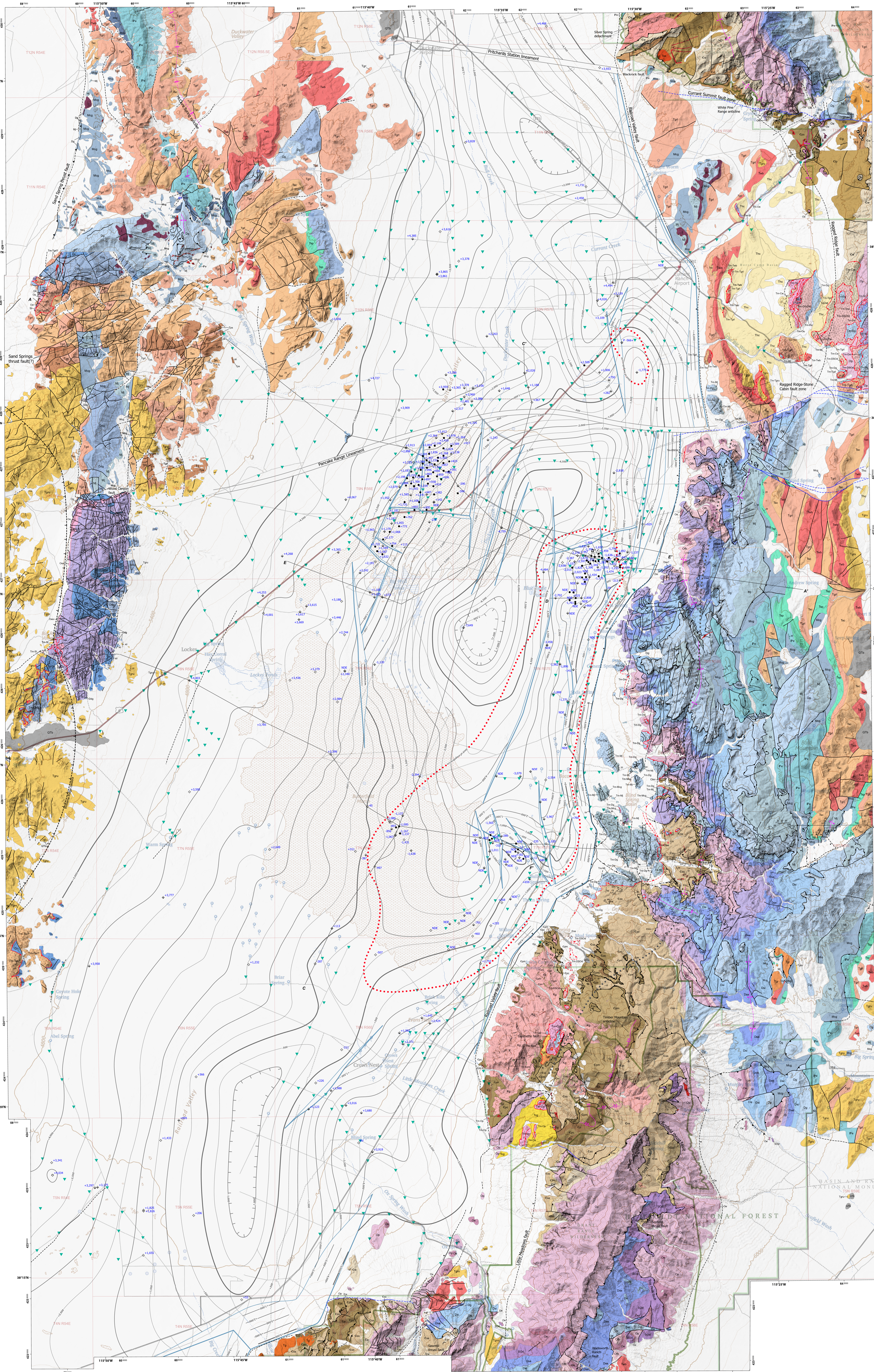


BASIN STRUCTURE MAP OF THE RAILROAD VALLEY AREA, NYE COUNTY, NEVADA

Plate 4 of 5

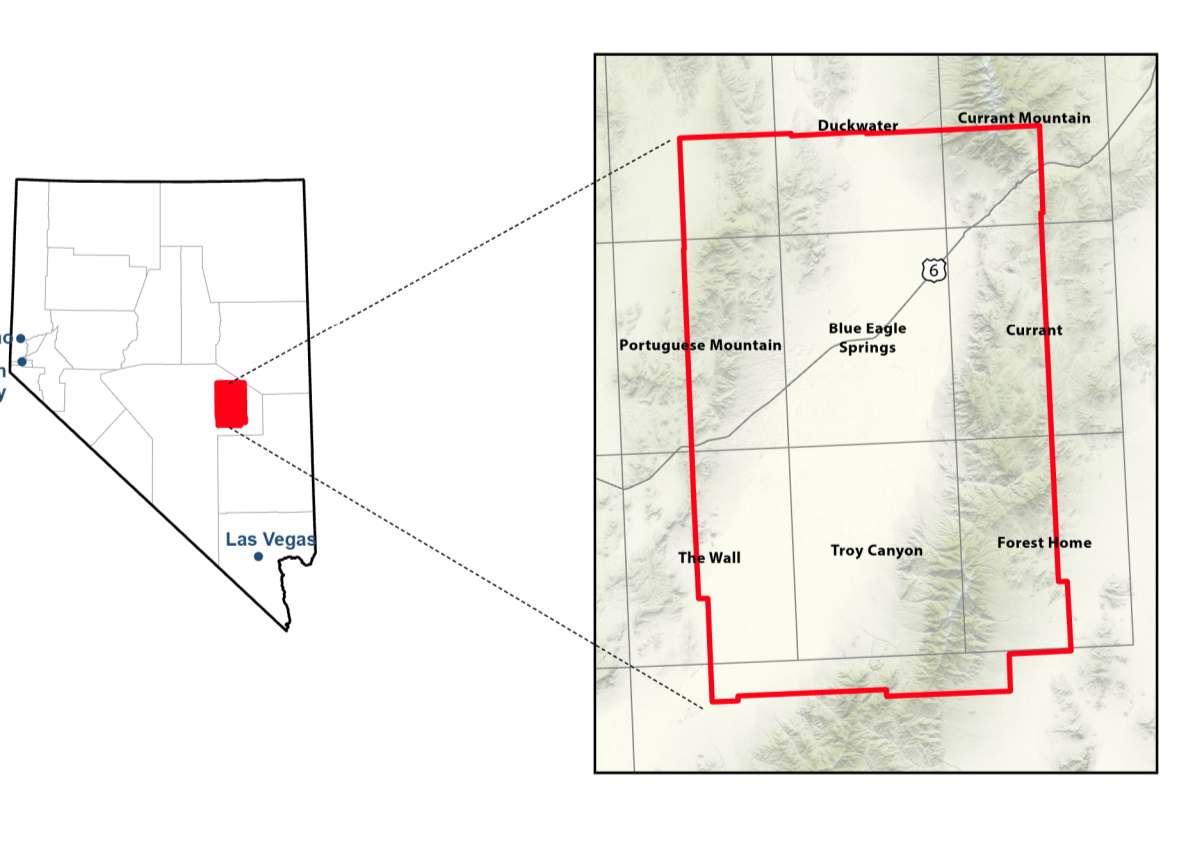
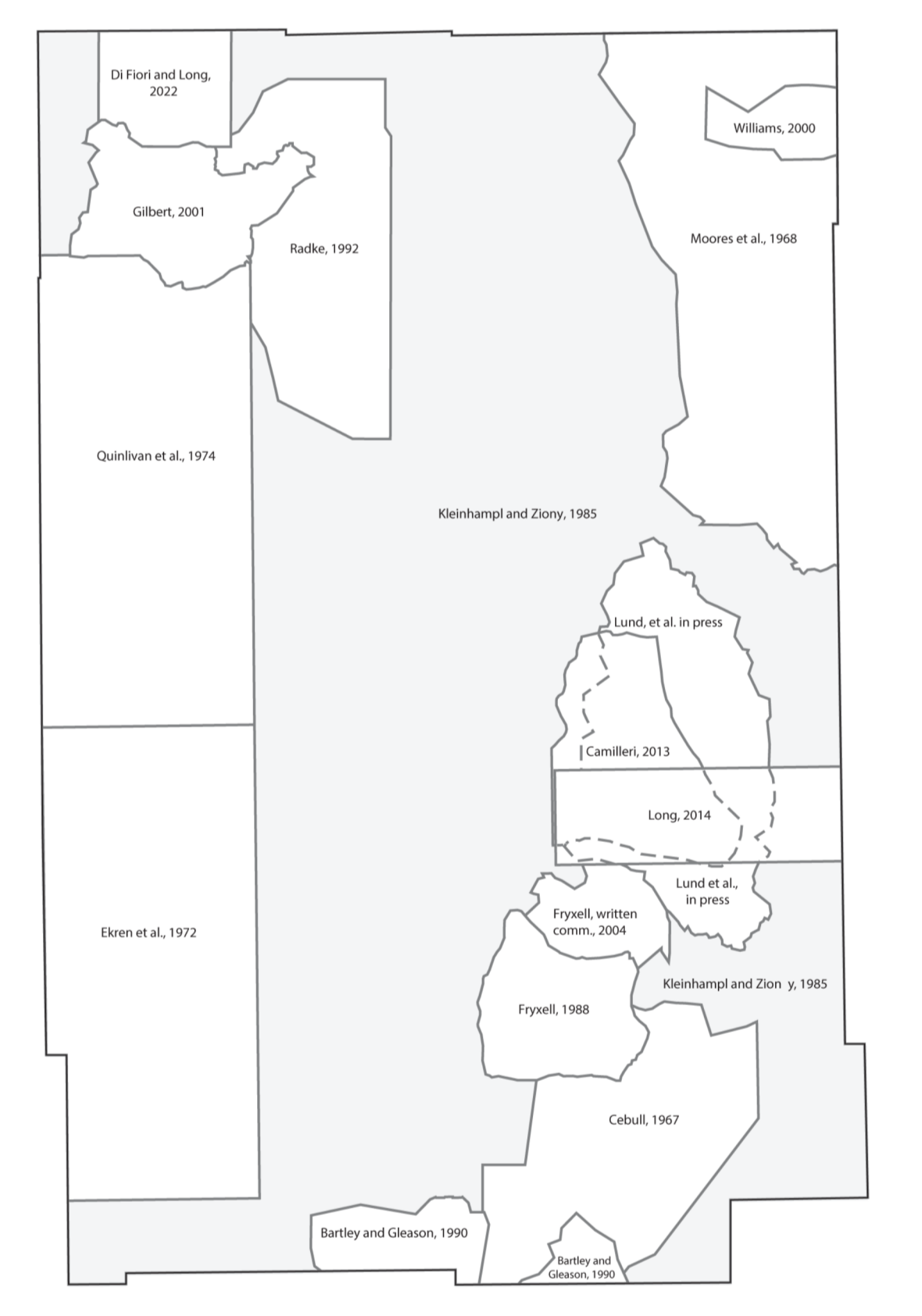
Don E. French
Ciannis Exploration, LLC, Billings, MT
2024



See report and plate 2 for unit descriptions and references for this plate.

GEOLOGIC UNITS	
U1	Unroofed basalt (Pliocene)
Q1M	Valley fill (Pliocene to Miocene), shown in cross sections only
Q1M1	Upper valley fill
Q1M2	Middle valley fill
Q1M3	Lower valley fill
Q1M4	Early valley fill
M1	Megabreccia (Pliocene, Miocene, or Oligocene)
M2	Eagle Spring megabreccia, shown in cross sections only
M3	Kate Spring megabreccia, shown in cross sections only
M4	Grant Canyon megabreccia, shown in cross sections only
M5	Horse Camp Formation (Pliocene to Miocene)
M6	Unroofed conglomerates (Miocene)
M7	Sedimentary breccia (Miocene), shown in cross sections only
M8	Garrett Ranch Group (Oligocene)
M9	Upper Garrett Ranch Group
M10	Trap Spring caprock, shown in cross sections only
M11	Windous Butte Formation
M12	Lower Garrett Ranch Group
M13	Tuff of Marston Ranch, shown in cross sections only
M14	Tuff of Pritchards Station
M15	Current Tuff, shown in cross sections only
M16	Stone Cabin Formation
M17	Shoop Pass Formation (Eocene)
M18	Carbon Ridge Formation (Pleistocene)
M19	City Limestone (Pleistocene)
M20	Clayton Peak Formation (Mississippi)
M21	Charmion Shale-Gap Wash Formation, unroofed (Mississippi)
M22	Charmion Shale (Mississippi), shown on cross sections only
M23	Gap Wash Formation (Mississippi), shown on cross sections only
M24	Jones Limestone (Mississippi)
M25	Guilmette Formation (Devonian)
M26	Dreiss Gate Limestone (Devonian)
M27	Nevada group (Devonian)
M28	Simonsen Dolomite (Devonian)
M29	Smy Dolomite (Devonian)
M30	Likeween Dolomite (Silurian)
M31	Likeween Fish Haven, unroofed (Silurian, Ordovician)
M32	Fish Haven Dolomite (Devonian)
M33	Fly Limestone (Devonian)
M34	Hanks Quartzite (Devonian)
M35	Hogback Group (Devonian)
M36	Carboniferous (Devonian)
M37	Little Meadows Formation (Cambrian)
M38	Wheatfield Formation (Cambrian)
M39	Subalpine Spring Formation (Cambrian)
M40	Chudenberg Shale (Cambrian)
M41	Lincoln Peak Formation (Cambrian)
M42	Red Canyon Limestone (Cambrian)
M43	Peach Shale (Cambrian)
M44	Prospect Mountain Quartzite (Cambrian)
M45	Unroofed, unknown age
M46	Intrusives, unroofed, shown on cross section A only
M47	Current Stock (Eocene)
M48	Railroad Stock (Eocene)
M49	Silver Spring Stock (Eocene)
M50	Tray Stock (Eocene)
M51	Unroofed granite or granitic rocks (Eocene)

MAP SYMBOLS	
---	Contact: Automatically generated from geologic unit boundaries and shown as solid
---	Fault: Solid where certain and location accurate, short-dashed where inferred
---	High-angle normal fault: Solid where certain and location accurate, short-dashed where inferred. Showing dip, half on downthrown block
---	Low-angle normal fault: Solid where certain and location accurate, short-dashed where inferred. Half relies on downthrown block
---	Megabreccia fault: Solid where certain and location accurate, short-dashed where inferred
---	Transverse fault: Solid where certain and location accurate, short-dashed where inferred
---	Thrust fault: Solid where certain and location accurate, short-dashed where inferred. Shaded on upper (structurally higher) plain
---	Collocation axis
---	Line of megabreccia deposit
---	Basin structure contour: 500 ft contour on base of valley fill. Maximum on closed block
---	Anticline: Solid where certain and location accurate, short-dashed where inferred
---	Overturned anticline: Solid where certain and location accurate, short-dashed where inferred
---	Syncline: Solid where certain and location accurate, short-dashed where inferred
---	Caliche margin: Short-dashed where inferred. Tick points into caliche
---	Line of cross section
---	Soil-gas survey station
---	Strike and dip of bedding
---	Strike and dip of compaction lamination in ash flow tuff
---	Well symbology
---	Dry hole
---	Dry hole gas show
---	Dry hole oil & gas show
---	Dry hole oil & gas show
---	Injection/disposal
---	Oil well
---	Oil well plugged
---	Megabreccia
---	Subsurface fault
---	Lightroom side
---	Downthrown side



Scale 1:63,630

0 0.5 1 1.5 2 2.5 3 3.5 KILOMETER

0 0.5 1 1.5 2 2.5 MILE

CONTOUR INTERVAL 150 FEET

Projection: Universal Transverse Mercator, Zone 11, North American Datum 1983 (NAD83)

Base map: U.S. Geological Survey 30' x 60' Duckwater and Quinn Canyon Range quadrangles. Acquired from The National Map Topographic Edition, April 2024.

Hillshade: Derived from Q1M lidar data from The National Map.

Supported by:
French, Don E., 2024, Basin Structure Map of the Railroad Valley Area, Nye County, Nevada. Nevada Bureau of Mines and Geology Report 60, Scale: 1:63,630, 102 p.