## Kerr-Addison Gold Mines Limited

To. W.c.M. M. S.i.rola

From.
P.....M.....Kavanagh. $\qquad$

Subject. Dynaml.c.Meta.ls..Corporation,..S.Locan..Area.,..B.C.........Date. $\qquad$ Februa.ry...26.th, 196,5

With reference to your February 24th memorandum, 1 approve your recommendation that we decline further interest in this situation under the terms stipulated. Under no circumstances would I consider taking any further definite interest before ${ }_{A}$ a $^{\text {an g }}$ property examination after the snow would go.


Paul M. Kavanagh Chief Geologist - Exploration.

To. P.M. KAVANAGH. From..............................

Subject..... DYNAMIC METALS CORPORATION, SLOCAN AREA, B.C. $\qquad$

I went to Victoria on Monday to discuss this situation in particular, and the Slocan Camp in general, with Matt Hedley.

Hedley feels that the veins could intersect as shown on Dynamic's map, but says this, in itself, is not necessarily meaningful. Apparently, some vein intersections were important, others were not. The history of mining in the camp is one of production on a very small scale, instigated, in many cases, by promoters. Occasionally bodies of ore were encountered, which paid for development costs, and, in some instances, even showed a profit.

The most recent effort in the camp is that of Johnsby Mines, who drove an adit into a steep hillside on the Standard property. They have encountered silver mineralization, but whether or not they are happy with this situation I cannot say. You could call Ash. Johnston, or Brodie Hicks, in Toronto, and perhaps they could enlarge on the situation. According to Fred Chow, one of the difficulties is that of establishing another adit level higher up the mountain side. This problem results from the extremely precipitous terrain.

I am personally prejudiced against this type of mining, because I feel that the ratios of development waste, compared to development in ore, are extremely high. The Slocan Camp, in general, is much better suited to either a promotional effort, or to a small company who would have to get by on a boot-strapping type of operation. I do not feel that we have the people out here to dissipate our efforts in trying to establish small blocks of ore under very difficult terrain conditions.

Apart from my personal sentiments, I disagree with the concept that we should be obligated to pay Dynamic Metals for all of the costs incurred in initiating the project. In my own experience I have usually found that the small mining company is prepared to gamble along with the larger company; instead of expecting to have all of the gamble removed.

## Kerr-Addison Gold Mines Limited

$\qquad$

Unless you feel strongly to the contrary, I will advise Mr . Read that we do not wish to take on the exploration of this project under the terms stipulated.

## Kerr-Addison Gold Mines Limited

Subject DYNAMIC MEPALS CORPORATION PROPERTIES, $\qquad$ Date........ebruary 18th, 1965. SLOCAN AREA, BC.

The Avison payments are as follows :

> \$200. on the signing of the agreement with Dynamic (this has been paid). 500. on or before July 15th, 1965. 2,000. on or before December 31st, 1966. 3,000. on or before December 31st, 1967. 4,000. on or before December 31st, 1968. 5,300. on or before December 31st, 1969.

Total $=\$ \overline{\$ 15,000}$.
Should the properties be in production in the interval December 31st, 1966, - December 31st, 1969, the payments could be made from $10 \%$ of the net smelter returns of the entire group of claims, but this royalty does not apply after the sum total of $\$ 15,000$. has been paid. In other words, the $\$ 15,000$. is the total purchase price regardless of whether it is paid from royalties or otherwise. The deal with Avison is so arranged that he could receive royalties from both the Avison and Clever groups, until the total purchase price has been paid.

The Clever group would be entitled to $10 \%$ of the net smelter only from the Clever properties, and, again, only until the total purchase price of $\$ 25,000$. has been paid.
(4)

Dynamic's position, or interest, whatever it might be, would be non-assessable. They feel that their contribution is in having acquired the ground, and that they will make no other contribution. I do not really feel that this is quite right, since they are asking us to pay for the cost of having put the deal together.

## Kerr-Addison Gold Mines Limited

(FOR INTER-OFFICE USE ONLY)

To. $\qquad$ From.

Subject. Date.

contd/..

As a purely practical matter, if the property were developed in an orderly manner, it would seem rather unlikely that many of the payments would be made as smelter returns. The main thing to bear in mind is that the royalty ceases when the total purchase price has been paid, and that it is not a royalty over and above the payments.

I will arrange a meeting with Matt Medley in Victoria early next week in an effort to gain further insight into the merits of this situation.

The Chamber of Mines of Eastern British Columbia at Nelson, has put out a table of silver production from the Slocan Camp, and they show the Standard to have produced $8,228,009$ ozs. of silver to the end of 1953.

I think you should consider the alleged junction to be between the Idaho and the Alamo veins, but Dynamic's map shows the Idaho to be the extension of the Standard vein.

The Dynamic people express a great unwillingness to wait until the property could be examined in the spring.

wMS/iw.
$\qquad$

Subject. D.ymante..Metal. Cof Cofation Propertites; Slocan .....Date $\qquad$ Februaryllith; 1965: Area, B.C.

This is prompted by your memorandum of February 8th with attached sketch map, and by the data we recelved from Mrs. Wilson on January 20th.

I certalnly agree with you that we should not be willing to enter into any agreement prior to as thorough a property examination as possible after the snow has gone. There could be a lot more work already done than is being advertised. Before an examination you could probably learn a lot from talking with Hedley, etc.

In the data Mrs. Wilson forwarded there is mention that the reportedly still untested junction is between the Standard and Alamo veins whereas Dynamic's own January 14 th , 1965 map would suggest that the posilbly still untested junction is between the Idaho and Alamo veins.

The data also indicate that the best ore in the Idaho and Alamo workings was shallow, and this suggests to me that shallow enrichment caused the high grade, or that the mineralization is quite eplthermal and that the high grade ore is shallow for that reason. Was the Standard's high grade ore also shallow?

The properties Dynamic holds give very little protection due north of the postulated Junction area.

Questions I have concerning your notes on the type of deal Dynamic has in mind are the following: -

1) Would the relmbursement of $\$ 8,000$ to Dynemic be a cash down payment immediately upon the signing date of an agreament?
2) What is the payment and date breakdown of the $\$ 15,000$ total payments on the Avison group?
3) Would the $10 \%$ net smelter royaltles you mention be separate, l.e. would the Avison royalty only be paid for production from Avison ground, and the Clever royalty for production from

## Kerr Addison Mines Limited <br> (FOR INTER-OFFICE USE ONLY)

To
W.........s.trola

From.......................Kavanagh

Subject
Date F-....ebruary 12th; 1965 .
(2)

Clever ground, or would all production within the overall deal be charged with a total $20 \%$ net smelter royalty?
4) Would Dynamic's $40 \%$ be unassessable as in an Endako type deal?


PMK: sw

## Kerr-Addison Gold Mines Limited

(FOR INTEROFFICE USE ONLY)
 Cropper and Mr. Jones of Jones Tent \& Awning.

These gentlemen have assembled a l0-claim group in the Slocan area, and claim to have the last important vein junction in that camp. These two veins are known as the Idaho and the Alamo Lodes, and, according to Read's theory, they would merge on the Lone Star claim.

The situation would be attractive in the light of Mr. Read's presentation because there were two important producers to the southwest and northeast of the purported junction. The Standard Mine, $6,000 \mathrm{ft}$. to the southwest, had a production of 368,000 tons averaging 15 ozs . Ag, $8 \% \mathrm{~Pb}, 7 \% \mathrm{Zn}$. The Idaho and Alamo, located 3,500 ft. northeast of the junction, produced 1,625,000 oas. of Ag , and 5,120,000 lbs. of Pb , from 30,000 tons of ore.

There is just one rather large fly in this ointment. The accompanying sketch, showing the veins as they relate to the topography, suggests to me that the veins, in fact, do not merge at all, but only appear to do so because of the effects of topography. While it may still be possible to find ore shoots not related to the alleged junction of the veins, this, none-theless, removes the basic premise which Read is presenting, ie., that most of the important ore bodies were found at large vein junctions.

In case you still find this situation appealing (and you may well do so), Read and associates have the following type of deal in mind :
(1)
$\pi_{\text {Kerr }}$ Addison would agree to spend $\$ 8,000$, on the property, and to reimburse Dynamic Metals for out of pocket expenses of, approximately, $\$ 8,000$. The agreement between Dynamic Metals Corporation and Messrs. Avison and Clever calls for the expenditure of the $\$ 8,000$ 。 mentioned above. Mr. Avison owns the Sandow and the Lone Star claims. Mr. Clever controls the following claims : Link, Lost Tiger, Happy Delivery, Betsy Ross andEstella. The other claims involved were staked by Dynamic Metals.
contd/.. - $2-$

# KERR-ADDISON GOLD Mines Limited 

(FOR INTEROFFICE USE ONLY)

To $\qquad$ From $\qquad$
$\qquad$

The total payments on the Avison group are $\$ 15,000$ by December 31st, 1969, plus $10 \%$ of the net smelter returns.

On the Clever group there is a $\$ 500$ payment due on July 15 th, 1965 , and $\$ 10,000$ must be spent on the ground by December 31st, 1966. $\$ 2,000$ must be paid to Clever by December 31st, 1968, and every year thereafter until a total of $\$ 25,000$ has been paid. If Kerr agreed to make all of the payments before December 31st, 1970, the total payments would be reduced by $\$ 5,000$. Clever would also receive $10 \%$ of the net smelter returns.

Dynamic Metals to form a new company in which Kerr Addison Mines would take down shares for money expended. Dynamic would like to retain a $40 \%$ position in the company, but this point is open to negotiation. Presumably, Dynamic would want to be in a position to benefit from any increase in the price of shares in the new company.

I do not feel that we should enter into this agreement without the opportunity of visiting the ground. It is always possible that considerably more work has been done than has been shown on any of the available maps. It is Read's contention that these properties have lain dormant because of the inability of the two owner factions to work together. I am presenting this information without specific recommendation for the time being, until I can perhaps become more familiar with the picture by talking to people like Matt Medley in Victoria who did the most recent mapping in 1952. In the meantime, you might have an opportunity to form some definite impression from this material.

I understand from Mrs. Wilson that she has already sent you the literature we received from Dynamic Metals.


Dr|en $\subset ~ N / O p+0$
Anison Ciente Geew.
Tcean Ta $^{\circ}=300^{\circ}$


SCOCAN DNT.

Mr. W. Sirola
Kerr Addison Mines Ltd. 1112 West Pender Street Vancouver, B. C.

Dear Mr. Sirola:
Regarding our recent telephone conversation concerning mining properties, I enclose a map and data from reliable government publications covering a very favourably located group of claims in the Slocan Area of British Columbia. The Slocan Area is well known for silver production.

The claims are under option to purchase or owned by Dynamic Metals Corporation Ltd., a private B. C. Company.

The group is believed to contain the last unexplored major junction of silver veins in the Slocan Area and presents probably one of the best potentials for a larger size silver-lead deposit in that area.

For over 60 years the key claims were held in two groups which were so located that development on one depended on ownership of the other. First the owners could not agree then they were entangled in estates. This is the first time ownership could be centralized. A group of claims to the footwall lapsed recently and has been staked for Dynamic Metals Corporation giving complete ground control.

The owners of the ground on both strike extensions have been approached and can be acquired if you feel it is advisable.

The type of agreement to acquire control of this ground is relatively flexible. Our initial thoughts were for participation with a partner who could gain majority interest by an initial payment, taking over options and developing the property to production. These are details that can be worked out if you find the property to your liking.

We feel that there is going to be even stronger upward pressures on the price of silver with present production falling far short of consumption and for this reason have secured a silver property of attractive potential.

Yours very truly,
DYNAMIC METALS CORPORATION LTD.
CC .s. Peal
W. S. Read P. Eng. (Yukon)

Vice-President
WSR: par
Enclosure

Minexal deposits in the Slocan occur in either single fissure or coraplex lodes. The single fissure lodes are in general 1 imited to several thousand feet in length. The large complex lodes may be several miles long and a hundred feet wide with boal changes in both horizontal and vertical direction according to the structure that it encountered. The forces that caused these vein faults were complox and the resulting pattern of lodes shows splitting branching and intersections. Ore deposits were formed in the openings caused by irregulaxities along the course of the lodes and at the junctions of the intersections.

The Fidly Edith-Standard-Idahn-Queen Bess is an example of one of these major lodes. Along its course in some cases due to structuremcansed buckles, are found the Alpha-Echo, Idaho and Queen Bess ore-bodies within a distance of three miles. In adition, at the junction of the Mammoth and Standard lodes, the famed standard ore-body was disclosed. Another function, that of the Alamo lode with the Standard is yirgin ground. The Alamo lode had an oxe-shoot about 3,500 feet from this intersection.

The Standard was the major producer of these mines. The ore-body at one location was 40 feet in width with 20 feet of clean galena. Broduction of the mines along the lode was as follows:

|  | Tons | O2. Ag | Lb. Pb | Lb. 28 |
| :---: | :---: | :---: | :---: | :---: |
| Standard | 368,000 | 5,520,000 | 58,880,000 | 51,520,000 |
| Queen Bess | 18,247 | $1,377,873$ | 18,809,857 | 35,727 |
| Idaho \& Alamo | 30.000 | 1,625,000 | 5,120,000 |  |
| Alpha \& Echo | 3,000 | 300,000 | 3,120,000 | 272,000 |

Unexplored ground along the Standard lode consiats of between the Queen Bess and Idaho and between the Idaho and scho. This latter section includes the junction of the Alamo with the standard. This ground consists mainly of two groups of mineral claims separately held for about sixty years. The Dynamic Metals Corporation Ltd. has recently optioned these properties from the heirs of the two estates. This option provides for low plyments for the fixst two years providing exploration work is done. Initially a road should be extended from the Alpha Claim followed by bulldozer stripping along the vein.

# AVISON AND CLEVRR GROUPS OF MINERAL CLAIMS SLOCAN MIMIMG DISTRICT 

Excerpts from Bulletin \#29<br>Geology and Ore Deposits<br>Slocan Mining Camp<br>By Dr. M.S Hedley

## page 47

The larger known faults, all of which axe mineral bearing and are plotted as lodes on Eigure 2, are zones of shearing and shattering from a few feet to about 100 feet in width. There 15 commonly one principal gouge zone, but there may be several, in addition to subparallel fractures and shears throughout the zone. A continuous zone of faulting, not a single fissure, extends through the Standard, Mammoth, Carnation, and Silversmith mines a known distance of about 6 miles. A branch just north of the Standaxd mine passes west of Idaho peak, branching again through the Alamo and Idaho mines.
Eage 52
The laxger lodes include the Queen Bess-Idaho, which apparently joins the Alamo, which, in turn, continues through the Standard.
page 52
These lodes form a partly connected system of tear faulting and are the largest known in point of view of structural significance; some of the largest orebodies in the area have been found in them.

Although the lodes may contain widespread gangue minerals, orebodies have been shown by past exploration to be greatly restricted. It is clear that, although the lodes served as channelways for mineralizing solutions, it was only locally within them that conditions favoured the formation of an orebody. Rage 77

Cunningham - After a short drive on the oueen Bess an orebody larger than any before known was encountered. It was rapidly mined and is reported to have shown net smelter returns of a million and a quarter dollars.

## Page 100

There is no positive information concerning it (the Queen Bess lode) farther to the south-west, but projection and the known facts of rock distribution prove the Queen Bess and Idaho lodes to be the same.

The record of production is not as informative as it might be because the output of the Idaho and Alamo was grouped. About $30,0 \rho)$ tons was mined altogether, with a metal content of about 1,325,000 ounces of silver and about $5,120,000$ pounds of lead; zinc was recovered in 1905 and again subzequently to 1918. About 85 per cent of the ore was mined between 1395 and 1905. Dividends amounting to about $\$ 400,000$ were paid. The last shipment recorded was 114 tons frora the Alamo in 1928.

The Idaho and Alamo, two distinct lodes of major size, are continuations of the Standard lode system. They cross the high radge northwest of Idaho Peak, the Alarw crossing the Sandow claim and the Idaho passing into bedding where last seen on the southern slope west of the Sandow. The two lodes may join before passing through Tiger and Echo ground farther to the south. The Idaho lode is continuous with the Queen Bess, although it cannot be traced between mines. The Alamo passes through the Conductor claim on the ridge ast of Alamo basin, and its position is not known with certainty beyond that point. The projected position of the Alamo east of Howson Creek is shown in Figure 2.

Alamo - The Alamo lode is exposed by five adit levels over a vertical range of about 500 feet. The adits are all caved, so the following underground detail is taken from published material or inferred from existing maps.

According to Cairnes $(1935, p, 62)$ : "The lode is a strong, mineralized fissure or fissured zone along the course of which the country rocks have been much crushed and brecciated. It varies in width from a few inches to over 9 feet and in its more productive parts had a filling composed in part of ore minerals, including at one point between 8 and 9 feet of solid galena and in part of quaxtz, siderite, calcite, and crushed country rock. Most of the available ore has been worked out. The principal shoot extended from the surface to 50 feet or more below No. 4 level and had a maximum length, between Nos. 1 and 2 levels, of about 500 feet. The shoot pitched in general towards the east and the length decreased downward to less than 200 feet on No. 4 level.. . On No. 5 level the lode is well defined, and contains much vein quartz, but has shown only traces or small lenses of lead and zinc minerals.
"Grey copper was a conspicuous constituent of the higher grade ore and a small amount of ruby silver was associated with the galena throughout the mine. Pyrite and chalcopyrite were also present, the latter, locally, in amounts rather unusual for ores O1 this district. Quartz was the most abundant gangue mineral. It was associated with a small proportion of siderite and calcite." It is reliably reported that high silver values were associated with "sugary" or finely crystalling vuggy quartz, in which the
silver was contained in small grains of grey copper and ruby silver.

The Alamo lode cxosses a prominent ridge at an elevation of 6,500 feet. The five adit portals are on the southeastern slope, but there is a second portal of No. 1 acit on the northwestern slope. The rocks in the mine area are argillites with a general low dip and minor warps and crumples. The rocks on the north or footwall side of the lode are ovexturned and those on the south are right side up. Although there is no evidence in the actual mine area, the displacement along the lode has brought into conjunction different iimbs of a large compressed dragfold with a nearly horizontal axial plane (see p. 45 and section I-I', Fig.4). The lode, where it passes through the steeply dipping axial part of the fold, deflects from its normal course to follow the bedding. In this section the lode, which normally has a moderate dip to the south, swings to a southeast course with a high dip to the southwest. Recovery to the normal east-northeast. strike takes place in the vicinity of No. 5 level and it is reported that the steep dip encountered in the higher workings decreases a short distance above No. 5. Most of the ore was mined from the steep part of the lode.

Most of the ore occurred above No. 2 level and was mined to 60 feet above No. 1, where the lode widened into a zone of stringers. The orebody lay in the upper part of the steep buckle in the lode, a situation very similar to that of the orebody in the Ivanhoe lode and not unlike that of the gueen Bess main orebody.

The general controlling factors which localized the Alamo orebody are well established. The paturn is more distinct than in most of the larger orebodies in the Sandon area and is not exactly duplicated anywhere, but there is enough similarity to make further analysis valuable as a guide to exploration in the sandon area.

In the Alamo raine area the lode, which in general crosscuts the formation, swings into parallelism with a panel of strata of anomalous attitude, producing a distinct buckle in the lode. The buckle is local on strike and probably is local on dip also, more sharply defined near its lower limit than its upper limit. The buckle or flexure on strike is in a shear direction but on dip is in a tensional direction relative to the lode along which the hangingwall moved relatively down and to the east.

## Page 81

The ore formed in or towards the upper part of the buckle. In the uppermost section the lode was wider and moze diffused and was not favourable to the formation of ore in quantitym-it is probable that, above the present erosion surface, the diffused elements of the lode regathered into a lode of more normal habit. It is not known whether there was a similar, lower diffusion and regathering. In the main part of the buckle the well-defined lode is presumed to have been gouge filled or to have contained a considerable amount of gouge, but where shattering and brecciation took place rather than grinding of the rock a site favourable for ore deposition was foilued. In the case of the Alamo lode the influence of rock type was not important, and ore formed in argillite which in many circumstances is not a good. host rock. In other cases of a similar buckie in a lode it may be presumed that the character of the rock might further localize ore deposjtion, depending on its susceptibility to brecciation or to shear.

It will be seen that such a buckle is govexned by the folded structure and is at least in the case of the Alamo, a beddec conclusion that bedded lodes are on the whole not favourable to ore formation. The conclusion is warranted, as a generality, but a distinction should be made between a general and a local follow ing of bedding because in the lattex case the buckle is the raore important factor, and not the angular relation between lode and bedding. Also, a bedded warp or buckle may occur by reason of a bedded lode being deflected through an ixregularity of bedding, but the tendency to repture is less than in the case of a crosscutting lode which is locally deflected into the bedding. Rupture, of the sort that produces brecciation, is not a prior necessity for ore deposition but is on the whole a very important contributing factor.

It is interesting to conjecture whethex the Ivanhoe orebody formed for much the same reason as the Alamo, although in response to a structural environment of quite different over-ali form. The answer is not forthcoming and might not be even after an exhaustive axamination, but the farm of the buckle in the lode is the same in both mines.

Idaho - The Idaho lode outcrops in the small valley of a tributary of Howson creek. There are few exposures along the course of the lode and rost of the workings are caved. The
rocks txaversed are chiefly mixed, banded sediments and argillites, Two quartz diorite stocks lie north and west of the mine area. The structure is not known.

Two other lodes, the Cumbexland and St. John, are branches of the Idaho lode on the northern or footwall side. The cumberland joins the Idaho lode in the vicinity of the portal of No. 5 adit and diverges to the west. The $S t$. John merges near the west end of the mine area and diverges to the northeast. Rage 82

There are six adit levels on the Idaho lode in a vertical range of about 800 feet. No. 5 adit also explores the Cumberland lode. There are two small adits on the Cumberland and two on the St. John. All are caved except Idaho No. 5 adit. A sublevel between Nos. 5 and 6 was accessible in 1949 by a raise down from No. 5 level.

The Idaho has a maximum explored length of 2,500 feet. "The lode forms a strong shear or fracture zone varying in width from less than a foot to 25 feet. The principal tonage was obtained in paxt from stopes between and above the upper two levele and in part from the surface about the portals of Nos. 1 and 2 adits. . . The main shoot on the Idaho lode was up to 10 feet thick and included 2 feet of clean galena on the hanging-wall side. Besides this clean ore a large tcrneye of milling ore was mined. Operations on and below the thixd level have, on the whole, met with only inferior results, and this in spite of every evidence of a strong lode carrying, down to the lowest level a heavy filling of calcity gangue. Some stoping has been done from the lower levels and traces of ore mineralization are yet to be seen." (Cairnes, 1935, p. 60)

Nothing is now known of the St . John lode. The workings on it were caved at the time of cairnes' examination. The cumberland has been explored over a length of 1,450 feet on No. 5 level. It is a steep well-defined Eissure with little displacement. It cuts quartzites and argillites with moderate to low northeasterly dips. The best section seen contained up to 12 inches of siderite with semm of sphalexite and a little galena. One small section was stoped.

A length of 800 feet of the Idaho lode was seen on No. 5 level to a cave at the edge of a stoped section. A sublevel below No. 5, reached by raise 500 feet from the portal, is about 700 feet 'ong. The lode is a broad zone of sheayiag, not every where fully exposed, and locally contains 5 feet r more of calcite.

It dips 50 degrees to the south but in places is steeper or vertical. There is some evidence that the hangingwall moved relatively down and to the east. The rocks are mixed, banded sediments localiy silieified.

Mineralization seen locally consisted of sphalexite in lenses and streaks and a little galena. One steep fissure containing sphalerite diverges from the hangingwall to the east.

The lode as a whole is gougy but locally is rather tight and almost free of gouge. It is as much as 20 feet wide and has the appearance of a strong shear zone. Rage 82

The Mammoth is a branch of the Standard lode.
Race 107
Sandow - The Sandow claim is owned by the estate of $T$. Avison; R.A.Avison, Silverton, executor. It is 1,800 feet northwest of Edaho peak on a steep southwesterly slope. The rocks are poorly exposed limestones and raixed rocks on the lower limb of the Idaho Peak dragfold. A short blocked adit and a $15^{-}$ foot adit at an elevation of about 6,500 feet disclose a prominent shear zone, continuous with the Alamo lode which crosses the ridge crest 600 feet to the north. The main adit is dxiven on a shear zone 5 feet wide, striking north 75 degrees east and dipping 70 degrees southward. The smaller, 15-foot adit, 25 feet to the north-west, is on a similar rone. These are the southernmost known points on the Alamo lode.

> Excerats from Merooir 173 Slocen Mininc Camp By G. B. Cajxner

## Rage 83

The Standard lode, which is mainly representative of the shear-vein type, had a maximum width near the main ore-body of about 150 feet. It included two pronownced ore-bearing channels, one near the hanging and the other neax the foot-wall, with a combined maximum width of about 45 feet. The main, or foot-wall section, attained width of 40 feet, about half of it solid or nearly solid galena and the remainder ore of milling grade. Between the foot-and hanging-wall sections the lode was composed of more or less sheared, and in part sparsely mineralized, country rock.
Rage 85
The Emily Edith-Standard-Idaho-Queen Bess lode system is over 4 miles long.

Racre 104
If one wall of a fracture with curving inequalities be displaced along the fracture plane open speces would result at opposed concavities which would be good sites for ore deposition, especially if the walls were lined with impervious gouge. A number of the larger ore deposits in the district lie along curved parts of vein-lodes and it is believed that the channols in which they formed were developed in this manner. Important among such deposits are the main Queen Bess are shoot, the slocan Star ore-bodies, and probably also the main Silversmith shoot. page 105

In many instances mineral concentration has taken place at the junction or at the intersection of fissures. The first type, comnonly called "feedar veins," joins a main fissuce or vein-lode. When such fissures were mineralized at the same time as the main fissure or vein-lode it is cormon to find conspicuous development of vein matter, in some cases ore-bodies, at their junctures. For example, at the Last Chance mine the Blizzard vein joins the Last Chance vein on the hanging-wall side and at theix junction occurred the main ore-body at the Last chance mine. According to the old mine plans, it provided almost continuous stoping ground over a maximum length of 1,000 feet and a maximum vertical depth of 400 feet. Probably the outstancing example was the great ore shoot of the standard property. It was the largest yet discovered in the district and occurred at the junction of the main Standard and the I Veins.

Excerpt from Memoix 184 Slocan Mining Camp<br>By C. K. Cairnes

## Page 141

The junction of the Emily Bdith lode striking east, and the Standard-Alpha-Echo lode striking northeast, was the site of the big Standard ore-body. Any information indicating that other lodes join or intersect these explored lodes should be carefully considered in any future programe of exploratory work.


