PE-115-02

TERRITORY OF ALASKA

DEPARTMENT OF MINES

JUNEAU, ALASKA

8 July 1951

SUMMARY REPORT

TO: Leo H. Saarela, Commissioner of Mines, Juneau, Alaska

FROM: James A. Williams, Associate Mining Engineer, College, Alaska

SUBJECT: Examination of K & D Lode, Sunset Cove, Juneau Precinct. K-115-9

On 25 June 1951, Leo H. Saarela and James A. Williams examined and mapped the K & D Lode. Samples were not taken.

The property is a gold and antimony lode owned by Herman Kloss and Jack Davis. The location is at Sunset Cove which is south of Windham Bay on the mainland at coordinates of 133° 32' W long. and 57° 30' N Lat. The workings are 2½ miles from the beach at an elevation of 360 feet. The trail passes over a "hump" 500 feet high enroute, but the lode is actually on the same creek that empties into Sunset Cove where the trail leaves the beach.

The underground workings consist of an adit and a winze, or inclined shaft, which were mapped by L. H. Saarela, The map will be included with this report. A hand hoist and hand pump are in the shaft. The surface equipment includes a small milling setup with a very small ball mill. Two good cabins are maintained, one at the workings and one at the beach. The trail is very well maintained.

The mineralization is in the form of a large quartz vein system with off shoots carrying native antimony, stibnite, galena, sphalerite, arsenopyrite, jamesonite, gold, and others. The main vein is up to 25 feet thick, striking N60°E and dipping 45° to 50° NW. The quartz is very fractured and occurs in parallel layers ("ribbony") from one to six inches thick through the full width of the vein.

The vein lies conformably with the bedding of a graphitic to a curly gray schist. The initial fractures were undoubtedly filled with solutions and continuing stresses with many stages of mineralized solution filling resulted in the ore deposit. Undoubtedly those areas of maximum shearing will be found to contain the best ore when the deposit is sampled as shearing allowed free

circulation of solutions.

Much later on the plane of vein movement was noted in the workings (see map) which indicates continuing movement after deposition.

From a mineralogical standpoint, the most interesting feature of the deposit is the antimony, which is in a native state occupying the late fractures and shears. Native antimony is a rare occurrence. A large specimen of this mineral was given to the Department, courtesy of Herman Kloss.

A Victoreen Model 263A Geiger Counter was used in a thorough check of the underground workings and surface exposures in an effort to detect the presence of radioactive minerals. The results were negative.

A check was also made for fluorescent minerals underground with an ultra-violet lamp. Considerable fluorescence was found, but it was spotty. It was the orange fluorescence of hydrozincite, an alteration product of sphalerite.

The adit was drifted along the vein, as shown on the map, and the inclined shaft was sunk on the dip of the vein, crossing the adit on the way down. The shaft was full of water to the level of the floor of the drift. Kloss reports that a short drift was driven at the bottom of the shaft. There are a number of open pits exposing the vein upstream where the mineralization is also good. The creek follows the strike of the vein and exposes it well in a number of places close to the workings. Kloss claims that these exposures can be seen for a distance of nearly 2000 feet up the creek, and that the vein is persistent all the way.

Since the vein is so well exposed along the strike, it is suggested that future development work be directed downward from the bottom of the existing shaft in order to better determine the size and mineralization of the vein in depth. This would also block out a comparatively large tonnage.

In regards to sampling the deposit, diamond drilling appears to be rather impractical for the reason that a very large number of holes would have to be sunk to prove the vein. Also, considering the "ribbony" character of the vein and many stages of mineral deposition, if one were to properly channel sample the deposit, each separate band should be channelled individually to find exactly where the values lie.

There is not sufficient antimony in the vein as exposed thus far to make the deposit valuable for antimony alone. The large variety of minerals associated here will make a very complex

milling problem. If a simple, cheap method of separation can be arranged, it is possible that the property could be made to pay on gold and antimony values together. A good plan would be to make experimental mill runs with the mineralized material from future development work, carefully checking results and noting recovery efficiency from each run.

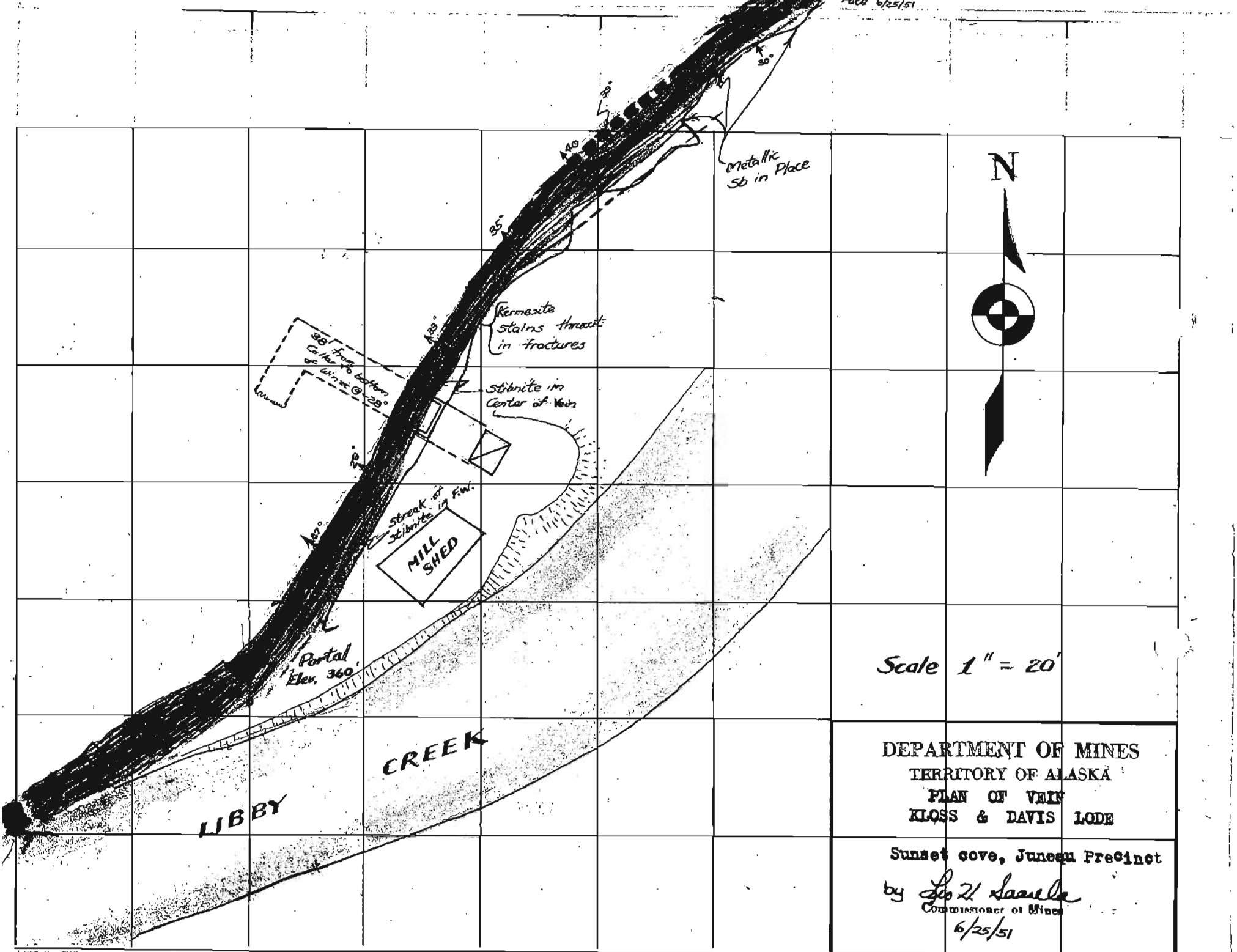
Considering the problem of transportation to the beach, pack animals over the trail would be the only practical solution until such time as the property would get into large production. If a tramway were to be constructed, probably the best route would be to follow the creek, but the cost of tramway construction is prohibitive for small operations at the present time.

Respectfully submitted,

James A. Williams

JAMES A. WILLIAMS
Associate Mining Engineer

Revised July 10 '51



DEPARTMENT OF MINES
TERRITORY OF ALASKA
PLAN OF VEIN
KLOSS & DAVIS LODE

Sunset Cove, Juneau Precinct

by Leo H. Laurila
Commissioner of Mines
6/25/51

(Original Field Sheets)

COPY

October 2,1961

Mr. Merill Nielson
Tulsa,Oklahoma

Dear Merill:

During my recent visit to the Juneau,vicinity, I talked with Jack Harlan and learned that you are representing Tidewater seeking new mining properties in Alaska. I would like to pass on to you a gold prospect that I believe could become a significant gold property.

Mr. Roger Pierce of Machinery Center in Salt Lake City,and I made a field examination on the K & D Gold Lode Claims owned by Herman Kloss and Mr. Davis, in the Sunset Cove,area. This property is a raw prospect on a significant quartz vein structure that varies to 30 feet in thickness. It contains several fairly high grade ore shoots with a minor amount of stibnite and pyrite. Because this is in a state of a raw prospect our respective companies did not feel that they could pursue for gold and antimony either individually or in a group.

I am told that your company is quite exploration minded and might possibly be interested in a large gold structure. If you are interested and wish some preliminary background I would suggest that you check with Mr. James A.Williams, Director of the Alaskan Division of Minerals concerning the occurrences. Or you might check with Mr. Kloss directly at Sunset Cove,Alaska, the prospector that has spent the greater part of twenty years in working and trying to develop the property. Mr. Kloss and Mr. Davis have driven drifts and winzes with hand steel hardly scratching the potential of the prospect. I believe this structure could develop into a large low grade mining operation with a proper develoopment program.

CWA/dl
cc: Herman Kloss
Roger Pierce

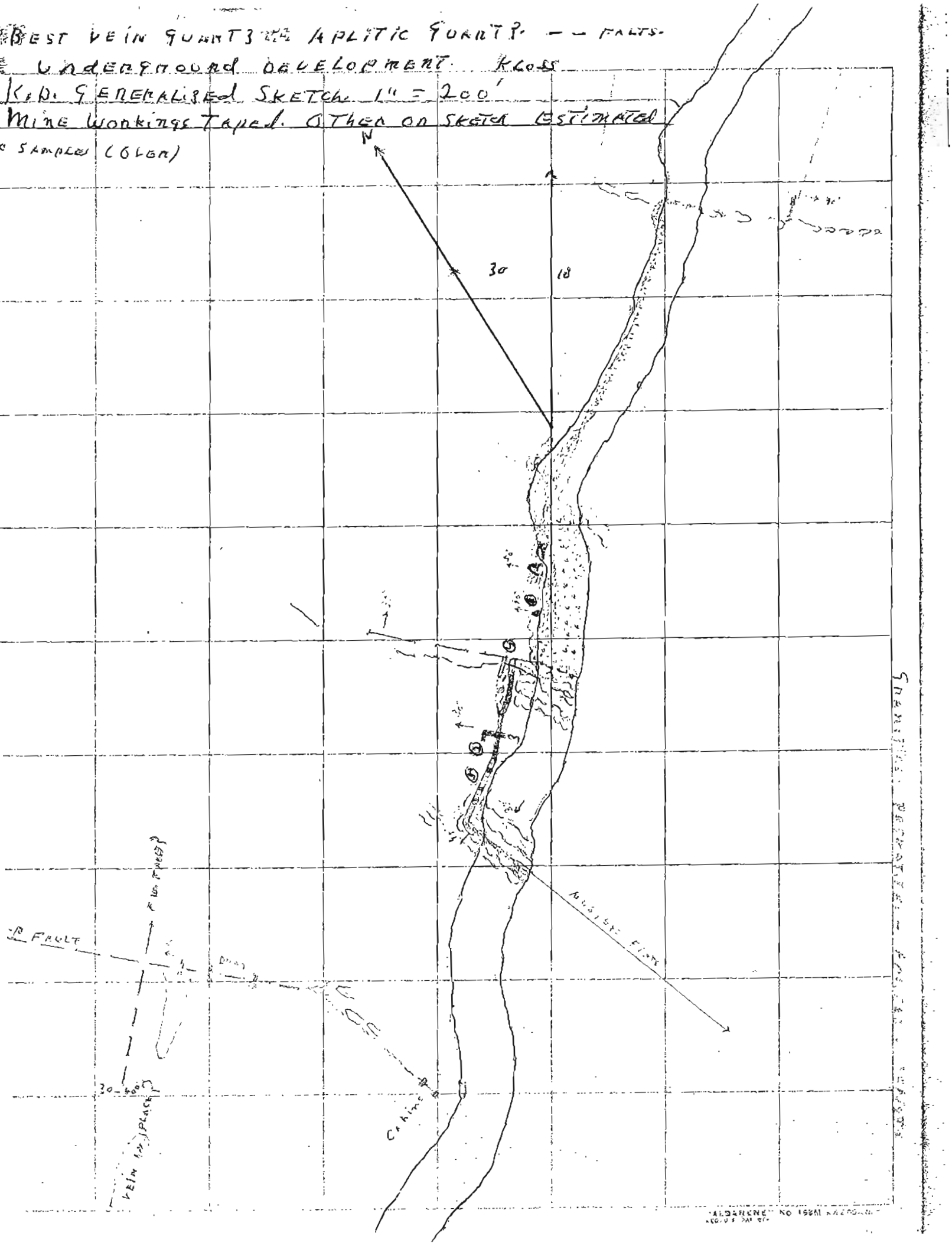
With kindest regards

Carl W. Appelin

P.S. The favorable comments on the property by Mr. Appelin are well appreciated such as the property being based on a large tonnage operation. Structural control relative to ore deposition as it indicates to me appears to be most favorable. The samples taken by Mr. Robert Thorne,U.S.B.M.Eng.on the property,also, places the K & D as a potential producer of higher grade ores and considerable tonnage.

Kloss

BEST VEIN QUARTZ ± APLITIC QUARTZ. — — FAULTS.
UNDERGROUND DEVELOPMENT. KLOSS
K.D. GENERALISED SKETCH 1" = 200'
MINE WORKINGS TAPED. OTHER ON SKETCH ESTIMATED
SAMPLES (COLOR)



Herman Kloss
Tenakee Springs, Alaska 99841
April II, 1978

Ross G. Schaff
State Geologist
P.O.Box 7438
Ketchikan, Alaska 99901

Dear Mr Schaff

The Geological Survey in the past many years, has made three or more field examinations on my K & D Gold Lode Claims. I will appreciate very much if I may obtain some general information from the results of their vists.

My prospecting and small-scale development on prospects of my discovery that I considered interesting to do some work on, has been more or less consistent in Alaska for over fifty years.

Cursory examinations on the K & D have been favorably reported since the first examination by, Mr. B. D. Stewart, Commissioner Of Mines at that time.

As Mr. Appelin and Mr. Pierce spent several days in their examination, may be of some interest to the Geological Survey, especially to those that have seen the property. My sketch also may be of interest.

With kind wishes,

Herman Kloss

Herman Kloss

Answered 5/16/78 Burdham

H. Kloss
L. Slade
-115-

Herman Kloss
4II4 Terrace Drive
Everett, Wash. 98203
February 5, 1973

Mildred Brown
Mining Information Specialist
State of Alaska
Department of Natural Resources
Division of Geological Survey
P.O.Box 80007
College, Alaska

Dear Miss Brown:

Thank you for the information contained in your letter to me of January 31 and for Information Circular #7.

I was quite surprised and a little disappointed that the only information on file about my K and D Gold-Antimony property is that by Jim Williams and Leo Sarrela.

Mr. R.D.Stewart was the first to report on my property, at that time he was Territorial Commissioner of Mines. Later on Bob Thorne made examination for the Bureau of Mines. Other mining men some of much background experience examined the property and reported favorably on it. This information was sent to Jim Williams and I assumed that he had filed it.

If you are not to buisy I'd appreciate a copy of the Jim Williams report.

Many thanks.

Sincerely

Herman Kloss

Herman Kloss

SUMMARY
K & D Gold-Antimony Lode
December 12, 1971

The purpose of this brief information and sketch enclosed, is to set forth what I conceive to be the most important factors that are involved, in any examination conducted on the K & D property.

Other than the shaded part of the sketch that shows the underground development, other features are generalized. The heavy overburden within this major fault zone, eliminates observations other than that the fault is post-mineral. This post-mineral structural deformation, deformation is shown by, the fracturing and cross-fracturing in the large K & D quartz vein structure, and in the wall rocks, such as grooves, striations and slickensides. Compound veining and complex mineralization attended such movements with higher ore values.

Basing my opinion on this major fault zone, and it's important relationship to K & D, it seems likely that it will be the controlling factors in what ever ore bodies that may be encountered within the affects of it's influence, structurally and otherwise. The sketch indicates the probability of such.

During the development, a small prospectors mill was used to treat the ore after first roasting, to free as much gold as possible from such type of complex mineralization. The pulp was run over a small amalgamation plate. The amalgam was taken up after each days run.

Such tests substantiated what I was convinced of soon after my discovery. That samples taken, few or many, values high or low, in such compound veining and in such complex mineralization would not be representative of quantity or quality only from the horizon that they were taken from.

On the subject of prospects examinations, Mr. C. Godfrey Gunther had this to say, "A great many prospects have been examined again and again, presumably by men that commanded a knowledge of sampling, the services of an assayer, and at least an elementary knowledge of geology. In order to pick a good prospect from those rejected by his predecessors, therefore, an engineer must base his hope of success upon his superior geological training."

Qualified mining men have made examinations on the K & D property. They have recommended that the property be further developed. Reports and comments are available on this property, from, the Division of Mines and Geology, College, Alaska. Mr. Robert Thorne of the Bureau of Mines, Juneau, Alaska, examined the K & D. Information from the results of Mr. Thornes examination may be had from their office.

cc: Mr. C. F. Herbert
Commissioner

Respectfully submitted,

Herman Kloss

Herman Kloss

65-115

January 28, 1972

Mr. Herman Kloss
4114 Terrace Drive
Everett, Washington 98203

Dear Herman:

Somehow or other, your letter of December 13 got mixed up in some papers that did not require immediate attention and has only come to light today. I certainly apologize for being so late in replying.

I shall certainly see that the information you supplied is placed in the K & D file. Interest in gold is increasing, and I should expect that some of the mining companies will be back to take another look at your property.

From what I hear, Washington has been having a few days at least of regular Alaskan weather. I presume that it did not bother you very much.

I would sure like to come down your way next summer and pay a visit again. This time I promise you I will not jump in the water.

Very best regards.

Very truly yours,

Charles F. Herbert
Commissioner

CFH/bmc
cc+mes: Geological Survey
Fairbanks

The K & D sketch enclosed is generalized. The underground workings was measured. Other distance on the sketch was roughly estimated.

The vein quartz as shown in the Stevens Passage Fault as I term it; appears to be an open question in respect to its position. Opinions differ as to whether the quartz is drag from a faulted K & D, or from a parallel vein or veins. The abrupt Se' bend and strike near the workings I assume to be the fillings of a persistent quartz vein that can be noted at different places for a mile and more on strike.

Where the vein re-crosses Libby Creek a thousand feet or so Ne' of the workings, it strikes Se' up a gulch of heavy overburden. The gulch I assume to be related to a post-mineral fault such as can be seen in the gulch near the face of the drift. K &D geology in part is complex. Quartz veins, pegmatite and aplitic dikes strike and dip in all manner. The K & D is the one exception that I've noted.

Years ago my prospecting partner Jack Davis and I put in an opencut on the north side of the gulch a hundred feet or so from the vein crossing. The cut exposed 4 feet of quartz. One assay taken and assayed for gold, showed value, .09 ounce/per ton. Interesting is that the opencut vein strike is of the general Ne' but the vein dips Se' approximatelly opposite that in Libby Creek.

Two inclined prospect shafts and a winze was sunk in the oreshoot. Movement striations are conspicuous in the quartz, mostly inclined Sw' Fault grooves on the footwall side of the vein conform to its dip. The origon of the K & D oreshoot is well marked, such as the fault adjustment stresses that re-opened the earlier veining. A later deposition of complex solutions filled the re-openings. A fact well known is that this particular type of mineralization, especially: arsenic and antimony minerals, when associated in gold deposits generally favor higher values in gold and in silver.

The experienced field man I think will recognize the oreshoot to be deep-seated in nature. The strong K & D quartz structure veinings is later than rock contact at intersections.

Respectfully submitted,

Herman Kloss

Herman Kloss

BELIEVE YOU HAVE THE SKETCH ON FILE.
MANY THANKS.

UNITED STATES
Department Of The Interior
Defense Minerals Exploration Administration
P.O.Box 1088
Juneau, Alaska

Mr. Herman Kloss
Sunset Cove, Alaska

Dear Mr. Kloss

I was glad to get your letter of May 5 and I am pleased to have the chance of discussing the proposed DMEA project directly with you.

First I want to make it clear to you that "Bob" Thorne was very favorably impressed with you property and has discussed it with me many times. He has always wanted to see more work done on it but I have held back because the property appears to be chiefly for gold which neither the Bureau of Mines nor DMEA is permitted to to explore. Our reports indicate that most of the antimony is in a mud or ribbon about one inch to one foot wide down the middle of the vein throughout a stated length of about a hundred feet; this could represent a substantial dollar value but isnot much antimony in terms of national requirements. That is why I told Mr.Lynch that I didn't think DMEA would be willing to put up their 75% participation for a deep shaft sinking and development program such as he proposed. I thought that we should first do some more surface work by removing overburden from the parallel veins and the south extention of the main vein to determine whether there is enough antimony to justify government participation in a deep level program which, as proposed by Mr. Lynch, would cost $100,000 to $150,000.

Mr. Lynch was in here a few days ago and seemed to agree he would go along with a trenching or stripping program such as I have mentioned above. He was going to try and talk with you about it and get you ideas. I too would be glad to know how much trenching you think would be practical-either by bulldozers or by using mining powder and then cleaning the trenches by hand(or perhaps partly by hydraulic methods) I am sure that DMEA would go along with that kind of program. From these results it might be possible to set up a second stage program of under ground exploration on a much more intelligent basis than we could at the present.

If you or Mr. Lynch do apply for a DMEA contract we will need to send someone down to sample the tunnel systematically. Even though you may not consider sampling to be practical, the DMEA people in Washington will want to have a set of samples assays that are as nearly accurate as possible.To get that information for them we would cut channel grooves samples at five foot intervales from the portal to the face. At each intervale we would cut separate samples for the antimony-bearing section and for the sections that do not contain visible antimony. We will give you copies of the samples results. I am assuming that the tunnel is accessible;if not please let us know.

Please rest assured that we will do everthing that we can to help work up a program that will be acceptable to the Washington office of DMEA and that will also help to develop the property. The enclosed booklet will help to explain the rules and regulations of the DMEA program.

Yours sincerly,

S.H.Lorain
Executive Officer,
Alaska District
Region I.

Enclosure -I

Remarks: I have no objection about sampling my property if the results from the samples taken include a general geological appraisal of the characteristic features of such types of minerals deposits as K & D.

Kloss

State of Alaska
Department of Natural Resources
Division of Geological &Geophical Sur.

September 23,1978

Thomas K. Bundtzen
Mining Geologist

Dear Mr. Bundtzen:

I will appreciate it very much if you'll please file the enc-losed information on the K & D instead of that you now have on file.

Mr. S.H. Lorain' letter to me from the result of Bob Thornes K & D examination; I wish you would also please file.

My information on the property is the only of its kind that I'm aware of. It might be of some help should the Geological Survey do some work down my way,and I think it should be interesting to mining companies whenever more action is taken in Alaskan Prospects and undeveloped mines.

Sincerely

Herman Kloss

Herman Kloss