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Mines and prospects, Idaho Springs district, Clear Creek and Gilpin Counties, Colo., by R. H. Moench and A. A. Drake, Jr.

Tunnel extended in 1960

Veins are 1 to 24 in quartz, pyrite and altered wall rock

Veins are 0.5 to 2 in. quartz, pyrite, altered wall rock

0.5 in. quartz, pyrite

Post-mineral fault in 10 ft zone of sheared and altered wall rock hanging wall moved down and north

Veinlts of quartz and pyirte in 11-ft zone of sheared and altered wall rock

Assay: Au-Tr, Ag-0.20 oz/ton, Cu-<0.01, Pb-0.03, Zn-0.02 percent. Chip sample across 12 ft zone of altered wall rock cut by veinlets of quartz and pyrite

J. L. Emerson vein: footwall vein consists of 1 to 5 ft dark gray silicified, pyritized wall rock coated with secondary copper sulfate

Bad air

Assay: Au-0.04, Ag-0.58 oz/ton, Cu-0.04 Pb-0.05 Zn-0.02 percent. Chip sample 4 1/2 ft across footwall vein

4 to 6 in. coarse pyrite

Veins are 0.5 to 1 in. quartz, pyrite; wall rock is altered and pyritized as much as 2 ft either side

Veins are 0.5 to 1 in. quartz, pyrite

Veins are 1 to 6 in quartz, pyrite

Assay: Au-Tr, Ag-0.24 oz/ton; Cu-0.03, Pb-0.04, Zn-<0.01 percent. Chip sample 5 in across vein

Sheared silicified arc pyritized width of drift; 1 to 6 in. coarse galena, sphalerite on hanging wall; thin veinlets of same on foot wall

Vein No. 20, Specie Payment (?)
Assay a: Au-0.06, Ag-5.20 oz/ton, Cu-1.18, Pb-6.94, Zn-11.33 percent. Chip sample 3 in. across hanging wall vein
Assay b: Au-Tr, Ag-3.10 oz/ton; Cu-0.29, Pb-2.02, Zn-0.67 percent. Chip sample stope width, 26 in.

Stoped above, 30 ft

JOIN — LINE

JOIN — LINE

2 to 6 in. pyrite, chalcopyrite, galena, sphalerite

Vein No. 18: 14 in. intensely altered wall rocks and disseminated pyrite
Assay: Au-Tr, Ag-0.50 oz/ton; Cu-0.01, Pb-0.83 Zn-0.15 percent. Chip sample 14 in. across vein

Vein No. 17:
Assay a: Au-Tr, Ag-0.16 oz/ton; Cu-< 0.01, Pb-0.24, Zn-< 0.01 percent. Chip sample 4 in. of disseminated pyrite in altered wall rock

Assay b Au-0.77, Ag-7.77 oz/ton, Cu-1.30 Pb-11.04 Zn-22.07 percent. Chip sample 3 in across vein
Assay c: Au-0.12, Ag-6.92 oz/ton, Cu-0.35, Pb-12.60, Zn-7.14 percent Chip sample 2 in. across vein

Vein No. 15, Yellowstone vein (?)

Stoped above more than 75 ft on horsetail shoot

Veins consist of quartz, pyrite, and few knots of sphalerite in white post-mineral clay gouge
Assay: Au-0.46, Ag-1.84 oz/ton; Cu-0.37, Pb-2.04 Zn-8.25 percent. 2 in. quartz, pyrite, base metal minerals

Stoped above

Vein No. 14:
Assay a: Au-Tr, Ag-0.12 oz/ton, Cu-0.03, Pb-0.07, Zn-0.01 percent. 2 in chip sample quartz, pyrite, altered rock

Assay b: Au-Tr. Ag-0.32 oz/ton, Cu-0.02, Pb-0.05, Zn-0.52 percent. 4 in. inner quartz, pyrite, Tr. dark sulfides.
Assay c: Au-0.28 Ag-0.33 oz/ton; Cu-<0.01 Pb-0.07 Zn-0.04 percent. 8-in. chip sample outer silicified rock with disseminated pyrite

10 to 30 in pyrite, gray quartz

Vein No 13:
Assay: Au-Tr, Ag-0.08 oz/ton; Cu-0.06 Pb-0.04 Zn-0.03 percent. Chip sample, 22 in. across vein

Stoped above, 30 ft

0.5 in galena, sphalerite

0.5 to 2 in. vuggy quartz, pyrite, sparse galena, sphalerite

Assay a: -0.05, Ag-0.27 oz/ton, Cu-0.06, Pb-0.38, Zn-0.11 percent Chip sample, 14 in white gouge
Assay b: Au-Tr, Ag-0.40 oz/ton, Cu-0.05, Pb-1.00, Zn-0.09 percent Chip sample, 12 in. altered rock

1 to 3 in. galena, sphalerite

Veins are 0.5 to 1 in galena, sphalerite, 1 in. altered rock either side

Veins are 0.5 to 3 in. pyrite, galena, sphalerite

Veins are 0.5 in. quartz, pyrite

1 to 6 in. gray clay and quartz, and pyrite
Assay: Au-Tr, Ag-0.16 oz/ton; Cu-0.01, Pb-0.04, Zn-0.03 percent. 6 in. chip sample

JOIN — LINE

1 to 6 in. quartz, pyrite
Assay: Au-Tr., Ag-0.34 oz/ton; Cu-0.01 Pb-0.19 Zn-0.25 percent. 6-in. chip sample

Veins are 1 in. quartz, pyrite, and pods of galena and sphalerite

Vein No. 10: 12 to 18 in. altered rock with disseminated pyrite; includes: 6 in. gray clay bounded by 4 to 6 in. greenish altered rock either side
Assay: Au-Tr., Ag-0.14 oz/ton, Cu-0.06 Pb-0.06 Zn-0.05 percent 18-in. chip sample

1 to 4 in. altered rock, pyrite, secondary copper sulfate

5 in. pyrite, galena

0.5 to 6 in. quartz, pyrite

1 ft. shear, local altered rock, pyrite

Veins are 0.5 in. quartz, pyrite

Veins are 0.5 to 1 in. quartz,

Portal
Altitude
7890 ft

EXPLANATION

Order may not reflect age

- Pegmatite
- Amphibolite
- Microcline-quartz-plagioclase-biotite gneiss

PRECAMBRIAN

Contact
Dashed where inferred

30 Plunge of warp axis

18 Strike and dip of foliation

88 Barren fracture, showing dip
Dashed where inferred

42 85 Vein, showing dip, and plunge of slickensides
Dashed where inferred

23 Vein, showing plunge of split, pod, or curvature

Disseminated pyrite

Foot of raise or winze

Lagged workings

Caved workings, or otherwise inaccessible

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Geology and base by R. H. Moench and A. R. Krueger, August 1953

Descriptions and maps supplementary to U.S.G.S. Suit 1208 by R. H. Moench and A. A. Drake, Jr., 1966

FIGURE 57.--GEOLOGIC MAP OF THE LUCANIA TUNNEL (C-II,1,FIG.1)

100 0 400 Feet

Datum is mean sea level