

DEPARTMENT of the INTERIOR

news release

Geological Survey
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DIV. MINERAL INVESTIGATION

NEW COPPER-SILVER-ZINC DEPOSITS IN ALASKA RANGE

Previously unknown copper-silver-zinc deposits have been observed in a remote sector of the Alaska Range, near Farewell, Alaska, according to the Geological Survey, Department of the Interior.

Outcroppings of the massive, fine-grained sulfide bodies were noted very briefly in 1967 during field studies in connection with the Interior Department's Heavy Metals program by U. S. Geological Survey scientists Bruce L. Reed and Raymond L. Elliott, of the Survey's Menlo Park, Calif. office.

Within recent weeks, Reed, and another Survey scientist, Donald Eberlein, also of Menlo Park, examined the deposits in more detail. They report the location at an altitude of 4,300 feet near the south edge of a small glacier, about 37 miles east of Farewell, and 2 miles north of Shellabarger Pass in the SE 1/4 of the NW 1/4, sec. 35, T. 29 N., Range 19 W. Talkeetna C-6 quadrangle.

The deposits are accessible by helicopter and ski-equipped fixed wing light aircraft.

The largest sulfide body, according to the USGS scientists, is partly covered by snow and rock debris, and is continuously exposed for a length of 90 feet, with a maximum exposed thickness of 17 feet. Another exposure, separated from the main body by snow cover, but possibly a continuation of the same body, occurs in a glacial creek 105 feet to the north. The presence of sulfide boulders above the body to the northwest, and along the south edge of the glacier suggests that it may continue beneath the glacier.

Reed and Eberlein noted a second sulfide body, about 125 feet downslope, and to the east of the larger body; it is lenticular, with a length of 50 feet, and a maximum thickness of 17 feet. Smaller bodies of massive sulfide minerals occur to the north and southeast.

The dominant minerals are sulfides of iron, copper, and zinc (pyrite, chalcopyrite, sphalerite, and arsenopyrite). The analytical data available suggest that silver minerals may also be present in small quantity, as well as a little gold. Analysis of samples from the deposits show a range of 0.7 to 7.0 percent copper, 1 to 5 percent zinc, and 0.3 to 9 ounces of silver per ton.

The presence of these base and precious metals in economically interesting amounts in a little known, but geologically "favorable" area of the southern Alaskan Range, suggests that the occurrence itself and the adjacent terrain warrant further attention by prospectors and exploration geologists, according to the USGS scientists.

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(Note to editors: See table of analysis of samples, and map, attached)

Analyses of Samples Taken from near Farewell Alaska
(Semi-quantitative spectrographic analyses, except gold
by atomic absorption). Values in parts per million.

Sample No.	Type	Silver	Gold	Copper	Lead	Zinc	Arsenic	Antimony	Bismuth
1	Grab	100	0.08	30,000	1,000	50,000	5,000	500	70
2	Grab	200	0.08	70,000	500	10,000	2,000	500	100
3	Grab	100	0.3	30,000	700	30,000	5,000	500	50
4	Grab	100	0.8	15,000	500	>10,000	1,500	200	20
5	Grab	70	3.5	7,000	7,000	>10,000	>>10,000	1,000	n.d.
6	Chip, 5'	150	0.5	15,000	1,500	>>10,000	1,000	200	20
7	Chip, 17'	150	0.9	15,000	1,500	10,000	1,000	200	<10
8	Chip, 6'	200	1.2	15,000	2,000	>10,000	1,500	300	20
9	Chip, 9'	100	0.8	15,000	500	>>10,000	2,000	150	20
10	Grab	10	0.2	7,000	30	>>10,000	1,000	<200	<20
11	Grab	200	2.1	7,000	3,000	>10,000	700	1,500	10
12	Grab	300	5.0	>>20,000	1,500	>10,000	700	150	70
13	Chip, 11'	150	1.9	15,000	500	>10,000	1,500	150	20
14	Chip, 15'	100	1.7	7,000	3,000	>10,000	700	200	<10
Limits of detection									
		1	0.02	1	10	200	200	200	10

