

PE-104-06

PE
104-6

K. ... 27

STATE OF ALASKA
DIVISION OF MINES AND MINERALS

PROPERTY EXAMINATION REPORT
K & K ENTERPRISE

GOLD-QUARTZ PROPERTY
BEAUTY BAY-NUKA BAY DISTRICT
KENAI PENINSULA, SEWARD PRECINCT
SELDOVIA QUADRANGLE, ALASKA

By

M. W. JASPER
State Mining Engineer
January 1960

CONTENTS

	<u>Page</u>
INTRODUCTION	1
LOCATION AND ACCESSIBILITY	1
CLIMATE, TIMBER, and WATER	1
TOPOGRAPHY	2
HISTORY AND OWNERSHIP	2
Development Work	3
GEOLOGY	5
Vein Characteristics	6
Mineralization	7
Sampling Results	8
CONCLUSION	10

REFERENCES

U.S.G.S. Bul. 897A Pg. 32. "Quote" in full appended.

Terr. Dept. of Mines 1933 Biennium Report. Pgs 44 to 46.
"Quote" in full Appended.

Maps I, II, & III attached.

K & K ENTERPRISE

INTRODUCTION

An examination was made of the Cecil Kramer and William Knaack gold-quartz property during period of November 9th to 11th, 1959, at request of Jack Neubauer, resident of Anchorage. Neither of the owners were available to make the trip.

LOCATION AND ACCESSIBILITY

The property is located at approximate geographical coordinates Longitude $151^{\circ} 35' W$ and Latitude $59^{\circ} 31' N$. It lies within the east-central limits of the Seldovia Quadrangle.*

Situated on right limit of Ferrum Creek one mile from the beach at head of Beauty Bay (a westerly extension of Nuka Bay's West Arm), the camp cabin is at 190 foot elevation, and the Adit Portal is a 100 yards to the south at 230 feet above sea level.*

Beauty Bay is fairly well protected from the frequent stormy weather which lashes the rugged southeast coast of Kenai Peninsula.

Accessibility to the area is by boat from Seward, a distance of about 90 miles, or by air, a distance of about 60 miles, with small wheeled aircraft landing on a good beach at low tide and pontoon aircraft using the bay.

CLIMATE, TIMBER, and WATER

With area exposed to the storms of the Gulf of Alaska the annual precipitation is heavy, and the climate, similar to that of Seward and all points along the southeast coast of Kenai Peninsula, is relatively mild. Winter temperatures are reported to rarely go below zero.

* Refer to Maps 2 & 3

Timber is abundant in this area below the 500 foot level. It is limited to spruce of up to 30 inch diameter and an estimated 50 to 60 foot height.

Other vegetation is typical of the gulf coastal region.

Ferrum Creek, together with the much smaller flow of Little Creek, should have sufficient volume for a 100 to 150 ton per day mining and milling operation for possibly 10 months of the year. During period of examination the Ferrum Creek flow was estimated at 400 to 500 cubic feet per minute, and Little Creek at 25 to 30 cubic feet per minute.

TOPOGRAPHY

This region is one of steep slopes and serrated ridges rising to elevations of 2000 to 2880 feet in the immediate vicinity of the property. The camp and mineral claims are located on a low hill of an estimated maximum 500 foot elevation. An easterly-westerly elongated mass, it is separated from base of the mountain by a 150 to 200 foot wide easterly-westerly fault depression on the south and a narrowed canyon section of Ferrum Creek on the north.

HISTORY AND OWNERSHIP

The history, ownership, and work done on the property from time of its reported discovery and location in 1924 through 1931 is covered in report of Earl R. Pilgrim, which was included in E. D. Stewart's Supervising Mining Engineer report on MINING INVESTIGATIONS & MINE INSPECTIONS IN ALASKA for the BIENNIAL ENDING MARCH 31, 1933. Mr. Pilgrim's report, pages 44 to 46, quoted in full, is appended. The next report on the property is brief mention covering period from 1932 to 1936 in USGS Bul 397-A, page 22, by Philip R. Smith. This report, quoted in full, is also appended.

Development Work

It seems evident in the above references, and indicated during the November 1959 examination, that all underground work and surface open-cuts and trenching was completed by end of the 1934 season. Records were not examined in the Mining Records office at Seward to determine whether or by whom the property may have been held since 1934.

The Brunton-tape survey of the Adit Level shows the following work completed by the original owners and lessees: -*

Drift length on "A" vein - Sta. 1 (at portal) to Sta. 3	120 ft
Cross-cut length - Sta. 3 to face	309 ft
Drift length on "C" vein - Sta. 7 to face	33 ft
Raise length in "C" vein - Adit Level to surface (estimated)	<u>130 ft</u>
Total Footage	592 ft

Point where raise "holed through" to surface was not located. The "natural" draft in Adit Level - especially noticeable at manway located in the 33 foot drift - indicates its original completion to surface. The small volume and low velocity of the fresh air supply suggests it to be fairly well covered at surface, as well as possibility of it being partially blocked by broken "chute" lagging and posts protecting the manway. With no evidence of the raise having been recently used or entered by present owners, it was not examined and sampled.

The trench on "C" vein at Sta. 12 (240 feet south of the Adit Level on "A" vein) has length of 47 feet. At its east end the "face" is 12 foot high and 6 feet wide. A winze is reported to have been sunk to depth of 15 feet, at face of the trench, on a bull-quartz "gash" vein in the footwall graywacke.

* Refer to Map 1 attached.

Filled with broken quartz, the winze was following a vein that appears to be 30 to 36 inches in width.

Vein "C" is exposed at two points between Sts. 12 and Sta. 14 and again at 40 feet east of Sta. 14. At these three points no work has been done upon the vein. At Sta. 14 a test pit has been dug to depth of 2 feet.

A "sluffed-in" shallow pit was dug by one of the original owners at Sta. 13, which is 45 feet south of Sta. 12. This is probably on what Mr. Pilgrim's report referred to as the "D" vein, although no quartz was noted in the material removed from it. The other open-cuts and trenches referred to by Mr. Pilgrim, along a 150 foot section of the "D" vein, were not noted; they were probably obscured by the light snow fall, dead grass, and brush in the fault depression in which the probable vein strike would place them.

The shallow open-cuts on the "B" vein, also referred to in Mr. Pilgrim's report, were noted in the timbered area. Time was not taken to "tie" them in or sample, however, as lack of recent work on the showings would have taken more time than was available to clean-out the frozen muck to expose full widths of the vein.

The property was relocated in 1958 with the staking of 6 Mineral Claims by William Knaack and Cecil Kramer of Seward. Work done by them this year was largely confined to limited additional stripping in old trench above the Adit Portal on "A" vein. In effort to determine values at this location (at Sta. 9, shown on Map I) an arrastra was built and a reported 500 to 600 pounds of ore was treated, from which it is said \$60.00 was recovered.

GEOLOGY

Few natural bedrock outcrops were noted in the limited surface area traversed. Stratigraphic study of the area was therefore confined to walls of the Adit Level and to few trenches and open-cuts mentioned below and plotted on attached Map # 1.

On the Adit Level the wall rock along the 120 feet driven on the "A" vein is confined to graywacke. From this point (at Sta. 3.) for 309 feet to face of cross-cut the wall-rock is graywacke. The 33 foot drift to the west of Sta. 7 on "C" vein has the same formation in each wall.

The wall rock in trench on "A" vein at Sta. 9 is also graywacke.

The natural outcrops along "C" vein show a graywacke footwall with an argillite hanging-wall indicated. The 47 foot trench immediately west of Sta. 12 has a graywacke footwall, and thin bedded argillite hanging wall. The shallow pit at Sta. 14 has similar walls. At neither of these two points has effort been made to strip the "branch" veins in the hanging-wall argillites - striking N 30 W and dipping 52°SW at Sta. 12 with N25E strike and 42° dip at Sta. 14 - to obtain information on their lateral extent and value.

The several veins have a marked parallel strike, easterly-westerly and are considered to be related and parallel to a major fault along which Ferrum Creek has become deeply entrenched. The depression between the "C" vein surface showings and base of the mountain slope (150 to 200 feet to the south) is considered the easterly end of this major fault before it disappears under the wide Nuka River valley floor.

Vein Characteristics

The "A" and "C" veins, at least, are fairly well defined fissures. With these veins showing marked "banding" the quartz filling represents repeated reopening of the fissures. In the surface trench on "A" vein and along the Adit Level section driven on this vein, post mineral movement shows a "strike" fault in plane of vein with no marked displacement noted. In area about 90 feet from Adit portal, the vein appears to have been "split" with a graywacke "horse" block separating the vein on hanging-wall side from quartz showing in footwall just above the floor for at least a 10 foot distance.

The "C" vein exposed in the wide trench at Sta. 12 has well defined walls. Face of trench is composed of 5 or 6 adjoining quartz bands across 57 inches on the footwall side with 15 inches of sheared highly oxidized argillite on the hanging-wall side. Due to weathered condition of this argillite, the strike and dip of that formation is not clear; it is possible that the 4 quartz veins noted in north wall (up to 13 inches in width and each separated by a foot or more of oxidized argillite) may be "bedded" deposits, in which case strike of the argillite would be N30W and dip 52SW.

The two veins studied and sampled ("A" and "C") have the common characteristic of "Pinching" and "swelling" along both strike and dip. Their average strikes vary only a few degrees along the short lengths exposed in the Adit and on the surface. Their dips, however, vary from 45° to 58° North for "A" vein to 68° to 80° North for "C" vein.

Greatest true width of "A" vein in open-cut 15 feet east of Sta. 9 is 51 inches, while in the Adit - 38 feet vertically below at point 40 feet from portal (before it swings into hanging-wall) is 13 inches; at 70 feet from portal, where full vein width is again shown, it is 29 inches wide. *

* Refer to Map I. Assay Plan

The "C" vein's true width at face of trench just west of Sta. 12 is 57 inches (of quartz). In drift on the adit level - 120 feet vertically below and 80 feet to the east - the "C" vein appears as three veins across an 8 foot width; their individual widths (from Hanging-wall to foot-wall) are 17", 4", and 7" , with graywacke between them. At west end of that 33 foot drift the hanging-wall stringer pinches down to about 2 inches and center one to a very thin veinlet on south side of drift. *

In shallow test pit at Sta. 14, the "C" vein width is 32 inches. At north-west corner of the test pit there is a "branch" vein in the argillite hanging-wall 25 inches wide. The vein "filling" is composed of quartz stringers and sheared, oxidized argillite.

Mineralization

Sulfide minerals noted were limited (in order of their abundance) to arsenopyrite in fairly solid veinlets, small "bunches" and disseminated grains in the quartz; sphalerite as large "blebs" and disseminated grains; and to occasional scattered grains of galena, pyrite, and chalcopyrite. In the heavier mineralized sections the sulfides present are estimated at maximum of 3% across full vein width; generally they are estimated to be minus 1%. The gold occurring in the two veins appears to have fairly uniform distribution along sections sampled. Of the 24 samples taken there were only 4 showing no gold values present. At these 4 points (samples 334, 338, 339 and 341 in Adit Level on "A" vein) the hanging-wall side of vein was not exposed in the Adit. A study of "A" vein exposed in open-cut at Sta. 9, where hi-grade gold samples have been obtained by owners, the gold appears to favor the hanging-wall "slip". Study of hand samples suggest that values may possibly be limited to a few inches in width adjoining and immediately under the hanging-wall slip. The fact that the only 4 samples taken on the "A" vein, showing only "Trace" values, could not include the hanging-wall

*Refer to Map I. Assay plan

Section might possibly account for no values at those points.

The following is a record of samples taken:

Sampling Results K & K Property

Sample No.	Width In's	Au Oz	Ag Oz	Total Value/T	Description
295	12	2.22	Tr	\$ 77.70	Sta. 14 Test-Pit. FW side "C" vein. Qtz with small amt of brecciated Argillite. Est. 1% FeAsS ₂ .
296	24	0.20	Nil	7.00	Adjoins #295 on N. side. Little dissem. FeAsS ₂ . Broken qtz stringers in oxidized argillite.
297	25	0.20	Nil	7.00	Sta. 14 Test Pit. "Branch" vein @ NW cor. Qtz & highly oxidized argillite. Est. FeAsS ₂ 1%.
298	13	0.58	3.06	23.00	Branch vein N. side of Sta. 12 trench opposite winze. FeAsS ₂ ½% & little dissem. pyrite.
299	72	0.94	Tr	32.90	Face of trench on "C" vein 3 ft. W of Sta. 12. 57" of banded qtz, plus 15" highly oxidized argillite on HW side. Few veinlets & some dissem. FeAsS ₂ (Est. -1%)
325	27	0.54	Tr	18.90	"A" vein at head of open-cut, Sta. 9 Cut from HW toward FW. Qtz vein with small brecciated graywacke fragments. Est. 1% FeAsS ₂ in blebs & dissem. grains. Few grains of PbS, ZnS, & CuFeS ₂ noted.
326	24	0.12	Tr	4.20	"A" vein adjoins #325 on footwall side. Sample cut to FW. Minus ½% FeAsS ₂ , plus few grains of PbS & CuFeS ₂ . Total vein width for 2 samples = 51".
327	14	0.44	2.29	16.56	"A" vein 6.5' W. of #326. Taken on FW side. Qtz. Balance of vein obscured by frozen muck. FeAsS ₂ plus few grains PbS, ZnS & CuFeS ₂ . Total sulfides est. -1%.
328	30	0.25	Tr	8.75	"A" vein @ Sta. 9. Qtz with -1% FeAsS ₂ . Lower end of open-cut. Was not cleaned out-frozen muck from banks prevented sampling full widths every 5'.

Sample No.	Width In's	Au Oz	Ag Oz	Total Value/T	Description
329	10	0.24	Nil	\$ 8.40	"Z" vein Adit 20' from Portal. Full vein width Qtz with little dissem FeAsS ₂
330	10	0.72	Tr	25.20	"A" vein 25' from Portal. Full vein width. Qtz with est. 1% FeAsS ₂ .
331	11	0.48	Tr	16.80	"A" vein 30' from Portal. Full vein width. Qtz with little FeAsS ₂ .
332	14	0.24	Nil	8.40	"A" vein 35' from Portal. Full vein width Qtz with est. -1% FeAsS ₂ .
333	13	1.88	Tr	65.80	"A" vein 40' from Portal. Full vein width Qtz with est. -1% FeAsS ₂ . Sul-fides favor HW side.
334	11	Tr	Nil	-- --	"A" vein 45' from Portal. Full vein width not exposed in Adit. Unknown width in N. wall. Little dissem. FeAsS ₂ .
335	18	0.10	Nil	3.50	"A" vein 60' from Portal. Full vein width not exposed. Little FeAsS ₂ . "Split" vein section indicated in right (S.side) wall. From 45' to 55' vein lies in N.wall.
336	29	0.10	Nil	3.50	"A" vein 70' from Portal. Qtz in FW (S.side) indicates "split" in vein. Est.-2% FeAsS ₂ which occurs as small "pods".
337	20	0.12	Nil	4.20	"A" vein 80' from Portal. HW well defined. "Split" in vein with Qtz showing in S.wall 2' above floor. FeAsS ₂ present as small "pods" & "Blebs" in roof of drift.
338	32	Tr	Nil	-- --	"A" vein 90' from Portal. HW starts "swing" into N. side of Adit, with vein not fully exposed @ 90'. Vein here is white "sugary" Qtz. "Strike" fault in this area with considerable local brecciation of vein from 90' to 120' from Portal. Very little dissem. FeAsS ₂ noted.
339	29	Tr	Nil	-- --	"A" vein 100' from Portal. FeAsS ₂ est. -1½%. Vein width not completely exposed - extends into N. wall.
340	18	0.20	Nil	7.00	"A" vein 110' from Portal. Est. -1% FeAsS ₂ . Qtz vein not fully exposed-extends into N. wall.
341	26	Tr	Nil	-- --	"A" vein 120' from Portal, Est. -½% FeAsS ₂ . Qtz vein not fully exposed. Adit swing here to X-cut to "C" vein.

Sample No.	Width In's	Au Oz	Ag Oz	Total Value/T	Description
342	17	0.24	Nil	\$ 8.40	"C" vein 10' W of Sta. 7 & 5' E of raise. Vein "split" on this level to 3 sections. Sample taken from HW "Slip" toward FW. Section includes 1" veinlet of FeAsS ₂ 4" from HW. Vein filling Qtz. "C" vein banded qtz stringer on FW 8' from HW. Est. -2% FeAsS ₂ .
343	7	0.20	Nil	7.00	"C" vein in X-cut 375' from portal. Banded qtz stringer on FW. Est. -2% FeAsS ₂ .

* Gold value calculated @ 35.00/oz and silver @ 90¢/oz. No free gold was noted in the samples taken. However, a number of hand specimen from "A" vein open-cut having appearance of vein material from hanging-wall section, were noted to have free gold along the quartz vein hanging-wall "slip", as well as within an inch or two of that surface in the quartz. From specimen examined a small amount of high-grade could possibly be sorted out in selective mining having a value of \$400.00 to \$600.00/T.

Location of samples taken in the Adit are marked on the wall of the working.

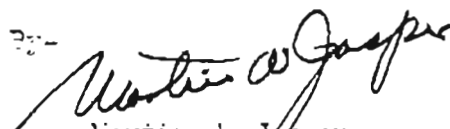
CONCLUSIONS

On basis of sampling the areas shown on attached Map No. 1, the vein widths and values determined are not of special interest at present \$35.00/oz gold price. The samples taken in the "A" vein open-cut, and those from the Adit section driven on this vein, do not indicate a high-grade oreshoot suspected by the owners to be present in this area.

The "A" and "B" veins are the most well defined of any personally examined in the Kuka Bay region. The gold distribution appears quite persistent along the sections exposed to date by limited development work.

In event the gold price is advanced to value within range of \$65.00 to \$75.00 per ounce, this property would warrant more extensive exploration and development. With a higher price for gold prevailing, there is a possibility the several veins could be developed to point where a profitable 50 to 75 ton per day operation would be assured for a number of years.

Anchorage, Alaska
January 1960

By- 
Martin A. Jasper
Mining Engineer
State Division of
Mines & Minerals

EXCERPT FROM USGS BULLETIN 897A, MINERAL INDUSTRY OF ALASKA in 1936

by Philip S. Smith

Little Creek prospect. - The Little Creek property, often called the Earl Mount prospect, lies about a mile northwest of the head of Beauty Bay in the valley of a glacial stream that flows northeastward. Several distinct quartz veins have been explored to some extent, and active prospecting was carried on by lessees in 1932-34, when over 400 feet of underground tunnels and raises were driven. This work unfortunately failed to discover ore of sufficient value to justify the erection of a mill, and the lessees' option was not taken up. Since 1934 only assessment work has been done on this ground.

BEAUTY BAY AND NUKA RIVER

This property was originally located by Eric Burman and H. Carlson who discovered several veins and conducted preliminary development work on them during 1924 and 1925, in which years the property was examined by H. H. Townsend and J. G. Shepard, respectively, associate Territorial engineers. As early as 1924 a large number of open-cuts had been excavated on at least 4 quartz veins, and one 20-foot tunnel had been driven on a 14-inch vein, now designated the "A" vein. The property is now known as the Little Creek group and is held by Mr. Earl Moont of Seward, Alaska. It is reached by a trail one mile in length that starts at the northwest corner of Beauty Bay on the west side of the mouth of Ferrum Creek, otherwise known as Iron Creek. The trail extends up the west side of this stream for one-half mile, thence westerly up a small tributary gulch and over a pass, the elevation of which is 220 feet, to the mine camp on Little Creek, which is an easterly tributary of Ferrum Creek. The property includes two claims: Little Creek No.s 1 and 2, respectively. The vein outcrops lie a short distance southeast of the mine camp.

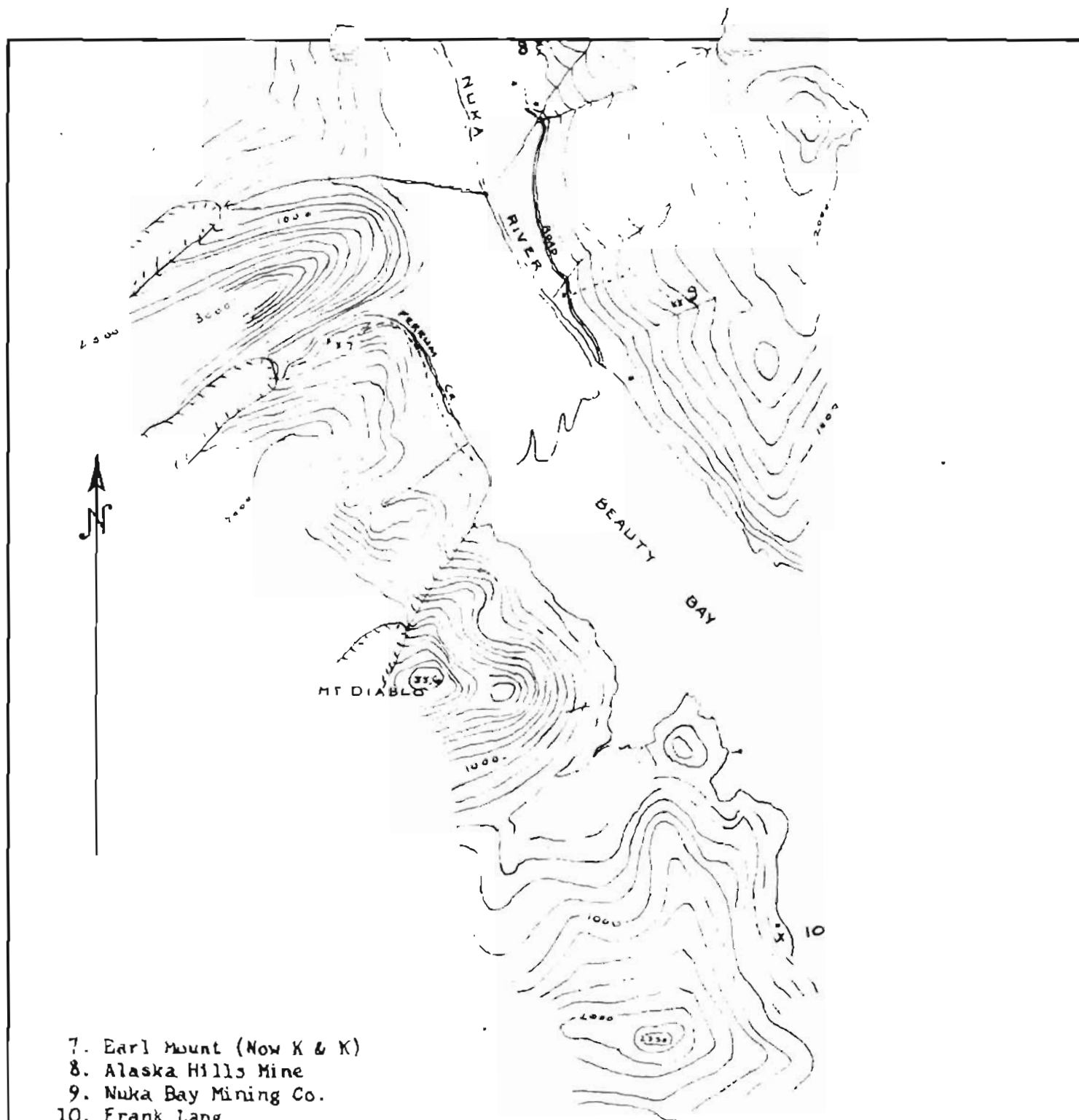
The "A" vein, which is the most northerly of the group, strikes N. 87°E and dips 52° N. The tunnel on this vein above referred to, the elevation of which is 230 feet, now has a length of 50 feet. The vein as exposed in the tunnel is described by Pilgrim as being from 10 inches to 24 inches in width and as consisting of solid white crystalline quartz, which contains considerable arseno-pyrite, some sphalerite and a trace of copper and lead. A grab sample taken by him from various points along the vein in the tunnel assayed gold 0.01 oz., and silver 0.10 oz. per ton. A sample described as oxidized material taken by Townsend at the face of the tunnel when it was 20 feet from the portal, at a point one foot above the floor and across a width of 14 inches, assayed gold 0.32 oz., and silver 0.15 oz. Another sample of unoxidized vein material taken by Townsend across 14 inches in the back of the tunnel 8 feet from the portal assayed gold 0.14 oz., and silver 0.20 oz. A number

of open-cuts expose the outcrop of this vein at the surface over a length of several hundred feet.

The "B" vein lies south of and parallel to the "A" vein, to which it is similar in type. Its outcrop is exposed in three open-cuts along the hillside above the easterly exposed section of the "A" vein.

The "C" vein lies about 200 feet south of the "A" vein and has a similar strike. The dip, however, is nearly vertical. A series of open-cuts reveals the width of this vein to be from 4 feet to 6 feet at the westerly exposure and varying from 6 inches to 18 inches for a distance of about 200 feet easterly therefrom. The vein is composed principally of white crystalline quartz, which in the widest portions contains some graywacke breccia. The vein material contains metallic sulphides in considerable quantity that include galena, with which gold appears to be associated. At one of the open-cuts on this vein a shaft has been sunk to a depth of 15 feet. Pilgrim states that near the west end of this open-cut free gold is visible in the quartz along the south wall.

The "D" vein, which is parallel to the three others above described, lies about 50 feet south of the "C" vein. The dip is 75° N. Its outcrop has been exposed by a series of 4 open-cuts and trenches over a distance of about 150 feet, in which the widths of the vein vary from 6 inches to 4 feet. A sample taken by Townsend across a width of 1 foot in the most westerly cut, just north of a small stream, assayed gold 0.02 oz., and silver 0.10 oz. per ton. In a cut 50 feet east of this point a sample taken by him across a width of 30 inches of quartz assayed gold 0.20 oz., and silver 0.25 oz. Where exposed in the open-cuts the hanging-wall of this vein is slate and the foot-wall is graywacke. In the most easterly trench the vein narrows to a width of 6 inches where it passes from slate into graywacke.



- 7. Earl Mount (Now K & K)
- 8. Alaska Hills Mine
- 9. Nuka Bay Mining Co.
- 10. Frank Lang

BEAUTY BAY AREA SHOWING
K & K Au-Qtz Location
by

M. W. Jasper, Min. Eng.
State Div. of M & M
Anchorage Jan. 1960

MAP II

Scale



Note:-Taken from 1931 map of Earl Pilgrim.