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SUGGESTIONS FOR PROSPECTING

Lead-silver ores in both the old Reveille (Gila mine) and new Reveille mining areas are concentrated where the Eureka Quartzite and the oldest welded tuffs are juxtaposed. Ore-bearing solutions apparently moved upward and laterally in and adjacent to the highly fractured Eureka and were trapped by the overlying impermeable tuff, which nearly everywhere appears to be in low-angle fault contact with the underlying Paleozoic rocks. The north-striking Eureka undoubtedly underlies the tuff at shallow depth (mostly less than 500 feet) between the two mining areas.

to the Shingle Pass Tuff. Total thickness 0-500+ feet

Tuff - Compound cooling unit of partially welded to densely welded rhyolitic

cryst in upper one-half; quartz in lower one-half. Unit contains abundant

ash-flow tuff; reddish-gray, pink, and buff. Alkali feldspar is dominant pheno-

granite and pegmatite lithic fragments in upper part. Phenocrysts, upper part,

30: q 27-35, af 40-52, pf 20-25, b trace-1.5, o trace; lower part, 17-30: q

40-55, af 32, pf 25, b 1-2, hb trace, o trace. Magnetically reversed. Thickness

TUFF OF REVEILLE RANGE (MIOCENE) - Two or three cooling units of rhyo-

litic, densely welded ash-flow tuff; reddish-gray and pink; conspicuous vitrophyre

50-100+ feet thick at base of lowest unit in adjacent Reveille Peak quadrangle;

o trace. Lowest unit magnetically reversed; magnetic properties of higher units

Reveille Range included in the tuff of White Blotch Spring by Ekren and others

(1971) that ranges in age from 21.5 to 25 m.y. As mapped, includes at the base

thin (less than 30 feet) erosional remnants of shard tuff that are modally similar

unknown. Tuff probably correlates with quartz-rich units in the southern

all units typically rich in streaked out pumice that indicates some flowage during

welding. Phenocrysts 25-35: q 35-50, af 30-42, pf 15-25, b trace-2, hb trace-0.4,

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Tuff of Goblin Knobs - Compound cooling unit (possibly two cooling units) of densely welded, coarsely devitrified quartz latitic to rhyolitic welded tuff; mostly

pumice-rich with pumice 2-6 inches; light-brown and brownish-gray, weathering

phenocrysts, rarely as few as 28 percent or as many as 40 percent. Quartz com-

monly as large as 5 mm. Unit is distinguished from typical Monotony Tuff by

smaller total phenocryst content, sedimentary lithic fragments, higher alkali feldspar plagioclase ratios, and less biotite. Identified with certainty only along

east flank of Reveille Range in blocks interpreted as being disrupted segments

of a large caldera. Two cooling units are suggested by magnetic data which show

and inclination characteristic of the Monotony (Tm). Phenocrysts 28-40: q 18-35,

(biotite); 24.9±0.6 m.y. (sanidine). This age permits the possibility that the tuff

of Goblin Knobs is younger than the Shingle Pass Tuff-tuff of Arrowhead sequence.

The exposures at Arrowhead also permit this possibility. The stratigraphic posi-

tion inferred herein is based on the fact that rocks of this lithology are unknown

some rock magnetically reversed and some normal, but none with the azimuth

af 12-31, pf 38-50, b 3-12, hb trace-0.3, o 0.2-1.3. K-Ar age: 25.3±1.0 m.y.

above the Shingle Pass in this region. Thickness 0-5,000+ feet

brown; commonly containing numerous small lithic fragments of siltstone, aphyric

rhyolite, crystal-rich quartz latite lava and welded tuff. Typically having 32 percent