GEOLOGIC MAP OF THE CANDELARIA MINING DISTRICT, NEVADA

Mapping done by students under direction of D. M. Lemmon, B. M. Page, J. D. Barksdale, F. R. Kelley, C. V. Campbell, E. F. Cook, E. E. Roberts, B. W. Ryan, H. P. Schaub, and C. Webster.

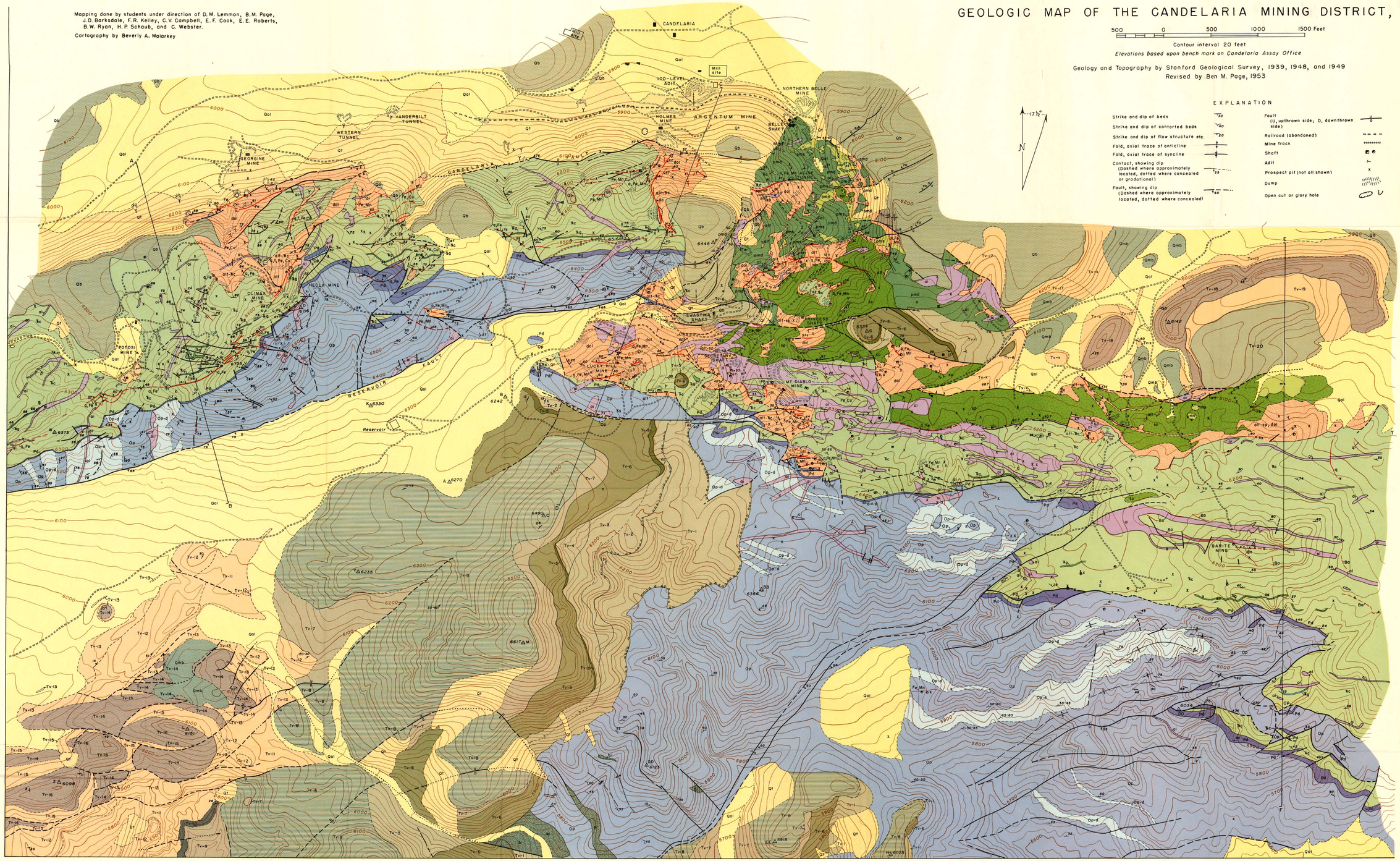
Cartography by Beverly A. Malarkey

500 0 500 1000 1500 Feet

Contour interval 20 feet

Elevations based upon bench mark on Candelaria Assay Office

Geology and Topography by Stanford Geological Survey, 1939, 1948, and 1949
Revised by Ben M. Page, 1953



EXPLANATION

- Strike and dip of beds
- Strike and dip of contorted beds
- Strike and dip of flow structure etc.
- Fold, axial trace of anticline
- Fold, axial trace of syncline
- Contact, showing dip (Dashed where approximately located, dotted where concealed or gradational)
- Fault, showing dip (Dashed where approximately located, dotted where concealed)
- Fault (U, upthrown side; D, downthrown side)
- Railroad (abandoned)
- Mine track
- Shaft
- Adit
- Prospect pit (not all shown)
- Dump
- Open cut or glory hole

ROCKS AND MINERALIZATION IN APPROXIMATE SEQUENCE

SURFICIAL DEPOSITS

QUATERNARY

- Talus material — Qt
- Alluvium — Qal

VOLCANIC AND RELATED ROCKS

TERTIARY

- Olivine basalt — Qb
- Andesitic mudflow breccia — Qmb
- Basalt, with underlying gravel, boulders, and breccia — Tv-20
- Dacitic rocks: Dacitic tuffs and welded tuffs (Tv-11, Tv-12, Tv-13, Tv-15, Tv-17, Tv-19, and several tuffs labelled Tv-x); Dacite flows (Tv-14, Tv-16, Tv-18) — Tv-x, Tv-19, Tv-18, Tv-17, Tv-16, Tv-15, Tv-14, Tv-13, Tv-12, Tv-11
- Olivine basalt — Tv-10
- Rhyolitic tuff — Tv-9
- Hypersthene basalt — Tv-8
- Dacitic and rhyolitic rocks Tuff — Tv-7
- Rhyolite flow — Tv-6
- "Pseudovitrophyre" welded tuff — Tv-5
- Tuffs (Tv-1, Tv-2, Tv-3, Tv-4) Gravels beneath Tv-1 and Tv-2, shown by small circles — Tv-4, Tv-3, Tv-2, Tv-1

VEINS AND MINERALIZED ZONES

UPPER JURASSIC (?)

- Quartz vein, apparently barren — q
- Silver-bearing veins, or veins which might contain silver. (Gold, lead, zinc, and antimony may also be present) Outcrop marked by quartz (q), iron oxides (Fe), and locally manganese oxides (Mn) — q, Fe, Mn
- Copper-bearing zones: Tourmaline-copper-bearing vein (q, t, Fe, Cu); Copper-bearing dissemination and vein (Fe, Cu) — q, t, Fe, Cu; Fe, Cu
- Barite vein — Ba

ALTERED ROCKS

- Rocks completely replaced by dolomite (dol), silica (silicified), or unspecified minerals (alt) — dol, alt
- Rocks which retain some original features. Altered Candelaria shale (alt-Rc), and serpentine (alt-sp) — alt-Rc, alt-sp

PRE-MINERALIZATION ROCKS

JURASSIC (?)

- Acidic and intermediate dike rocks, felsite, quartz monzonite porphyry, etc. — ai
- Basic dike rocks, diabase, dolerite, etc. — bi
- Serpentine (sp) with meta-sedimentary inclusions (ms) — sp, ms
- Rock complex of Pickhandle Gulch: Meta-dolerite (pmd) and obscure meta-sediments (pms) intimately intermingled — pms, pmd

LOWER TRIASSIC

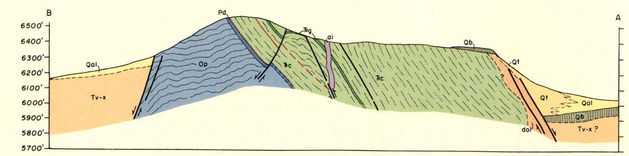
- Candelaria Formation: Chiefly shale, locally argillite; Thin grit bed (Rg) in lower part; A few thin limestone beds, not shown, near base — Rc, Rg

PERMIAN

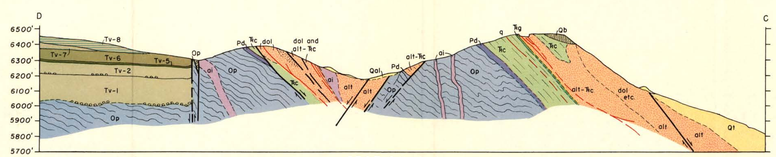
- Diablo formation: Grit or sandstone consisting largely of chert grains — Pd

ORDOVICIAN

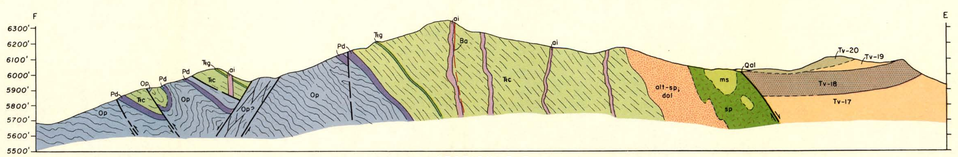
- Palmetto formation: Chert and shale or phyllite (Op); Thin-bedded dolomite, and shale or phyllite (Opd), incompletely mapped — Op, Opd



SECTION B-A



SECTION D-C



SECTION F-E

WILLIAMS & HEINTZ LITHOGRAPH CORPORATION, WASHINGTON, D.C.