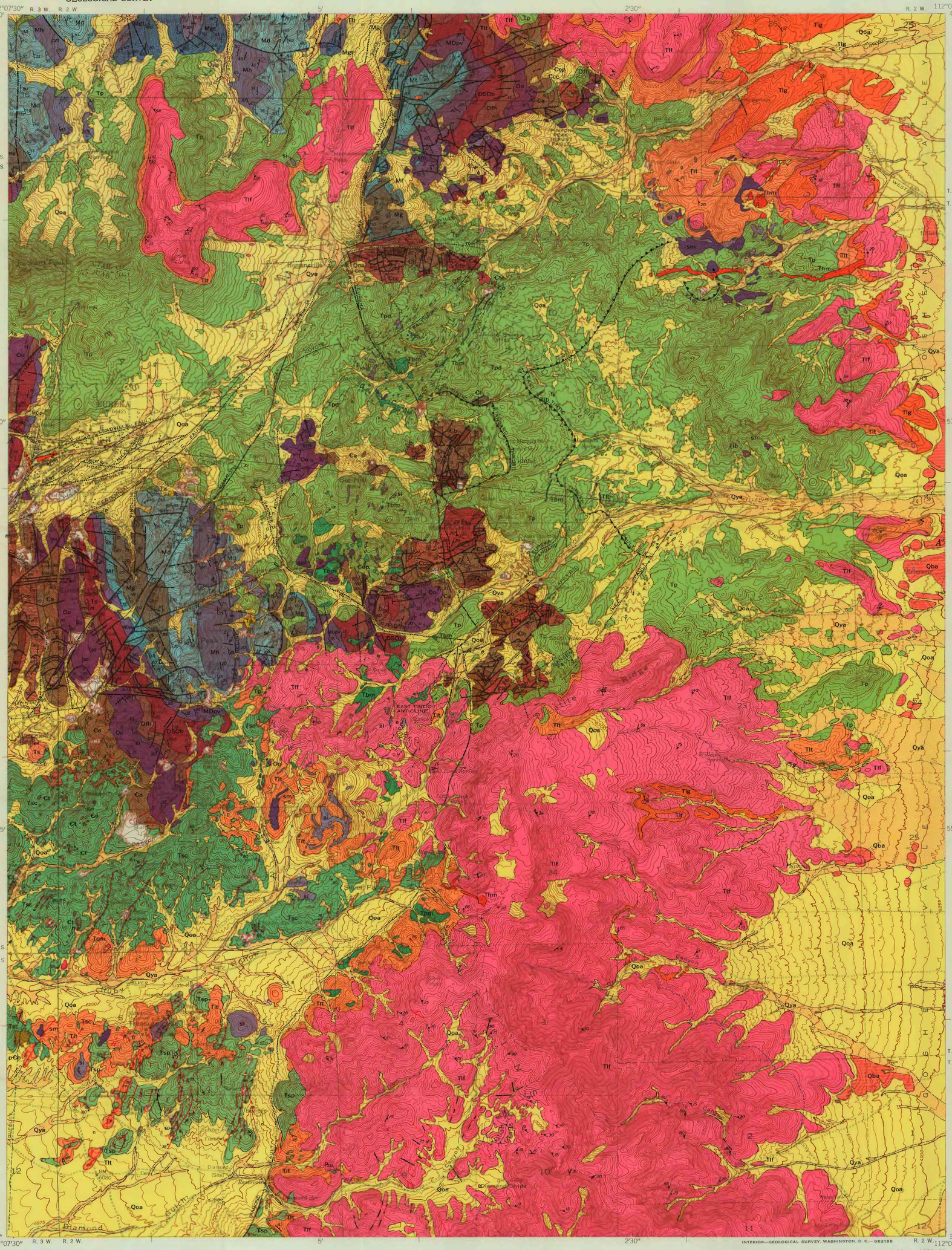


Base Map by Topographic Division
U. S. Geological Survey, 1954

Geology west of 112°05′ and south of 39°55′ by H. T. Morris, 1953–63; H. D. Goode, 1953–55; A. E. Disbrow, 1953; R. E. Lehner, 1954; and Priestly Toulmin, 3d, 1953. Geology east of 112°05′ and north of 39°55′ modified from Lovering and others (1960)

EXPLANATION

QUATERNARY

Recent

Qya — Younger alluvium

Pleistocene

Qba — Bonneville formation and Alpine formation

Qoa — Older alluvium

UNCONFORMITY

TERTIARY

Eocene

Tib — Andesitic or latitic instrusion breccia

Tqm — Quartz monzonite porphyry

Tpd — Pebble dikes
Dikes of intrusion breccia composed chiefly of rounded fragments of sedimentary rocks embedded in a matrix of rock flour or biotite monzonite porphyry

Tsc, Tbm — Monzonite of the Silver City stock
Tbm, *associated biotite monzonite porphyry*

Tsp — Monzonite porphyry of the Sunrise Peak stock

Thm — Hornblende monzonite porphyry

Tlg, Tlf, Tlt — Laguna Springs latite
Tlg, *latite conglomerate interlayered with latite flows, agglomerates, and tuffs*
Tlf, *latite and andesite flow rocks and welded tuffs*
Tlt, *latite tuffs and agglomerates*

Ts — Swansea quartz monzonite

Tp — Packard quartz latite
Tuff, lava, vitrophyre, and flow breccia not differentiated on map

UNCONFORMITY

TERTIARY(?)

Eocene(?)

Ta — Apex conglomerate

UNCONFORMITY

CARBONIFEROUS

Upper Mississippian

Mgp, Mgc, Mgt — Great Blue formation
Mgp, *Poker Knoll limestone member, top not exposed in quadrangle*
Mgc, *Chiulos member*
Mgt, *Paymaster and Topliff members*

Mh — Humbug formation

Md — Deseret limestone

Lower Mississippian

Mg — Gardison limestone

Mf — Fitchville formation

DEVONIAN

Upper Devonian

MDpv — Pinyon Peak limestone and Victoria formation

ORDOVICIAN, SILURIAN, AND DEVONIAN

DSOb — Bluebell dolomite

ORDOVICIAN

Upper Ordovician

Ofh — Fish Haven dolomite

DISCONFORMITY

Lower Ordovician

Oo — Opohonga limestone

Pzu — Paleozoic rocks, undifferentiated

CAMBRIAN

Upper Cambrian

Ꞓa — Ajax dolomite

Ꞓop — Opex formation

Middle Cambrian

Ꞓcc — Cole Canyon dolomite

Ꞓb — Bluebird dolomite

Ꞓh — Herkimer limestone

Ꞓd — Dagmar dolomite

Ꞓte — Teutonic limestone

Ꞓo — Ophir formation

Lower Cambrian

Ꞓt — Tintic quartzite

PRECAMBRIAN

DISCONFORMITY

pꞒb — Big Cottonwood formation
Base not exposed

si, sm — Silicified rocks
si, *intense silicic alteration; includes opalized tuffs and fine- to medium-grained jasperoid consisting of chalcedony and quartz*
sm, *moderate silicic alteration; includes spoity alteration to jasperoid and opal, and fine-grained, pulverulent quartz in partly silicified shaly limestone*

Vein and replacement ore body showing dip
Dotted where not ore bearing

Contact
Dashed where approximately located

Fault, showing dip
Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side. Arrows show direction of relative movement. In section: A, relative movement away from observer; T, toward observer

Thrust fault
Dotted where concealed; queried where doubtful. Saw teeth on upper plate. In section, arrow indicates inferred direction of movement of active block

Anticline — Syncline
Showing trace of axial plane and plunge of axis. Dashed where approximately located; dotted where concealed

Strike and dip of beds
Sedimentary rocks, bedded pyroclastic rocks, and lava flows

Strike and dip of overturned beds

Strike of vertical beds

Strike and dip of planar structure in intrusive rocks and massive lava flows
Arrow shows bearing and plunge of lineation

Strike and dip of joints

Adit — Pit — Shaft

Burgin shaft

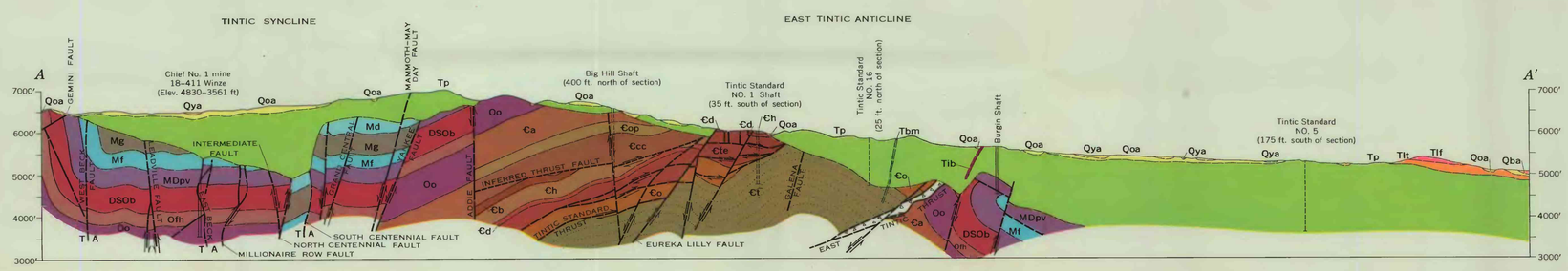
Mine shaft or winze
Dashed where projected to plane of section

Tintic Standard No 5

Churn drill hole
Projected to plane of section

Horizontal beds

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1963



GEOLOGIC MAP AND SECTION OF THE EUREKA QUADRANGLE, JUAB AND UTAH COUNTIES, UTAH

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 25 FEET
DATUM IS MEAN SEA LEVEL