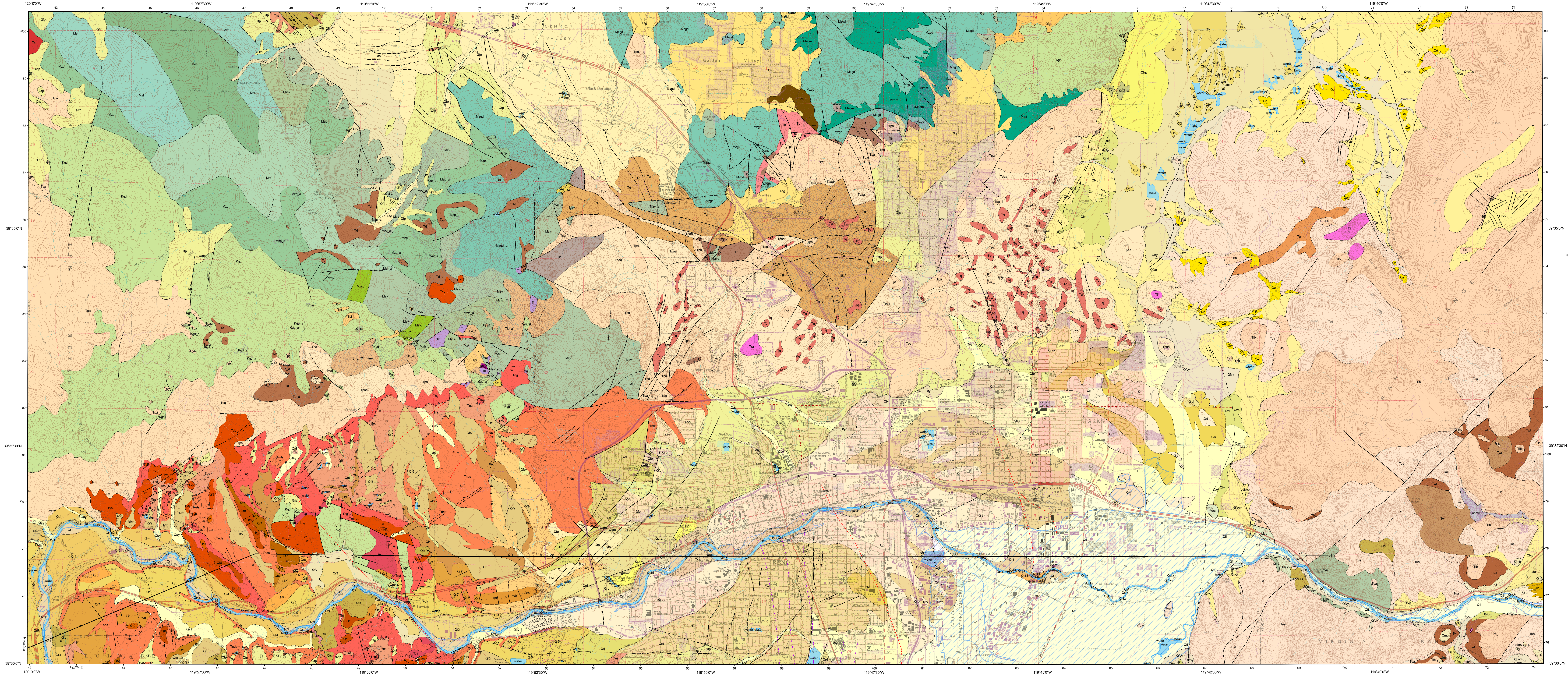
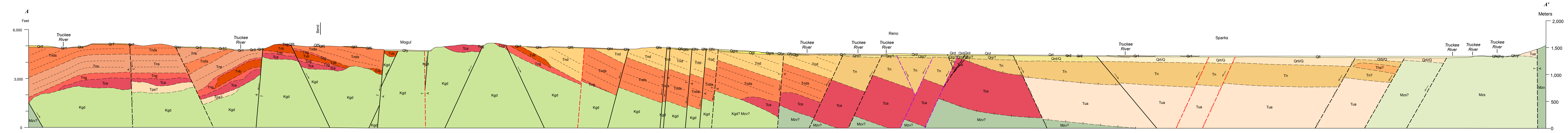
Prepared as part of the STATEMAP component of the National Cooperative Geologic Mapping Program in cooperation with the U.S. Geological Survey


120°0'0"W
119°57'30"W
119°55'0"W
119°52'30"W
119°50'0"W
119°47'30"W
119°45'0"W
119°42'30"W
119°40'0"W
39°35'0"N
39°32'30"N
39°30'0"N
²43⁰⁰⁰m E
⁴³77⁰⁰⁰m N
LEMMON VALLEY
Golden Valley
Black Springs
Peavine Peak
Poeville
Red Metal Mine
Anderson
Panther Valley
SPARKS
RENO
Verdi
Mogul
Lawton
Chalk Bluff
West Reno
Highland Reservoir
TRUCKEE MEADOWS
CANNON INTERNATIONAL AIRPORT
SPANISH SPRINGS
PAH RAH RANGE
VIRGINIA RANGE
TOIYABE NATIONAL FOREST
TRUCKEE RIVER
A
A′


A
Feet
6,000
3,000
0
Truckee River
Truckee River
Bend
Mogul
Reno
Truckee River
Truckee River
Truckee River
Truckee River
Sparks
Truckee River
Truckee River
Truckee River
A′
Meters
2,000
1,500
1,000
500
0

PRELIMINARY REVISED GEOLOGIC MAPS OF THE VERDI, RENO, AND VISTA 7.5' QUADRANGLES, RENO URBAN AREA, NEVADA

Alan R. Ramelli[1] and Christopher D. Henry[1]
With contributions by John W. Bell[1], Patricia H. Cashman[2], Larry J. Garside[1], P. Kyle House[1], James H. Trexler[2], Jerome P. Walker[3], and Michael C. Widmer[4]

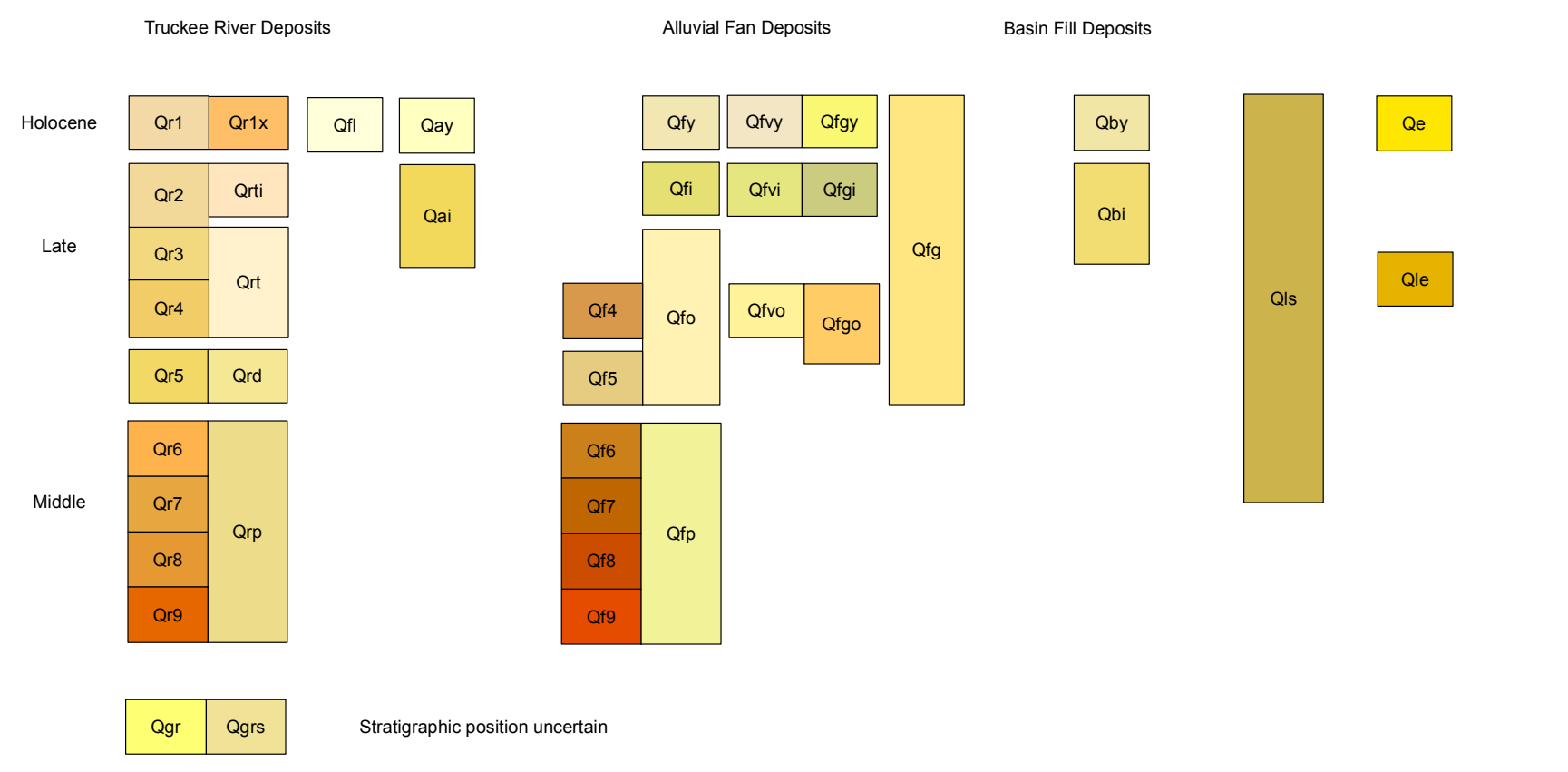
[1]Nevada Bureau of Mines and Geology; [2]Department of Geological Sciences, University of Nevada, Reno; [3]Consulting Geologist; [4]Washoe County Department of Water Resouces

2010

Revised from published geologic maps:
NBMG Map 4Gg, Geologic map of the Verdi quadrangle, John W. Bell and Larry J. Garside (1987);
NBMG Map 4Ag, Geologic map of the Reno quadrangle, Harold F. Bonham and Edward C. Bingler (1973);
and NBMB Map 4Hg, Geologic map of the Vista quadrangle, John W. Bell and Harold F. Bonham (1987)

Revised Cenozoic Stratigraphy of the Reno Area

Quaternary Strata of the Reno Area


Truckee River Deposits
Alluvial Fan Deposits
Basin Fill Deposits
Holocene
Late
Middle
Qr1
Qr1x
Qfl
Qay
Qr2
Qrti
Qai
Qr3
Qrt
Qr4
Qr5
Qrd
Qr6
Qr7
Qr8
Qr9
Qrp
Qfy
Qfvy
Qfgy
Qfi
Qfvi
Qfgi
Qf4
Qfo
Qf5
Qfvo
Qfgo
Qfg
Qf6
Qf7
Qf8
Qf9
Qfp
Qby
Qbi
Qls
Qe
Qle
Qgr
Qgrs
Stratigraphic position uncertain

Truckee River Deposits
Fluvial deposits (and outwash)

Qr1	Holocene to modern; Qr1x (modern)
Qr2, Qrti	Probable and definite Tioga age
Qr3, Qr4	younger and older Tahoe age; Qrt undivided
Qr5, Qrd	Probable and definite Donner Lake age
Qr6 to Qr9	Pre-Donner Lake age; 6 to 9 are progressively older
Qrp	Undivided pre-Donner Lake age
Qfl	Floodplain deposits

Alluvial Deposits

Qay	Younger alluvium
Qai	Intermediate age alluvium (Tioga and older)

Alluvial Fan Deposits

Qfy	Holocene
Qfg	Undivided fan deposits composed primarily of granitic material
Qfvy	Holocene fan deposits composed primarily of volcanic material
Qfgy	Holocene fan deposits composed primarily of granitic material
Qfi	Intermediate age fan deposits (Late Pleistocene)
Qfvi	Intermediate age fan depositscomposed primarily of volcanic material
Qfgi	Intermediate age fan deposits composed primarily of granitic material
Qf4	Older fan deposits, probably early Tahoe age
Qf5	Older fan deposits, probably Donner Lake age
Qfo	Older fan deposits undivided (Early toMiddle Pleistocene)
Qfvo	Older fan deposits composed primarily of volcanic material
Qfgo	Older fan deposits composed primarily of granitic material
Qf6 to Qf9	Pre-Donner Lake fan deposits; 6 to 9 are progressively older
Qfp	Undivided pre-Donner Lake age

Basin Fill Deposits

Qby	Holocene deposits
Qbi	Intermediate age deposits (Late Pleistocene)
Qls	Undivided landslide deposits
Qe	Undivided eolian sand deposits
Qle	Eetza Formation; lacustrine deposits of Pleistocene Lake Lahontan

Gravel of Reno

Qgr	Cobble gravel
Qgrs	Coarse sand

Cenozoic Volcanic and Sedimentary Rocks of the Reno Area

Volcanic Rocks

Qsr Qst	Rhyolite and tuff of the Steamboat Hills (1.2 Ma)
Qmb	McClellan Peak Basalt (1.4 Ma)
Tsb	Basaltic andesite of the Steamboat Hills (2.1 Ma)
Tlb Tli	Lousetown Formation, basalt lava and intrusion (7.5 - 7.6 Ma)
Tha	Andesite of the Huffaker Hills (7.7 Ma)
Tvb Tvi	Basaltic andesite of Verdi (10.0 - 10.7 Ma) and possible related intrusion
Twr Twt	Rhyolite and tuff of Washington Hill (10.9 Ma)
Tca Tcb Tcaa	Andesite, dacite, and breccia of the northern Carson Range (11.7 - 12.2 Ma)
T2a T2b T2s Tcaa	Andesite, dacite, and breccia of the northern Virginia Range (12.1 - 12.6 Ma)
Tra Trb Tri Traa	Andesite, dacite, and breccia of north Reno (14.3 Ma)
Tq	Quartz-alunite ledge (16.3 Ma)
Tpa Tpb Tpi Tg	Andesite and breccia of Peavine Mountain (15.8 - 16.0 Ma) and possibly related granitic stock
Td	Microdiorite
Tir	Rhyolite intrusion

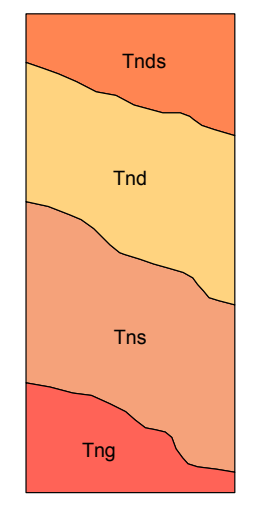
b = basalt or basaltic andesite
a = andesite or dacite
r = rhyolite
i = intrusion

a as subscript = hydrothermally altered

Tua Tub Tui Tuaa	Andesite, dacite, breccia, and related intrusions, undivided
Tnh	Nine Hill Tuff (25.3 Ma)
Tcc	Tuff of Cambell Creek (28.8 Ma)
Tt	Oligocene ash-flow tuff undivided

Sedimentary Deposits

QTfv	Fanglomerate of Lagomarsino Canyon (underlies McClellan Peak Basalt)
Tnds Tnb	Diatomaceous siltstone to sandstone and baked diatomaceous siltstone beneath basaltic andesite
Tnd	Diatomite, lacustrine
Tns	Sandstone and siltstone, fluvial to deltaic
Tng	Conglomerate and sandstone


Tnds
Tnd
Tns
Tng

Symbology (per FGDC-STD-013-2006)

Contact Solid where certain and location accurate, long-dashed where approximate, short-dashed where inferred, dotted where concealed; queried if identity or existence uncertain.

Gradational contact Approximately located.

Fault Solid where certain and location accurate, long-dashed where approximate, short-dashed where inferred, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side. (In cross section—A, away from observer; T, toward observer; Arrows show realitive motion.)

Subsurface - Well data

Inferred - INSAR data

Normal fault Solid where certain and location accurate, long-dashed where approximate, dotted where concealed; queried if identity or existence uncertain. Ball on downthrown side.

Water boundary

Extent of 1997 flood

Areas of intense hydrothermal alteration

Strike and dip of bedding
41 Inclined — Vertical — Horizontal — Overturned

Strike and dip of compact foliation in ash-flow tuff
47 Inclined — Vertical

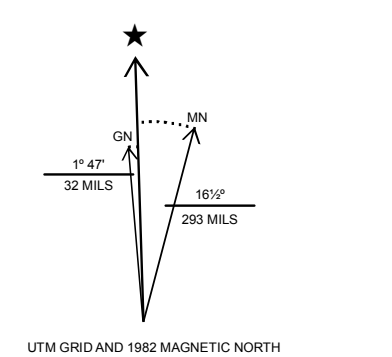
Strike and dip of flow banding or flow foliation in igneous rocks
33 Inclined — Vertical

Strike and dip of flow banding or flow foliation in metamorphic rocks
54 Inclined

Strike and dip of joints
54 Inclined — Vertical

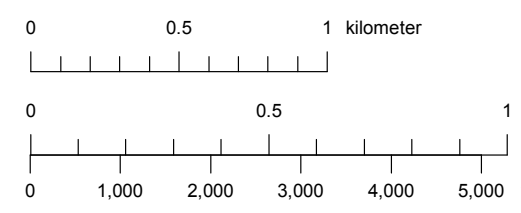
Ar 74.7
Sample locality

A ——— A′
Line of cross section


★
GN
MN
1° 47'
32 MILS
16½°
293 MILS

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Scale 1:24,000

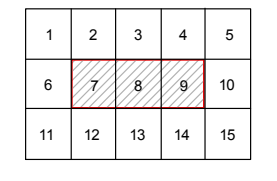

0
0.5
1 kilometer
0
0.5
1 mile
0
1,000
2,000
3,000
4,000
5,000 feet

CONTOUR INTERVAL:
Verdi — 40 FEET
Reno — 20 FEET
Vista — 20 FEET

Projection: Universal Transverse Mercator, Zone 11,
North American Datum 1927 (m)

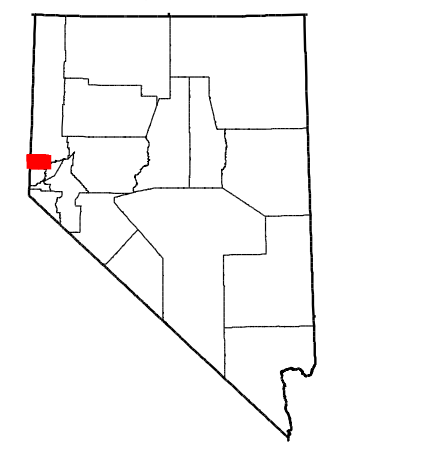
Base map: U.S. Geological Survey Verdi
7.5' quadrangle (1967, Photorevised 1982)
U.S. Geological Survey Reno
7.5' quadrangle (1967, Photorevised 1982)
U.S. Geological Survey Vista
7.5' quadrangle (1975, Photorevised 1982)

Adjoining 7.5' quadrangle names


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

1 Evans Canyon
2 Reno NW
3 Reno NE
4 Griffith Canyon
5 Spanish Springs Peak
6 Dog Valley
7 Verdi
8 Reno
9 Vista
10 Patrick
11 Boca
12 Mount Rose NW
13 Mount Rose NE
14 Steamboat
15 Chalk Hills

Map location



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

Field work done in 2000–2010
Supported by the U.S. Geological Survey STATEMAP Program
(Agreement No. G09AC00116)

DRAFT
Preliminary geologic map
Has not undergone office or field review
Will be revised before publication

Edited by XXXXXXXXXXXXXXXXX
Cartography and map production in ESRI ArcGIS v9.3 (ArcGeology v1.3)
by Matthew T. Richardson, Irene Seelye, and Jennifer Mauldin
First Edition, October 2010
Printed by Nevada Bureau of Mines and Geology

This map was printed on an electronic plotter directly from digital files. Dimensional calibration may vary between electronic plotters and X and Y directions on the same plotter, and paper may change size; therefore, scale and proportions may not be exact on copies of this map.

For sale by:
Nevada Bureau of Mines and Geology
2175 Raggio Pkwy.
Reno, Nevada 89512
ph. (775) 682-8766
www.nbmg.unr.edu; nbmg@unr.edu
This product is available free on our website
2015/2118