FORM SA-18

PE-087-11

MEMORANDUM

State of Alaska
DIVISION OF MINES AND GEOLOGY

PE 87-11

TO: James A. Williams
Director

DATE : August 4, 1969

FROM:

Gordon Herreid
Geologist

SUBJECT: Visit to George Gilbertson's
Crumb Gulch Prospect

I arrived at May Creek on the mail run on Monday, July 21, 3 p.m. with Bob Timmer, field assistant. We examined the property in company with George Gilbertson on Tuesday, and on Wednesday again walked to the property and left via Chitina Air Service on Thursday. The lowest showings on the property are about 2500' above the end of George's access road. No time was available for examining outcrops the first day up, and not a great deal on the second day. The principle exposures known (to me) of ore are in the short adit south of Crumb Gulch, which was examined and sampled, and in the 73' adit north of Crumb Gulch which was mapped and sampled by J. C. Roehm in 1936. Ed MacKevett also shows assays from north and south of Crumb Gulch in U.S.G.S. Circular 604, (table 1 & 2).

We were aided during this examination by meeting George Moerlein (Alvenco) who gave us a ride down the hill the second day in Alvenco's helicopter.

GEOLOGY

The bedrock in the area is black argillite (Kennecott formation of Cretaceous age) cut by a Tertiary granodiorite stock. The stock is surrounded, at least on the south side, by a rusty weathering halo about 1/2 mile wide. This probably represents disseminated pyrite. The veins are located in this halo.

On the south side of Crumb Gulch an adit has been driven for 10' in black argillite along a flat dipping vein of quartz-stibnite-realgar. The vein strikes N60W, dips 15° south, and pinches out a few feet west of the adit. It is exposed for about 20' east-west, and 10' north-south. It is 4 inches thick in the thickest portion and contains beautiful coarsely crystalline quartz-stibnite-realgar ore bounded on the top by 6 inches of limonitic gouge. Both the vein and gouge were sampled.

	PARTS PER MILLION					WEIGHT PER CENT		
	Gold	Silver	Copper	Lead	Zinc	Antimony	Tungsten	Arsenic
4" Vein	3.5	<0.5	90	10	10	52	1.07	5.4(contains som
6" Gouge	0.7	0.5	95	15	120	2.7	-	2.3 wolframite

1 part per million gold equals about $1.00 per ton.

Roehm (1936) reports that the adit north of Crumb Gulch contains a small persistent vein in a shear zone which contains stibnite with 0.54 oz. gold per ton ($18.85) across an 8" vein in the lower adit. He also describes an upper adit which George Moerlein reports he was unable to find.

MacKevett (1968) (tables 1 & 2) has sampled the north adits and an area south of Crumb Gulch which may not be the adit I visited.

Conclusion: The Crumb Gulch deposit is located in a slightly limonitized halo that is present around a granodiorite stock. The deposit consists of narrow veins (< 1 ft.) of stibnite and realgar which carries gold up to $66/ton. Most assays are in the $4 to $10 range. The vein is reported to be persistent over a distance of 2000 to 3000 feet. My present knowledge indicates that any large tonnage of low or moderate grade ore is unlikely and it was suggested to Mr. Gilbertson that he has to find some indication of a large low grade deposit or a moderate size high grade deposit. The optimistic private reports we have in our files may not be factual.

It was also suggested that he get the claims staked.

REFERENCES

Roehm, J. C., 1936, FE. Gold King Alaska, Inc. (William Peak)

MacKevett, E. M., Jr., and Smith, James G., 1968, Distribution of Gold, Copper and some other metals in the McCarthy B-4 and B-5 quadrangles. Alaska: U. S. Geological Survey Circular 604.

Exerpt from MacKevett - Table 1 & 2

SAMPLE	LOCATION	DESCRIPTION	Au (ppm)
13	Sb-Au prospect north of Crumb Gulch	12-in. channel sample across vein & gouge	3
14	" " " "	3-in. channel sample across vein	11
15	" " " "	12-in. channel sample across shear zone	2.8
16	" " " "	" " " " " "	66
17	" South " "	12-in. channel sample across vein	.08
18	" " " "	16-in. channel sample across vein	.1
19	" " " "	Vein	.2

(P A R T S P E R M I L L I O N)

Sample	Ag	As	Au	B	Ba	Be	Bi	Co	Cr	Cu	Mo	Mn	Nb	Ni	Pb
13	1	7,000	3	150	700	L	N	10	70	20	7	700	10	30	15
14	2	10,000	11	50	500	N	N	5	30	30	5	50	L	10	15
15	15	10,000	2.8	50	500	N	N	50	50	200	N	500	L	50	20
16	1.5	10,000	66.0	150	700	1	N	5	70	30	10	70	10	15	15
17	N	10,000	.08	70	700	1	N	15	50	50	10	700	10	30	L
18	N	10,000	.1	70	700	1	N	20	30	50	20	700	10	30	L
19	N	10,000	.2	70	500	1	N	5	30	20	30	1,000	70	50	N

Sample	Sb	Sn	Sr	V	W	Y	Zn	Zr	Mg	Fe	Ca	Ti
13	10,000	N	200	200	50	15	N	70	1	7	2	.5
14	10,000	N	150	70	N	N	N	30	.2	3	.7	.2
15	700	N	150	100	N	10	200	50	1	15	3	.2
16	5,000	N	100	150	N	15	N	70	.5	10	.2	.5
17	10,000	N	150	100	50	20	200	70	1	5	.5	.3
18	10,000	N	100	100	300	15	N	50	.2	3	.2	.2
19	10,000	N	200	100	10,000	15	N	20	.3	5	.15	.2

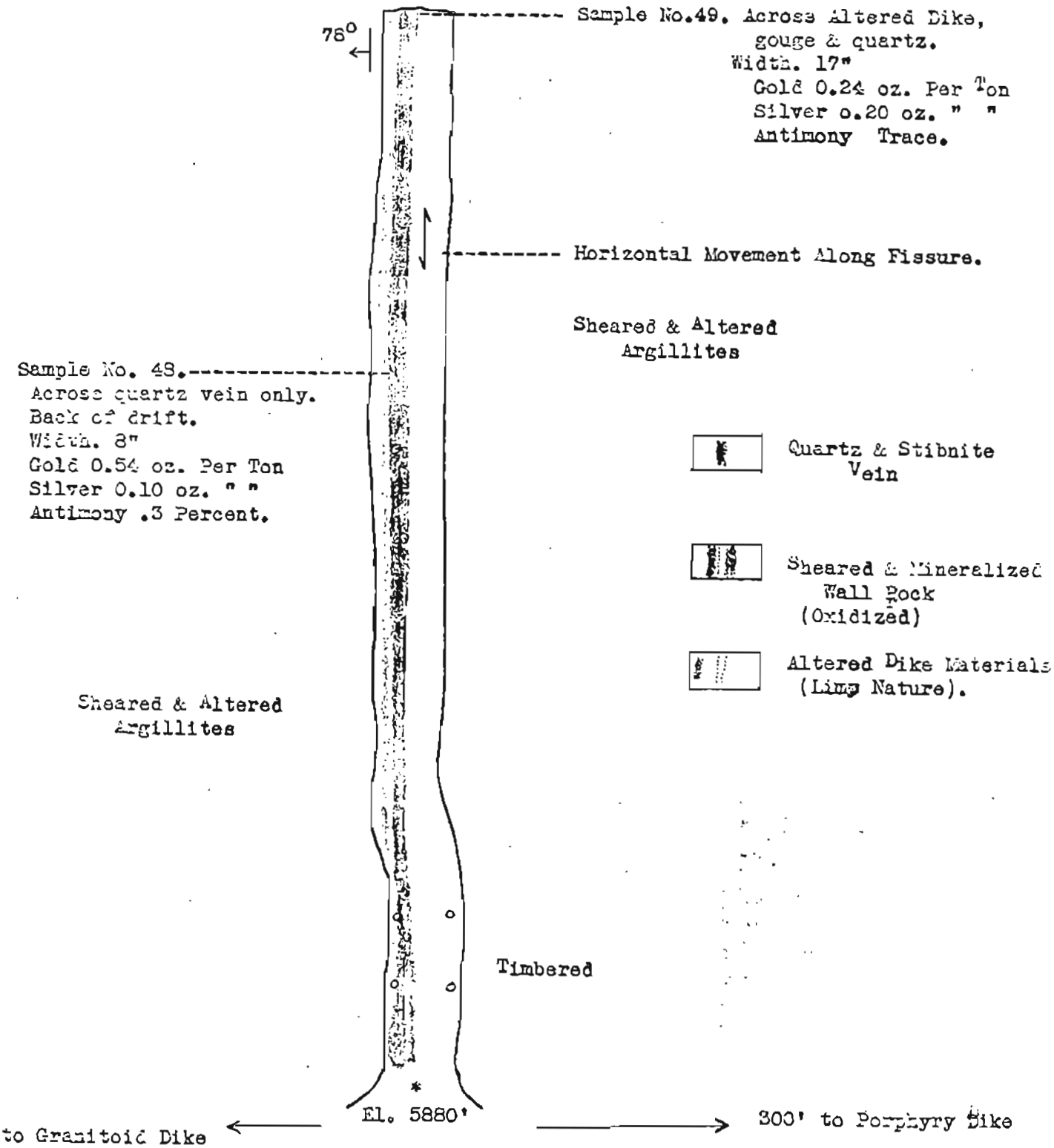
ASSAY SHEET, SAMPLE TAKEN ON PROPERTY OF GOLD KING ALASKA, INC.

Au @ $35 TV 1968

Sample No.	Location	Description	Width	Oz. Per Ton Gold	Oz. Per Ton Silver	% Antimony
48	No. 1 lower tunnel 50' from adit, back of drift, El. 5880'.	Across quartz only. Contains stibnite.	8"	0.54 $18.85	0.10	0.3
49	No. 1 lower tunnel, face of tunnel, 74' from adit, El. 5880'.	Across altered dike, gouge and quartz.	17"	0.24 $8.41	0.20	Trace
50	Surface outcrop 100' above No. 3 tunnel, El. 6320'.	Across quartz and massive stibnite.	5½"	0.14 $4.89	0.20	34.
51	Outcrop at adit of No. 3 tunnel, El. 6228'.	Across massive stibnite and quartz.	4½"	0.72 $25.10	0.30	25.2
52	Same as No. 51, footwall and hangingwall.	Across 6½" altered gouge hangwall and 6" altered footwall.	12½"	0.14 $4.89	0.30	None

Sketch
Lower Tunnel
GOLD KING ALASKA INC.,
William's Peak
Nizina Mining District
Alaska

North



Aneroid & Brunton Scale 1 "= 10' By J. C. Roehm Assoc. Engine.