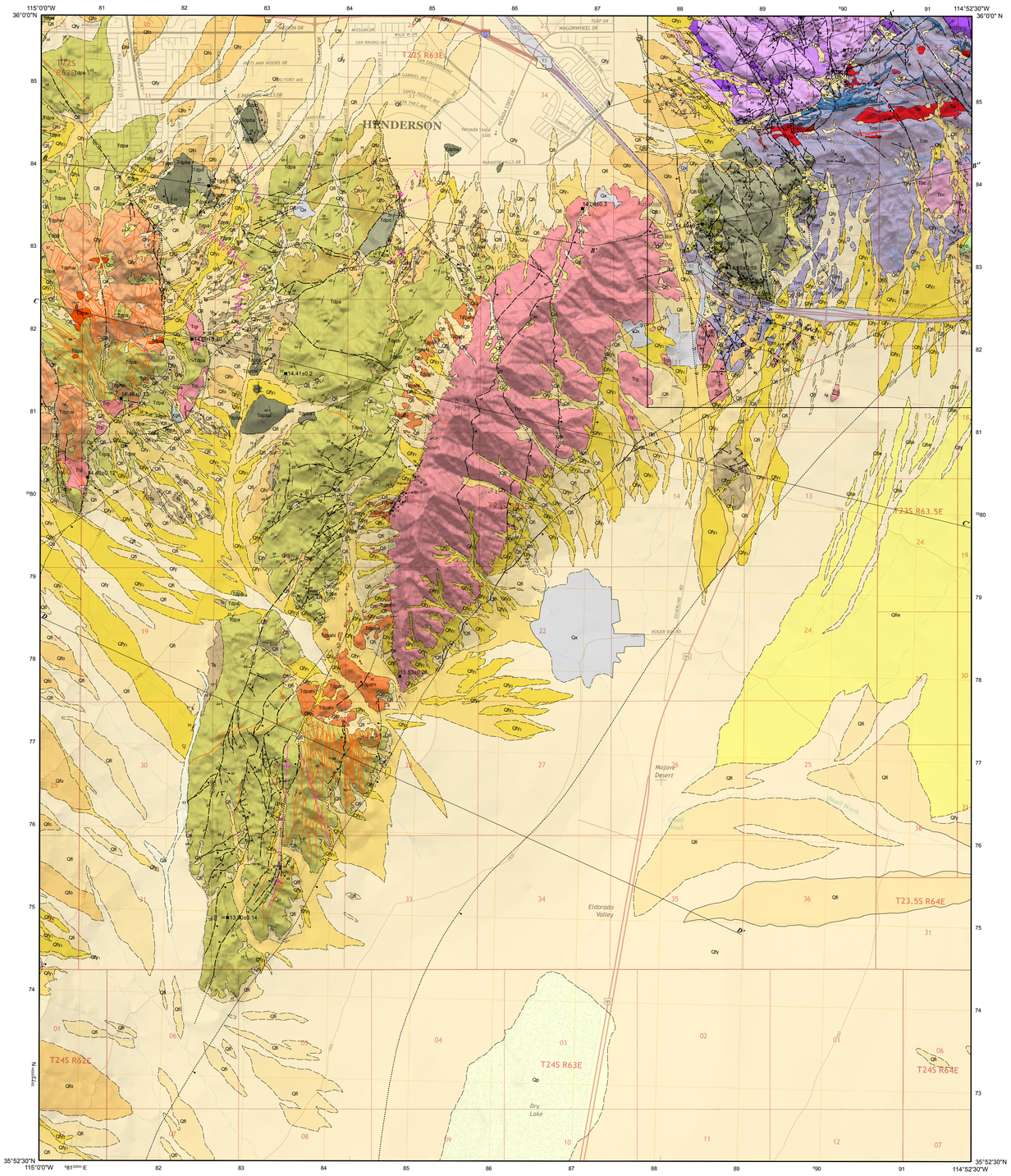
This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program under STATEMAP award number G16AC00186, 2017.

PRELIMINARY GEOLOGIC MAP OF THE BOULDER CITY NW QUADRANGLE, CLARK COUNTY, NEVADA

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2017



Contact Solid where certain, dashed where approximate, dotted where concealed; queried if identity or existence uncertain. Locally showing dip. Cross tick on vertical contacts.

Internal contact Dashed where approximate.

Fault Solid where certain, dashed where approximate, dotted where concealed; queried if identity or existence uncertain.

Normal fault Dashed where approximate, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side. Arrows show oblique motion. Locally showing dip. Cross tick on vertical faults. Double headed arrows show fault slip. *In cross section arrows show relative motion.*

Strike-slip fault Dashed where approximate. Arrows show relative motion. *In cross sections, A—away from observer, T—toward observer.*

Low-angle normal fault Dashed where approximate, dotted where concealed. Locally showing dip. Half circles on upper plate. Arrows show oblique motion.

Syncline Dashed where approximate, dotted where concealed.

Anticline Dashed where approximate, dotted where concealed.

Dike Approximately located. Locally showing dip. Cross tick on vertical dikes.

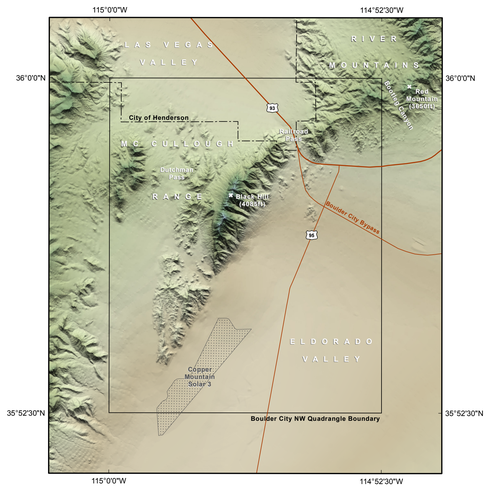
Alteration
Hydrothermal alteration

Strike and dip of bedding
Inclined

Strike and dip of primary foliation in igneous rocks
Inclined

Geochronological sample location
BCP-5

Line of cross section



ANTHROPOGENIC FEATURES AND DEPOSITS

- Cx — Anthropogenic modifications (Anthropocene, pre-1990 or 1994 imagery)

QUATERNARY DEPOSITS

- Qc — Colluvium (Holocene)
- Qp — Playa deposits (Holocene)
- Qa — Young alluvium (Historic to late Holocene)
- Qfy — Young alluvial-fan deposits, undivided (late Holocene to late Pleistocene)
- Qfy$_y$ — Youngest alluvial-fan deposits (late to middle Holocene)
- Qfy$_o$ — Young alluvial-fan deposits (early Holocene to late Pleistocene)
- Qfi — Intermediate-aged alluvial-fan deposits (late to middle Pleistocene)
- Qfie — Intermediate-aged alluvial-fan deposits with eolian cap (late to middle Pleistocene)
- Qfo — Older alluvial-fan deposits (middle to early Pleistocene)

TERTIARY VOLCANIC AND SEDIMENTARY ROCKS

- Ts — Tertiary sediments (middle Miocene to Pliocene)

Mount Davis Volcanics (middle Miocene)

- Tdmb — Middle basalt lavas of Mount Davis (middle Miocene)
- Tdmh — Middle hornblende dacite lavas of Mount Davis(?) (middle Miocene)

Powerline Road volcanics (middle Miocene)

- Tpd — Dacite lavas (middle Miocene)
- Tpbr — Dacitic tuffs and volcaniclastic sediments (middle Miocene)
- Tpa — Finely porphyritic andesite lavas (middle Miocene)
- Tppa — Coarsely porphyritic andesite lavas (middle Miocene)

Dutchman Pass volcanics (middle Miocene)

- Tdpba — Dutchman Pass basaltic andesite (middle Miocene)
- Tdpd — Dutchman Pass dacite (middle Miocene)
- Tdpb — Dutchman Pass dacitic tuff breccia and sediments (middle Miocene)
- Tdpa — Dutchman Pass andesite (middle Miocene)

Red Mountain volcanics (middle Miocene)

- Trm — Red Mountain volcanics (middle Miocene)

TERTIARY INTRUSIVE ROCKS

Dutchman Pass volcanics (middle Miocene)

- Tdpdi — Dutchman Pass dacite dikes (middle Miocene)
- Tdpai — Dutchman Pass andesite dikes and intrusions (middle Miocene)
- Tdphai — Dutchman Pass hypabyssal hornblende andesite (middle Miocene)
- Tdpahi — Dutchman Pass hypabyssal pyroxene andesite (middle Miocene)

Unnamed volcanics of southwest River Mountains (middle Miocene)

- Tdi — Dacite dikes (middle Miocene)
- Tai — Aphanitic andesite dikes (middle Miocene)
- Tpai — Porphyritic andesite dikes (middle Miocene)

TERTIARY PLUTONIC ROCKS

Boulder City pluton (middle Miocene)

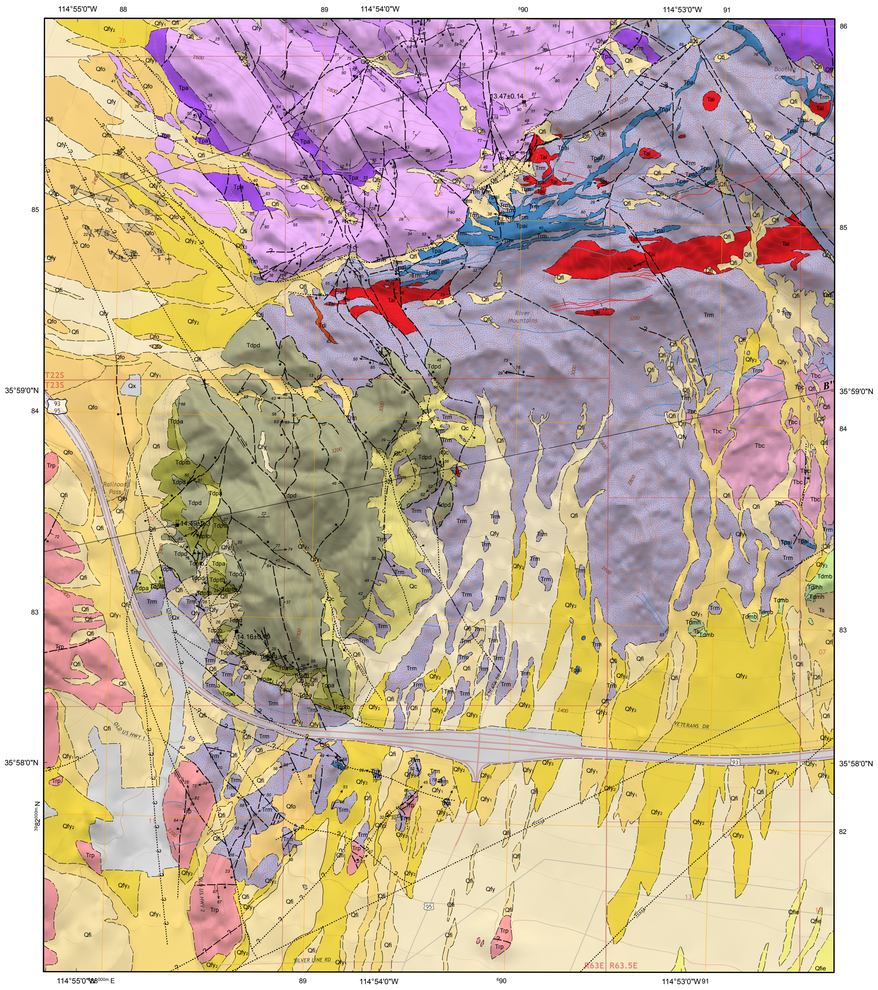
- Tbc — Boulder City pluton (middle Miocene)

Railroad Pass pluton (middle Miocene)

- Trpa — Aplite dikes of the Railroad Pass pluton (middle Miocene)
- Trp — Railroad Pass pluton (middle Miocene)

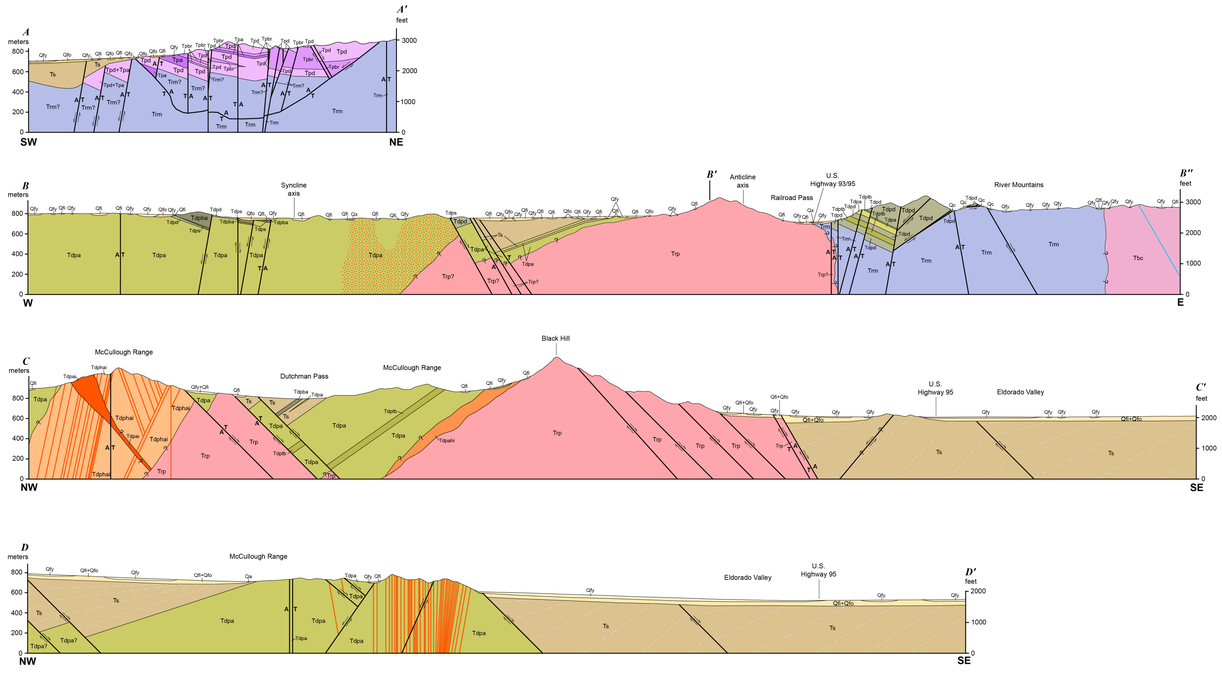
PALEOPROTEROZOIC METAMORPHIC ROCKS

- Xgn — Gneiss (Paleoproterozoic)



Inset scale 1:12,000

0 0.25 0.5 kilometers
0 0.25 0.5 miles
0 1250 2500 feet



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

Field work conducted in 2017
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DRAFT
Preliminary geologic map
Has not undergone office, field review, or full editing
Will be revised before publication

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2523

UTM GRID AND
2015 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

GN MN
11° 51'
1° 13'

Scale 1:24,000

0 0.5 1 kilometer
0 0.5 1 mile
0 1000 2000 3000 4000 5000 feet

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

Base map: U.S. Geological Survey Boulder City NW 7.5' quadrangle (2015)

Adjoining 7.5' quadrangle names

1	2	3
4	5	6
7	8	9

1 Las Vegas SE
2 Henderson
3 Boulder Beach
4 Sloan NE
5 Boulder City NW
6 Boulder City
7 Sloan SE
8 Boulder City SW
9 Boulder City SE

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

Suggested citation:
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