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ALPINE-ADDENDUM

Source: Unpublished Report on the Carson Sink Area, F.C. Schrader.
Field work 1911-1920.

P. 324. Elevation 6000'. On lower E slope of Augusta Range; (325) on opposite side of range from Wonder, from which it is 20 miles ENE. 3 miles NW of Alpine P.O.

326. Country rock Tertiary volcanics; in the E part of area, mostly rhyolite, toward the W, andesite. The veins occur in these rocks. Gangue is quartz and altered mineralized rock. Adularia accompanies the quartz in places. The deposits are best exposed in and near the canyons, which are mainly open drainage ways.

Williams Mine: 2 miles NW of Alpine. Country rock is rhyolite.

327. On a mineralized shear zone, N60E, dip 70 NNW into the mountains. A mineralized sheeted zone of quartz lenses and stringers, 60' wide. Known length exceeds $\frac{1}{2}$ mile. Lode is mainly quartz and altered silicified and replaced rock. Limonite stain. The quartz in places shows replacement of an earlier spar gangue. Often much adularia. Ore minerals are cerargyrite, argentite and gold, associated mainly with the quartz and quartz-adularia part of the gangue. The bunches of ore mined were very rich. The croppings were not prominent. Workings consist of a 200-ft. shaft and drifts.

Windlass Mine: $\frac{3}{4}$ mi. NW of the Williams mine. Altitude 6450'. On an E-W vein in rhyolite, on or near the contact with quartz latite. 50' incline shaft. Vein is 2-5' wide, crushed quartz and adularia and altered silicified rhyolite—all more or less banded. Much of the quartz-adularia part of the gangue is crustified-banded. Bands may number 18-20 to an inch. Margins of the bands are crenulate. The quartz-adularia contains pseudomorphic replacements (after spar). Average grade was \$6 per ton, $\frac{2}{3}$ gold, $\frac{1}{3}$ silver/

328. Vein said to be 5' wide in bottom of shaft; contains a 28" wide ore seam running \$22 per ton. at the surface assayed \$9.

400' SW of the Windlass mine is another good looking vein, striking NW, vertical. Explored by pits.

Nevada Lincoln Mine: 6 miles NNE of Alpine, in the upper part of Clan Alpine canyon, 4 miles from its mouth, near the site of the Clan Alpine mill. Country is rugged; elevation 6300'. Not visited by Schrader. Said to be 3 veins, 200' apart, each 4' wide; they dip steeply NNE. Country rock is rhyolite and probably intrusive aplite. Gold-silver ore occurs as seams in a shattered "quartz-talcosse gouge gangue". Largest ore band of quartz is 1.5-2' wide. Values are mainly in a hard bluish quartz. Value from \$5 to \$60 per ton.

CONCLUSIONS

Mineralization found in canyons, where erosion has cut down into ore zone. Country rock Tertiary volcanics. To west, volcanics rise 2000' + higher than Alpine. Districts fills our requirements and merits close study.

ALPINE, CHURCHILL CO. Millett sheet

Sources: F.C. Lincoln, 1923, Mining districts and mineral resources of Nevada

W.O. Vanderburg, 1940, Recon. of mining districts in Churchill Co., 15.

REGIONAL SETTING

Structure: Unknown

Production Belts: In National-Mina high production belt.

Lithology: On E slope of Clan Alpine range, composed of Tertiary volcanics. To W is a large area of volcanics exposed at elevations 2000' or more higher than Alpine.

LOCAL GEOLOGY

Country Rock: According to Vanderburg, slate intruded by monzonite; according to Univ. ev. Bibliography, country rock consists of Tertiary volcanics; this agrees with Tectonic Map of U.S.

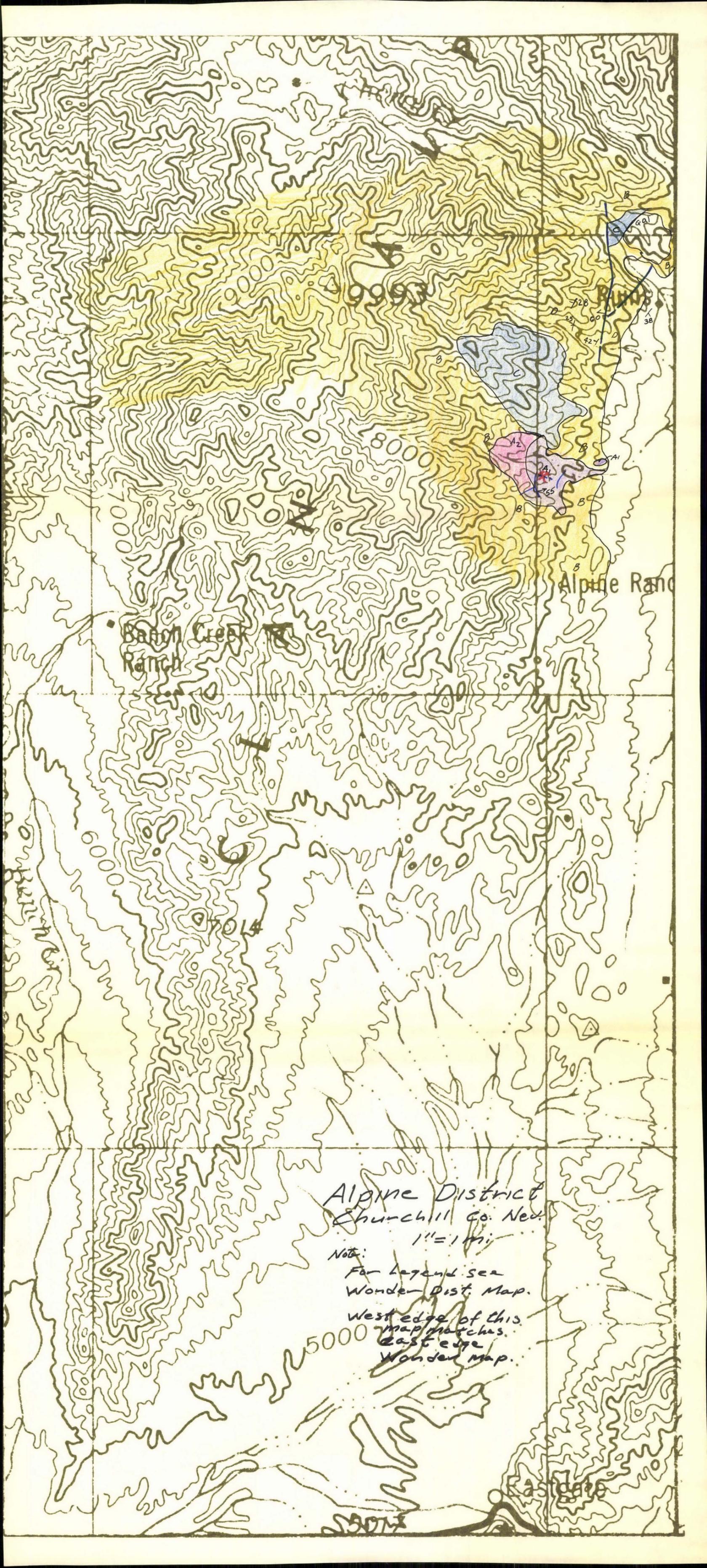
ORE DEPOSITS

Ore in two fissure veins cutting the slate and monzonite (?); strike N10E, dip 50 W. Silver, gold, tetrahedrite, galena, sphalerite; gangue quartz. Width of veins from a few inches to 15 ft. Stopes about 2' wide.

Production: According to Vanderburg, a few thousand dollars. *Prospecting mostly in the 1960s; veins proved narrow and low grade.

CONCLUSIONS

In spite of the discouraging description, the Clan Alpine range in this area might merit examination. If the known veins do occur in the basement, Tertiary epithermal deposits often are poor there, and improve in the overlying volcanics. All volcanic fields within the National-Mina production belt should eventually be examined.



Alpine District
Churchill Co. Nev.

1" = 1 mi.

Note:
For legend see
Wonder Dist. Map.

West edge of this
map matches
5000 East edge
Wonder Map.

Eastgate

MEMORANDUM FOR:
Edward Wisser

January 27, 1966

Geology of the Alpine District
Churchill County, Nevada

ROCKS OF THE DISTRICT

Rock types and nomenclature are identical with that at Wonder, but with the addition of a late Tertiary unit "C". This unit "C" is a basaltic andesite and Martin has tentatively correlated it with the upper division (Tvuu) volcanics of Vitaliano. At Ione, Vitaliano estimates this upper division unit to be 300 feet of basaltic andesite and trachyandesite.

STRUCTURE OF THE DISTRICT

So few faults and bedding trends are shown on Martin's map of this area that it is difficult to pick out any trends. It would appear that the ore deposit occurs in an erosional window of pre-Esmeralda volcanics surrounded by post-Esmeralda volcanics.

ORE DEPOSIT

There is only one prospect of any consequence in the district and production must have been very meager. Ore occurs along an easterly trending silicified zone with flanking kaolinization. Total width of the vein and silicified zone is probably not more than 2 to 3 feet.

E. H. Lindsey