DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2422

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EXPLORATION PROJECT

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

Copies to USBM, USGS, & Region II.

To:	Code 700, Rm. 4640	Date	3-14-52
To:	Opr. Comm.	~~Date~~	4-30-52
To:	Mr. Mittendorf	Date	
To:	~~Mails & Files~~	~~Date~~	
To:	~~Ellis C. Dockter~~	~~Date~~	
To:	Mittendorf	Date	9-10-52
To:	Mails & Files	Date	
To:		Date	
To:		Date	
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CONTROLLED DOCUMENT

FILE COPY
SURNAME:

FEJohnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. J. R. Atkeson
Copper Glance Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Re: Docket No. DMEA-2422 (Copper)
Okanogan County, Washington

Dear Mr. Atkeson:

Your application for aid in an exploration project docketed under the captioned number has been reviewed by this Agency.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your application and data available to this Agency, and an examination of the property concerned reveal that the probability of disclosing minable reserves by your proposed exploration program is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

If additional work on your property reveals information which makes the project feasible, an application may be submitted for consideration.

Sincerely yours,

9/15/52

C. O. Mittendorf
Administrator

HFKeller/jem 9-9-52
FEJohnson/pa 9-11-52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson-3621
Ned Nelson -4216 GSA
Ellis Keller
Operating Committee
Field Team, Region II (2)

FILE COPY
SURNAME:

HFKeller
Ellis
Johnson
Hedges
Thayer

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

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Seattle 3, Washington

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C. O. Mittendorf

Administrator

HFKeller/jem
9/9/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson-3621
Ned Nelson-4216 GSA
Ellis Keller
Operating Committee
Field Team, Region II (2)

9/9/52 rgla

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

September 9, 1952

Re: DMEA-2422
Copper Glance Mining Co.
Okanagan County, Washington
$100,000
Copper

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Concurrence with field team denial

The applicant proposes to further explore his property by crosscutting and drifting 140 feet and raising 80 feet to the surface.

The field team recommends that the application be denied.

Their examination of the two existing tunnel levels indicated that copper mineralization occurs along faults and fault intersections. These levels have explored several fault intersections without discovering any significant amounts of minable ore. Several samples were taken by the field team at the best exposures underground and at the surface. The unweighted average of these samples was .014% copper, gold nil, silver 0.04 oz. per ton. The geologic evidence and the results of the field team's check sampling does not indicate that copper mineralization on the property is strong enough to justify Government assistance. It is unlikely that the applicant's proposed work would discover any significant copper ore deposits.

I concur with the field team's recommendation that the application be denied.

E. L. Newcomb
E. L. Newcomb
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

September 9, 1952

Re: DMEA-2422
Copper Glance Mining Co.
Okanagan County, Washington
$100,000
Copper

Memorandum

To: Mr. E. W. Ellis

From: E. L. Newcomb

Subject: Concurrence with field team denial

The applicant proposes to further explore his property by crosscutting and drifting 140 feet and raising 30 feet to the surface.

The field team recommends that the application be denied.

Their examination of the two existing tunnel levels indicated that copper mineralization occurs along faults and fault intersections. These levels have explored several fault intersections without discovering any significant amounts of minable ore. Several samples were taken by the field team at the best exposures underground and at the surface. The unweighted average of these samples was .014% copper, gold nil, silver 0.04 oz. per ton. The geologic evidence and the results of the field team's check sampling does not indicate that copper mineralization on the property is strong enough to justify Government assistance. It is unlikely that the applicant's proposed work would discover any significant copper ore deposits.

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E. L. Newcomb
Geologist

9/9/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

August 22, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 2 1952

Mr. F. E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Copper Glance Mining Company
Okanogan County, Washington
Docket DMEA-2422, Copper

Dear Mr. Johnson:

Enclosed are reports by E. A. Magill, U. S. Bureau of Mines, and Willard P. Puffett, U. S. Geological Survey, concerning the Copper Glance Mining Company property, Okanogan County, Washington. On the basis of the evidence presented, it is concluded that the mineralization is too weak and the grade of the ore is too low to merit further consideration for exploration and consequently it is recommended that the application be denied.

By DMEA Field Team, Region II

A. E. Weissenborn, H.K.K.
A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

M. E. Volin
M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures 2 (in quad.)
cc: USBM (2)
W. Puffett

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

August 20, 1952

Memorandum

To: A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II

From: Willard P. Puffett, Geologist, U. S. Geological Survey

Subject: Field Examination of Copper Glance Mining Company Property, Okanogan County, Washington. Docket No. DMEA 2422 (Copper).

Recommendation:

It is recommended that the application submitted by Copper Glance Mining Company for assistance in a project to explore for copper ore on their property in Okanogan County, Washington, be denied. A field examination of this property disclosed that there was not sufficient favorable geologic evidence exposed to justify the probability that a minable copper ore deposit existed in the area.

Applicant:

Copper Glance Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Reviewed by
DMEA OPERATING COMMITTEE
9-8-52
(date)

Location of Property:

The Copper Glance Mine, consisting of 12 claims held by location, is in unsurveyed Township 38 North, Range 20 East, Okanogan County, Washington. This property can be reached by good county and forest roads 23 miles north of Winthrop, Washington.

Summary of Field Examination:

The property of Copper Glance Mining Company was examined Sunday, June 16, 1952 by myself and E. A. Magill, U. S. Bureau of Mines,

Mr. LaFlambey, President of Copper Glance Mining Company and another employee of the applicant company accompanied us on this examination. A tape and compass survey was made of the underground workings and the geology was plotted. A traverse was made locating the site of the proposed new portal in relation to existing workings. Samples were taken in the reported ore area and on other places on the property to compare with results of samples as submitted by the applicant. The accompanying map shows underground workings, geology and assay results of samples taken. In all, approximately 10 hours were spent on the property during the examination.

Geologic Setting:

The Copper Glance mine is situated on the steep east slope of a range of hills in central Okanogan County, Washington. The portal of the lower tunnel is at an elevation of approximately 5100 feet, 1200 feet above the valley floor. The hillside is rather throughly cloaked with soil mantle and timber thus limiting bedrock exposures to underground workings, road cuts, and occasionally deep cut canyons. There is no presently available published reports concerning the geology of the area but the preliminary Geologic Map of the State of Washington shows the majority of the bedrock in the area to be Miocene volcanics.

During the examination, two main rock types were noted, both of which are metamorphosed and altered. One type, a fine-grained siliceous, slightly calcareous, grey rock was at first considered to be a volcanic inasmuch as no sedimentary features were noted, but further examination of samples of this rock suggest it may be a strongly silicified, metamorphosed sedimentary rock. As such it is noted on the accompanying map. The other rock type, noted only near the west end of the lower tunnel, is a coarser-grained igneous, intermediately basic in composition, and probably of volcanic origin. No petrographic work has been done on examples of the two rocks but such work would clarify the rock types.

Ore minerals that were in evidence on the property are pyrite, chalcopyrite, tennantite, and a minor amount of copper carbonates, the result of alteration of the sulphides. Pyrite is quite copiously disseminated throughout the grey sediment as tiny crystals, its presence being noted in nearly every sample chip of this type rock. The other listed ore minerals are found only in the lower tunnel.

Concentration of the ore minerals seems to have been controlled by fault structures. In the lower tunnel, a strong flat-dipping fault has been explored down dip and along the strike for a number of feet. Directly beneath this fault, and in greater abundance near the intersection of this fault with crosscutting faults, pyrite and chalcopyrite are strongly concentrated. Samples were taken where this mineral concentration appeared to be the most concentrated but very low copper assay results were obtained. An apparently persistent, steeply dipping, fault striking slightly south of east, can be traced in the underground workings and at various places on the surface. In a strongly fractured area along this fault, found in the south drift of the lower tunnel, an ore pipe has been formed. This pipe was

mined through to the surface and large blocks of ore are found on the dump which reportedly came from this pipe. The ore consists of heavily concentrated chalcopyrite, tennantite, and only very sparse pyrite. Some evidence of this mineralized area still remain in the drift walls and a sample was taken to check the ore grade. Only 1.05 percent copper was obtained in the resulting assay. In the vicinity of other rather strong faults in the lower tunnel the concentration of pyrite was much higher than elsewhere in the workings. A number of faults are exposed in the upper tunnel and the walls are quite evenly mineralized with pyrite but a chip sample taken along the wall failed to give promising assay results.

Conclusions

Although it is apparent that the ore minerals have been concentrated along faults and at fault intersections, at no place in the workings or elsewhere on the property was evidence noted that suggested there was sufficient strongly mineralized ground to merit exploration. The lower tunnel explored a number of fault intersections, all of which were below ore grade. The upper tunnel explores a much fractured area in which pyrite seems to be nearly the only sulfide mineral present. At other places on the property where the applicant states samples were taken which gave promising results, check samples were taken and inspection for promising structure was made. Both the inspection and assay results of the sampling were discouraging. Consequently, it is believed that, although a very small amount of copper ore occurs or did occur at one place in the lower tunnel, the property as a whole cannot be considered to possess sufficient promising geologic evidence to justify the probability that thereon exists a minable copper ore deposit.

Willard P. Puffett

Enclosure

cc: DMEA
USBM
USGS(SRO)
Puffett

DEPARTMENT OF
Defense Mi
SEP 2 1952

M. E. Volin, Member, DMEA Field Team, Region II August 22, 1952

E. A. Magill, Mining Engineer, Bureau of Mines

Field examination Copper Glance Mining Co., Okanogan County, Washington, Docket DMEA 2422 (copper)

A field examination of the Copper Glance mine was made on June 15, 1952, in company with Willard Puffett of the U. S. Geological Survey. Mr. R. B. LaFlambey, President of the Copper Glance Mining Company guided us about the property.

RECOMMENDATION

It is recommended that the application of the Copper Glance Mining Company for an exploration loan in the amount of $100,000 be denied.

LOCATION

The Copper Glance mine is located in unsurveyed T. 38 N., R. 20 E., W. M., Methow Valley Mining District, Okanogan County, Washington. The property is reached from the Winthrop by following up the Chewack River road to Eightmile Guard Station, thence up Eightmile Creek to Copper Glance Creek, a total distance from Winthrop of 21 miles. A jeep road about 2 miles in length leads from Copper Glance Creek up the mountain to the mine.

PROPERTY

The property consists of 12 unpatented mining claims owned by the applicant.

COMPETENCE OF APPLICANT

In order to meet any financial obligations, it is necessary that the Copper Glance Mining Company sell stock. From what is known about the company, as well as observing the work which they have completed in the past, it is evident that the company has no one connected with it capable of directing an intelligent exploration program.

PAST PRODUCTION

The only recorded production from the property is a shipment of 2-1/4 tons of ore which contained 20% copper and 12 ounces of silver per ton.

The property is not in production at present.

DESCRIPTION OF DEPOSIT.

The ore occurs along a flat dipping fault contact (N. 75 W, 80° S) between a highly metamorphosed basic igneous rock and a siliceous, slightly calcareous metasediment. The predominant mineral is pyrite with minor amounts of chalcopyrite, tennantite and copper carbonates. Pyrite is also disseminated throughout a zone at least 600 feet long and 200 feet wide with an elevation difference of 250 feet. Locally there is exposed chalcopyrite and tetrahedrite in minor amounts.

Mine samples were taken from the property (see map accompanying report by Willard Puffett, USGS for locations); the unweighted average of the samples is: Copper 0.14 percent, gold nil, silver 0.04 ounces per ton. These samples were taken from the best exposures and from locations where the applicant claimed high gold values.

A spectrographic analysis of two samples gave the following results (see Puffett's map for location):

	EAM 183	EAM 185
Al	over 10%	over 10%
Sb	0.1 to 1%	—
As	0.1 to 1%	0.01 to 0.1%
Ca	1 to 5%	1 to 5%
Cu	1 to 5%	0.01 to 0.1%
Pb	0.01 to 0.1%	—
Mg	1 to 5%	5 to 10%
Ag	0.001 to 0.01%	—
Tn	0.01 to 0.1%	—
Cr	0.001 to 0.01%	0.001 to 0.01%
Co	0.01 to 0.1%	0.01 to 0.1%
Fe	over 10%	over 10%
Mn	0.01 to 0.1%	0.01 to 0.1%
Ni	0.01 to 0.1%	0.01 to 0.1%
Si	over 10%	over 10%
Ti	0.01 to 0.1%	0.01 to 0.1%
V	0.01 to 0.1%	0.01 to 0.1%
Mo	0.001 to 0.01%	0.001 to 0.01%
Ba	1 to 5%	5 to 10%
Zr	0.01 to 0.1%	0.01 to 0.1%
B	0.01 to 0.1%	—

Sampling and mapping of the property has failed to indicate any minable ore body. None of the samples substantiate the applicant's claims of high gold values, although they were taken either from the best mineralized areas or at points where the applicant claimed rich samples had been taken previously.

ORE RESERVES

The Copper Glance mine contains no measurable ore reserves.

E. A. Magill

CC: 4-Wash.
USCE
Albany
D/F
EAM

SEP 2

M. E. Volin, Member, DMEA Field Team, Region II August 22, 1952

E. A. Magill, Mining Engineer, Bureau of Mines

Field examination Copper Glance Mining Co., Okanogan County, Washington, Docket DMEA 2422 (copper)

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CC: 4-Wash.
USGS
Albany
D/F
EAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR
Bureau of Mines, Philadelphia
SEP 2 '52

So. 157 Howard Street
Spokane 4, Washington

August 20, 1952

Memorandum

To: A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II

From: Willard P. Puffett, Geologist, U. S. Geological Survey

Subject: Field Examination of Copper Glance Mining Company Property, Okanogan County, Washington. Docket No. DMEA 2422 (Copper).

Recommendation:

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Geologic Setting:

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Conclusion:

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Willard P. Puffett

Enclosure

cc: DMEA
USBM
USGS(SRO)
Puffett

700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

MAY 1 1952

Mr. J. R. Atkeson
Copper Glance Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Re: Docket No. DMEA-2422 (Copper)
Okanogan County, Washington

Dear Mr. Atkeson:

Your application for assistance in exploring your property in Okanogan County, Washington, under the above captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration and has been referred to Mr. A. F. Weissenborn, Executive Officer, Region II, DMEA Field Team, South 157 Howard Street, Spokane 8, Washington, for a field examination.

The Regional office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf (for) cc 5/1

Acting Administrator
Defense Minerals Exploration
Administration

HFKeller/Jem
4/29/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson, Rm. 3621
Ned Nelson, Rm. 4216 GS
Ellis
Keller
Field Team, Region II (2)

FILE COPY
SURNAME:

700

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

AIR MAIL

MAY 1 1952

Mr. A. L. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMEA-2422 (Copper)
Copper Glance Mine
Okanogan County, Washington

Dear Mr. Weissenborn:

This is your authority to make a field examination of the captioned Applicant's property on Eight Mile Creek, Okanogan County, Washington.

The Applicant obtained the services of Roy E. Corliss, a mining engineer, to examine and report on the Copper Glance Mining property. The information presented in Mr. Corliss' report, and the data we later obtained from the Applicant have not aided us greatly in the evaluation of the property nor of the proposed exploration project.

We recommend, if the Field Team believes the property has merit, that they should aid the Applicant in revising his application.

In so doing the Field Engineers should take up with the applicant the following points.

1. Propose a definite and realistic exploration project that would eliminate the necessity of raises 700 feet in length as now proposed. Either tunneling, trenching, diamond drilling or a combination of these methods could be used in the exploration of the more highly mineralized area or areas.

2. Revise the proposed wage scale to conform to that which is now in effect in the district for similiar work classifications.

3. Revise the estimated cost of supervision. We believe that an Engineer should be able to supervise the project as well as do the necessary engineering work.

4. Provide funds for assaying by a commercial laboratory, with the elimination of the assayer's proposed salary.

5. Provide for the rental rather than the purchase of equipment.

6. Provide for the purchase of all the supplies that will be required to complete the project.

7. Provide for a depreciation allowance for the applicant's equipment or his statement that the equipment will be furnished without cost to the project.

8. Applicant's competence in organizing and supervising an exploration project.

The request for a revision of the application in no way implies that the Government will approve a contract for the proposed exploration project.

Sincerely yours,

5/1

(signed) FRANK E. JOHNSON

(JHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED: J. H. Hedges (JHB)
Member, Bureau of Mines

D. M. Lemmon (JHB)
Member, Geological Survey

HFKeller/jem
4/29/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson, Rm. 3621
Ned Nelson, Rm. 4216 GSA
Ellis Keller
Opr. Committee
Field Team, Reg. II

4/22/52 gla

PHONE MELROSE 2123

Copper Glance Mining Company

4039 EVANSTON AVE.

SEATTLE 3, WASHINGTON

April 15, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 21 1952

United States Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Attention: Mr. Ernest William Ellis

Dear Mr. Ellis:

Subject: Docket No. DMEA-2422 COPPER, Copper Glance Mine, Okanogan Co. Washington

Will try to answer your letter of the 8th.

Question No. 1: When Roy E. Corliss speaks of channel assays, he took chipped samples of about five to ten feet in width.

Question No. 2: In our main tunnel there is approximately a sixty foot dyke of mineralized material which we crossed. Off this tunnel we have put out cuts both to right and left. We will go into detail on each sample he took, giving you as much information as I can. As you will notice on the sketch we made a turn or a second right hand cross cut. This seems to be entering into another mineralized body. As we built our road we cut a number of mineralized outcrops.

Sample No. 1: This J. & G. Claim is an outcrop up in the basin near head of Copper Glance Creek. The outcrop is about thirteen feet wide laying against Greenstone. This was a chipped sample of the outcrop near the bottom left side.

Sample No. 2: Taken the same manner only a little higher up.

Sample No. 3: This is of the Greenstone.

Sample No. 4: About a quarter of a mile to the left of our main tunnel down the hill is a spring. We cut in here in order to open it up for a better water supply. This sample is a little of the oxidized mass we found there.

Sample No. 5: Just some more oxidized material that looked a little different than sample No. 4.

Sample No. 6: This is a sample from a showing of Copper Glantz ore. Years ago there was a shipment made from this high grade vein of $2\frac{1}{4}$ tons which showed smelter returns of 20% copper. There is a ravine here which stops exploration in this cross cut without going to depth. (This showing about 4 ft. wide.)

Sample No. 7: Also assay in this same cross cut but away from the Glantz ore.

Sample No. 8: Nothing to do with the Corliss assays. A good looking piece from one of the cuts made by dozer along the road. The one above the old cabin.

Sample No. 9: A sample starting at portal of main tunnel.

Sample No. 10: A sample starting about 50 ft. from where our second right hand cross cut starts. On left hand side for about 10 ft. and 5 ft. from floor.

Sample No. 11: Same as sample No. 10 except on right hand side of tunnel.

Sample No. 12: Same cross cut as samples No. 10 and 11. This is a sample starting about 5 ft. from the turn or start of cross cut. Taken off the left wall.

Sample No. 13: This is a sample from the face of the first right hand cross cut from our tunnel in the 60 ft. mineralized zone.

Sample No. 14: Do not know how wide he cut this sample. It is from a cut about 75 or 80 ft. wide made when we built the road. On bend above the old cabin.

Sample No. 15: Do not know how wide he cut this sample. It is in the same cut as No. 14.

Sample No. 16: I rather think those are all about 5 ft. chipped samples; they are all from this same cut. Quite a showing of quartz: looks like a different dyke.

Sample No. 17: Sample taken from this same cut along the road. He put those in with his channel assays so think they are about 5 ft. chipped samples.

Sample No. 18: This is from country rock, looks like Greenstone as near as I can remember.

Sample No. 19: We put in a shot at right side of portal to true up the entrance. This is simply a grab sample picked up after the shot.

On 9/17/50 Corliss took a grab sample from cut near spring close to the old cabin.

On 9/25/50
Sample No. 1 of that date was from cut below the road. Do not think this was a channel assay. This from cut just below the old cabin.
Sample No. 2 of same date. Gray mud from the spring mass.
Sample No. 3 of same date. An outcrop shows above the road at first bend near tunnel. This would be just a surface sample. Marked on sketch map with *.
Samples No. 4 and 5 are of two seemingly different types of rock showing as a wall after the oxidized mass was dozed out. This mass was about 40 ft. through. The wall as we go into it decreases in value. Since those assays were taken we have exposed about 100 ft. of mineralization and this should be tested for depth. It looks as though we dozed off this top of the dyke which was oxidized and reached the wall.

Sample [illegible] of Sept. 8, 1950: This from the face of our upper 60 ft. tunnel.

Question No. 4: This property consists of a series of outcrops that can be traced as large dykes. Our tunnel seemingly cross cuts one of these dykes showing about a 60 ft. width of mineralization. In our first cut to the left of this tunnel we find the body of Copper Glantz ore. We have made a cut about 200 ft. below where this showing is in the tunnel and we also made a cut about 750 ft. further down the hill and in both cuts have exposed a good showing of mineralized

material. The type of Iron Pyrites together with the showing of Copper Glantz ore leads us to believe we will not only have a large body of low grade (as indicated by the many outcrops over such a wide area) but at depth find high grade Glantz ore.

No. 5: The dykes or mineralized outcrops can be traced on the surface according to the engineer for a width of over 800 feet and a length of more than two thousand feet.

I hope this will be of some assistance and wish to thank you for your prompt interest in processing our application.

Sincerely yours,

J R Atkeson

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

APR 8 1952

Mr. J. [illegible] Akeson
Copper Glance Mining Company
1039 Vanston Avenue
Seattle 3, Washington

Re: Docket No. [illegible]-2423 (Copper)
Copper Glance Mine
Okanogan County, Washington

Dear Mr. Akeson:

The subject application and supplementary information pertaining to mine are being studied by the engineers of this agency. In order that they may have a better understanding of the ore potentials of your mining claims they would appreciate receiving the following additional information:

1. Width of ore samples as represented by the samples in the report of Roy L. Corliss.

2. A statement as to the nature of the vein or material sampled in the above mentioned samples.

3. Results of the 20 channel samples taken by Mr. Corliss which were to be assayed later with data requested in Item 1 and 2.

4. Any additional information that you can furnish that will aid us in obtaining a more complete knowledge of the type and nature of the ore deposit.

5. Are the tunnels driven along well defined veins? What distance can the veins be traced on the surface and what is their average width?

We shall be pleased to continue processing your application on receipt of the requested information.

Sincerely yours,

Signed
S.H.
4-8-52

Arthur M. Ellis, Chief
Ware and Misc. Metals Division
Defense Minerals Exploration
Administration

H. Keller/jem
4/7/52
cc to: Adm. Reading File
Docket
Messrs. C.H. Johnson, Rm. 3621
Ned Nelson, Rm. 4216
Ellis
Keller
Field Team, Region II (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

March 26, 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA 2422 - Copper Glance Mining Company, Seattle, Washington, Copper Glance Mine, Okanogan County, Washington

Applicant submits a $100,000 exploration project to consist of 2100 feet of drifting and raising; $10,000 worth of diamond drilling and $10,000 for bulldozing, outcrops, clearing roads, and so on. $20,000 is for housing and equipment. Applicant submits a very good surface map of the property and a report by Roy E. Corliss, mining engineer, made in August 1950, for the Copper Glance Company. Mr. Corliss' report, however, is unsatisfactory, in that the sampling data cannot be interpreted. He gives no information as to the width of ore sampled, nor is there any indication as to the nature of the ore deposit, excepting that the copper minerals are sulphides.

Corliss' report on page 4, states "I have taken 20 channel samples at regular intervals to be assayed at a later date." I suggest that applicant be requested to have Mr. Corliss furnish a sketch showing the locations and width represented by these samples, also the assay returns. He did not give this information in his report, but instead gave a lot of apparently hit-or-miss samples taken inside and outside the mine workings.

I have no serious objection to referring this application to the field team but must confess that my general impression is that the applicants are inexperienced and hardly competent to conduct an exploration project, and that the applicant's engineer likewise is inexperienced and has based his conclusion on very misleading data.

The application is returned herewith.

C. H. Johnson

C. H. Johnson

Attachment

Copy to - Mr. Nelson
Minerals Division
C. H. Johnson
Base Metals Branch
Files

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

March 18, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Ned E. Nelson

Subject: DMEA-2422, Copper Glance Mining Company, Seattle, Washington

Comment

This writer visited this property in 1925, at which time very little work had been done. Copper glance in bunches in volcanic rock (andesite) furnished specimens but continuity and tonnage were missing. The location, distance from the railway at Paterros, Washington, and a structure which promised little caused a lack of interest.

The pictures and the Corliss report show someone has since been interested and possibly a prospect has been made.

The map and the report show large samples were taken, some very large for hand samples, but no widths are definitely attached to the samples and it is not easy to judge their significance. However, there seem to be several spots or places at which samples showing poor to good copper values were obtained by Corliss.

Some 560 feet of "tunnelling" has been done in 2 adits (460' and 100'). Of the 27 assays listed only 7 pertain to samples taken underground and of these 3 assayed above, one per cent, and 3 are below one-half of one per cent. Two of the 3 came from the left crosscut and one from the right crosscut. The implication is that the underground work is largely in waste and the large orebody spoken of by Corliss may be rather low grade.

Before referral to a field team, the applicants should be asked to explain the spottiness of the orebody on surface and underground.

N. E. Nelson

Ned E. Nelson
Geologist

EXPLORATION

Subject: DMEA-2422
Re: Exploration Loan
Copper Glance Mine
March 14, 1952

Mr. R. B. LaFlamboy
Copper Glance Mining Co.
4039 Evanston Ave.
Seattle 3, Washington

My dear Mr. LaFlamboy:

This will acknowledge receipt of your application dated November 15, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2422 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2422 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2422
Metal or Mineral
Date Received 3-13-52
Amount $
Participation (Government %)

Name and address of applicant

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle, 3, Wash.

Date Nov. 15, 1951

If you have already filed MF-100, give date filed herewith, type of assistance requested exploration loan,

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Copper Glance Mining Co. By [illegible]

(Name of company) (Signature of authorized official)

Nov. 15th 1951. President

(Date) (Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Copper Glance Mining Co. 4039 Evanston Av., Seattle 3, Wash.

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Application Form MF-103

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1. (a) Mining properties consisting of twelve mineralized claims in Okanogan County, Washington; in what is known as the Methow Valley Mining District, 23 miles north of town of Winthrop in State of Washington. See maps herewith.
   (b) We own the properties held under location.
   (c) Upper portion of Claim #1 as shown by dots and red markings on maps herewith.

2. (a) Copper with some gold, silver, lead, and zinc values Also on "J&G" Claim (at top of map) there is considerable showing of zinc and lead in outcropping as shown in enclosed pictures. Assays from this have run as high as $17.00 per ton. In applicant's opinion, this J&G Claim would not be developed with funds from this exploration loan. (It might be advisable for U.S.Govt.Engineer to examine this J&G claim.)
   (b) See accompanying Engineer and Geologist reports, maps, sketches, and photographs.
   Please return all of above items.

3. (a) Proposed new work.- Drive tunnel approximately 700 ft. drifting into hill on mineralized body until we come under the present dyke, where we have exposed 60 ft. of mineralized ore and considerable copper glantz ore in upper level. Then make two raises approximately 700 ft. high on this ore body. The drifting and raises will total approximately 2100 ft. or more. If engineering reports are correct, this should give us 700 ft. of backing and sufficient ore to operate for a long period of time.
   Estimated Approximate Costs:-
   $60,000.- 2100 ft. or more of tunnels & raises
   10,000.- Bulldozing for roadbuilding, surface-prospecting, and various needed clearing, etc.
   10,000.- Reserve for possible need of diamond drilling
   5,000.- Necessary additional building and equipment to house more men
   15,000.- Additional required equipment, including mucker, compressor, and miscellaneous items needed from time to time, such as fans, pipe, airhose etc.

3. (b) Start work in May,1952

4. See map herewith

5. 2 cabins, now in good condition, will house 8 people.

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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6. For $12,500.-, we have an option to buy and move onto this property, 9 buildings and a 50-ton Denver Equipment Mill without power-plant. We estimate the above mill and buildings to be worth $75,000.00. We estimate a power-plant would cost from $3,000. to $4,500. additional. Power is expected to be developed from Copper Glance Creek. It is not contemplated to use exploration money to move above 50-ton mill to this property unless so advised by Government Engineer followed by special arrangement with the Government for such action. See Question #11.

7. (a) Equipment to be rented.- None

(b) Equipment to be purchased and estimated cost-

Power mucker	$3,000.-
Rails 1000 ft.of track	900.-
Air-compressor	5,000.-
2 Ore cars	800.-
2 Jack-hammers	600.-
2 Drifters	600.-
2 Stopers	600.-
Pipe & hose	1,000.-
Lumber	2,500.-
	15,000.-

(c) Equipment to be furnished by us.

Present camp facilities
2 Jack-hammers
GMC truck & air-compressor
Jeep
Air-hose
Ore-car
Track-rails
Miscl.mining tools

8.

1 supervisor	$500.- per mo.	
4 miners)	92.- each, per week	($2. per hour & 4 hours overtime @ $3. hourly)
2 muckers)		
1 machinist)		

9.

1 Engineer	$500.- per mo.
1 Assayer	500.- do
1 Cook	300.- do
Food	500.- do
Accounting)	
Office Expense)	300.-
Gas, oil, etc.	200.-

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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10. (a) We will put up an amount equal to the amount put up by the Government.

(b) Yes

11. Copper Glance Creek carries sufficient water & fall to make it possible to develop electric power for less expense than running lines into property for use of electric power. This point should be given due consideration, as it will mean very cheap mining when property is developed.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2422

Date received 3-13-52

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle 3, Washington

Name and address of applicant

Date Nov. 15, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation
   (*b*) Are you operating this property as:
   ☐ Owner. Owner doing exploration work
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production .....
   If not in production or operation, estimated date when production will begin at completion of exploration work
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1952

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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1. (a) Copper & a little gold and silver
   (b) Zinc & lead

2. Copper Glance Mine
   Hard-rock mine
   Mill to be installed
   (a) None
   (b) 100 ft. of crosscuts
   (c) 360 ft. of tunnels
   (d) 7 test-holes in different places on mining-property

   Mine is not flooded. No pumping problem.
   Various engineers class this mine as having the makings of one of the large mines of our country.

3. (a) 23 miles north of Winthrop in Okanogan County, Washington
   (b) Methow Mining District
   (c) Unsurveyed district in Chelan National Forest on "8-mile Creek" tributary to North Fork of Methow River. See sketch-map here-with
   (d) Okanogan County, State of Washington

4. (a) Doing exploration work
   (b) Owner

5. Not in production. Doing exploration work. Production will begin at completion of exploration work.

6. (a & b)
   R.B.LaFlamboy, President of the Copper Glance Mining Co., has had a wide business experience. His present occupation is real estate. He holds a Broker's License. He has been interested in mining most of his life and has assisted in the development and operation of mining at various times.
   J.R.Atkeson, Secy.-Treasurer, has been interested in mining for many years, and has been a very active leader in advancing the mining activities of the Northwest. He is considered a very capable man in this field.
   These men understand the importance of good business management and are capable of securing the right kind of mill men and placing proper men in the right positions to develop a smooth-running organization.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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7. (a) Some development work has been done; but, due to lack of roads it was impossible to properly develop until the last 3 years. Has not been in operation.
   (b) Due to lack of roads, this mineralized section of country has not been developed.
   (c) Maps and reports are enclosed herewith.

8.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
R.B.LaFlamboy Lakebay, Wash.	Pres. D	$667.82 coms.	$15,000.-	301,667	None	None	
Vice-Presidency recently vacated not yet refilled						do	
J.R.Atkeson 4039 Evanston Av. Seattle 3, Wash.	Secy. D		$15,000.-	3,233,333		do	
C.A.Dever F.St.,Bremerton,Wn.	Stockholder			199,000		do	
Leah Hipp Lakebay,Wn.	Stockholder			125,000		do	
E.D.Richardson 2818 Valette St.,Bellingham,Wn.	Stockholder			100,000		do	
S.A.Hotchkiss Estate Winthrop	Stockholder			100,000		do	
Estate of Franklin Good,dcd. Mt.Vernon,Wash.	Stockholder			200,000		do	
Totals		$667.82		4,259,000	-0-	-0-	-0-

9. Common Stock

(a) Authorized/	(b) Outstanding/	(c) Par Value/	(d) Shs. Outstanding/	(e) Dividends
$100,000.-	$87,996.-	$87,996.-	8,799,600	(None)

No Preferred Stock
Authorized or Outstanding

10. No Production to date.

11. No Production to date.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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12. (a) Mining engineers and geologists report a very large body of ore which should be capable of producing for many years.

(b) 60 ft. of mineralization cross-cutting a probable dyke, and also considerable copper-glantz ore in a cross-cut of this mineralized zone. See map.

No blocked-out ore.

(c) Not placer

13. 23 miles to Winthrop,Wash.

14. Copper Glance Creek. Sufficient water available to furnish electric power for milling, mining, and camp.

15. No power now. Now using gasoline.

16. 3 men on pay-roll during season of 1950-1951.

17. Same as other report. See enclosed Form MF-103

18. No

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING COMPANY

Roy E. Corliss 8-30-50

Sample #1: J. & G. Claim, 13 ft. ledge, bottom left.

Cu	.76%	15.2 lbs.	@ 18.6¢	$ ~~2.85~~ 2.83 REC
Pb	1.13%	22.6 "	@ 12¢	2.71
Zn	.98%	19.6 "	@ 12¢	2.35
Ag	3 oz.		@ 90¢	2.70
Au	.12 oz.		@ $35	4.20
				14.79

Sample #2: J. & G. Claim, avg. sample at left ledge.

Cu	.87%	17.4 lbs.	@ 18.6	$ 3.24
Zn	.31%	6.2 lbs. REC	@ 12¢	.74
Ag	.98 oz		@ 90¢	.88
Au	.03 oz		@ $35	1.05
				5.91

Sample #3: J. & G. Claim, avg. sample at rt. ledge.

Cu	.61%	12.2 lbs.	@ 18.6¢	$ 2.27

Sample #4: Blossom at spring, 8 ft. to right.

Cu	1.2%	24 lbs.	@ 18.6¢	$ 4.46
Ag	.23 oz			.21
Au	.09 oz			3.15
				7.82

Sample #5: Blossom at spring, 1 ft. to right

Cu	.9%	18 lbs.	$ 3.35

Sample #6: Oxidized copper, first crosscut left, main tunnel.

Cu	18.7%	374 lbs.	$69.55
Ag		2.1 oz	1.89
Au		.3 oz	10.50
			81.94

Sample #7: Av. sample, left crosscut.

Cu	2.1%	42 lbs.	$ 7.82
Ag	.76 oz		.68
Au	.1 oz.		3.50
			12.00

Sample #8: Johnson sample

Cu	13.7%	274 lbs.	$51.00
Ag	3.0 oz		2.70
Au	.87 oz		30.45
			84.15

Sample #9: Right portal. Main Tunnel

Cu	2.9%	58 lbs.	$ 10.80
Ag	.6 oz		.54
Au	.07 oz		2.45
			13.79

Sample #10: 50 ft. from turn, left side about 5 ft. from floor.

Cu	.31%	6.2 lbs.	$1.15
Ag	.4 oz.		.36
			1.51

Sample #11: 50 ft. from turn, right, 4 ft. from floor.

Cu	.45%	9 lbs.	1.68
Ag	.3 oz		.27
			1.95

Sample #12: 2nd xcut right, in 5 ft. on left wall.

Cu	.14%	2.8 lbs	.52
Ag	.7 oz		.63
			1.15

Sample #13: 1st xcut right, face, along vein.

Cu	Rec ~~x~~3.9%	78 lbs.	$14.50
Ag	7.1 oz		6.39
Au	.03 oz		1.05
			21.94

Sample #14: Road below tunnel, 10 ft. below stump in line with big tree, 2 ft. above road bed.

Cu	.7%	14 lbs.	$ 2.61
Ag	.8 oz		.72
Au	.07 oz.		2.45
			5.78

Sample #15: 6 ft. up road from #14.

Cu	.21%	4.2 lbs.	$ .78
Ag	1.41 oz		1.27
Au	.009 oz		.32
			2.37

Sample #16: Under stump in line with tree. 10 ft. above #14.

Cu	1.5%	30 lbs.	5.58
Ag	17.2 oz		15.48
Au	2.9 oz		101.50
			122.56

Sample #17: 10 ft. below ~~#15~~ #16. Rec

Cu	1.4%	28 lbs.	$ 5.21
Ag	7.1 oz		6.34
Au	.03 oz		1.05
			12.60

Sample #18: Avg. sample on road. Vicinity of sample #16.

Cu	.3%	6 lbs.	$1.12
Ag	1.8 oz		1.62
			2.74

Sample #19: Grab sample at portal, lower tunnel, right entrance.

Cu	9.4%	188.2 lbs.	$35.20
Pb	1.6%	32 lbs.	3.84
Zn	2.1%	42 lbs.	5.04
Ag	3.3 oz		2.97
Au	.7 oz		24.50
			71.55

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING CO. BY ROY E. CORLISS
9-17-50

Grab sample taken from ledge at side of road near cabin above spring. Sample showed pyrites.

Ag	3.11 oz		$ 2.80
Au	.21 oz		7.35
Cu	.37%	7.4 lbs.	1.67
			11.82

Assays figures on the following metal prices

Ag 90¢ an oz
Au $35.an oz.
Cu 22.5¢ a lb.

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINE BY ROY E. CORLISS 9-25-50

Sample #1: Below road, below cabin

Cu	.43%	8.6 lbs.	$ 1.935
Ag	.29 oz		.261
Au	.002 oz.		.070
			2.266

Sample #2: Gray mud at spring.

Cu	.09%	1.8 lbs.	$ .405
Ag	2.1 oz		1.890
Au	.003 oz.		.105
			2.400

Sample #3: Above road at first bend near tunnel.

Cu	1.03%	20.6 lbs.	$ 4.635
Ag	3.02 oz		2.718
Au	.67 oz		23.450
			30.803

Sample #4: Sample at spring (soapy rock).

Cu	1.24%	24.8 lbs.	$ 5.580
Ag	1.97 oz		1.773
Au	.03 oz.		1.050
			8.403

Sample #5 Sample at spring (gray granular rock).

Cu	.87%	17.4 lbs.	$ 3.915
Ag	.62 oz.		.558
Au	.15 oz.		5.250
			9.723

SPECTROGRAPHICA ORE ANALYSIS PERFORMED BY

ROY E. CORLISS 9-8-50 FOR THE COPPER

GLANCE MINING COMPANY

In tunnel, 80 ft., at face.

Cu	.93%	18.6 lbs.	$ 3.46
Ag	1.5 oz.		1.35
As	Present		4.81
Mg	"		
Mo	"		
Zn	"		

Roy E. Corliss

REPORT ON COPPER GLANCE MINE

As per request of Mr. J. R. Atkeson, secretary of Copper Glance Mining Company, I visited the Copper Glance Mine August 13th and 14th with the assignment to t ake numerous samples for assay, to study the geology of the property, and to peruse the development work that has been completed as well as to look over the property in general. The following report is a testimony of what I have seen.

The Copper Glance property is located on the Methow River 66 miles from Pateros and 23 miles from the town of Winthrop at the junction of Copper Glance Creek and Eight Mile Creek. The mine camp is on the main road to Billy Goat Pass across the creek from the Bridgewater Forest Cam. The camp consists of a rustic log cabin which serves as a combination cook shack, bunk house, and storage room; and two smaller cabins that serve as bunk houses. This camp is within 100 feet of Eight Mile Creek and is part of the 5 acre mill site claimed by the company. The 3,900 feet of elevation atthis point seems to have made the area particularly suitable for the large stand of pine forest which dominates the claim.

The actual mining claims are 12 in number and reach from the creek to the 6,500 feet elevation mark in an east-west direction. (See map of claims at the end of this report.) Claims #1 and #2 are the original claims purchased by the owners. These claims were first staked before World War I, but the extent of the mining at that time was only a small amount of development work. The original claimants did go as far as sending 2-½ tons

of ore to the smelter and were paid for 20% copper and 12 ounces of silver (presentvalue about $100). The other ten claims surround the original claims and were staked after purchase of the originals. The underground development work is on claims #1 and#2 with the lowest portal being at the 5100 foot level on claim #1 and the upper portal at 5200 feet elevation on claim #2. 400 to 500 feet of development work has been performed at this time. One encouraging aspect of this work is that so far very little timbering has been needed resulting in reduced costs per foot of driven tunnel. Good mineralization is apparent underground as well as on the surface.

A 2¼ mile road leads from the camp to the mine but is traversable the full distance only by company jeep. The road would need some improving to accommodate automobiles but is adequate for present work requirements.

GEOLOGY

The deposits on the mine property occur in a mineralized zone that has been estimated to be from 1800 feet to 3000 feet in width (and even greater) and running from the upper basin between Sherman and Craggy Mountains to Eight Mile Creek, a difference in elevation of 3100 feet and a distance of about three miles. Time limitations prevented accurate measurements of distances involved. The heavy sulfide ore minerals which can be found throughout so much of the above zone are the result of replacement, secondary enrichment, and metamorphosis. They occur in veins, as can be seen in the tunnels, prospect pits, and the dozen or more outcrops on the property.

Sherman and Craggy Mountains are of igneous origin, being mainly granite cleaved by numerous quartz veins and dykes. It is probable that the mineralized zone in question is a dyke although intensive metamorphism, in addition to the porphyritic structure present, hides much of the characteristic dyke structure. Porphyritic structure is amenable to some of the world's greatest copper deposits, and it would seem to be that way at this mine with the rich copper glance mineral, a copper sulfide, occuring mostly in porphyries. The pyrite, arsenophyrite, bornite, sphalerite, galena, and garnierite that I viewed on this property occurs in veins.

The rock strata in this area strikes west-north-west and, in mining parlance, is "standing on end", its dip being 75° from the horizontal or 15° from the vertical.

The chalcopyrite, bornite, and copper glance present at the Copper Glance Mine are the principle minerals to be mined. They are dependable copper ores and usually carry good gold and silver values as can be witnessed by one $1300 assay obtained recently. Pyrite and arsenopyrite, while being of no particular value in themselves, can carry good gold and silver values. In my prospecting during this trip I found many samples of the aforementioned minerals as well as garnierite (nickel ore), galena (lead ore), sphalerite (zinc ore), and cinnabar (mercury ore). The prospect hole on the upper J. and G. claim was found to have some likely looking lead and zinc showings as well as copper.

In a highly mineralized sulfide deposit it is common to find all of the above sulfide ores occuring together. Evidence support the theory that this is a well mineralized area.

(Engineer's note: Since this report was started a spectrographic analysis of a representative pyrite, arsenopyrite, copper glance ore was made by the author. Although actual percentages of metals present were not calculated, the following estimations were made.)

Copper	7%	140 lbs. per ton	$20.00
Lead	2%	40 lbs. per ton	4.80
Zinc	2%	"	4.80
Silver	10 ounces		9.00
Gold	½ ounce		8.75
Cadmium	trace-no estimate made		
Mangamese			
Platinum metals			
		Approximate value	$ 55.35

I have taken 20 channel samples at regular intervals to be assayed at a later date. The samples were not necessarily taken where good mineral showings were present but at regular intervals along mineable rock which would have to be taken along with the higher grade ore. It will be the value of the lower grade that will determine the difference between profit and loss in this mine.

This property is so well mineralized that one can pick up good mineral showings at almost any hard rock exposure. Even seemingly valueless country rock shows minute metallic specks under a magnifying glass. Practically all of the test holes, excavated in the location of the claims, and outcrops show mineralization.

In prospecting above the mine many pieces of cinnabar float were found. Subsequent prospecting may result in discovery of mineable ore. With mercury selling for $100 for a 76 pound flask, it can not be ignored in the economic possibilities of this property.

UTILITIES AND TRANSPORT

Plenty of water is available at both Copper Glance Creek and Eight Mile Creek. These two streams will furnish more than enough water for mill and camp requirements. Electric power for the mill will have to be supplied by Diesel generator units. The high cost of stringing utility lines from Twisp 32 miles away would eliminate the use of commercial power.

The company already owns a mobile compressor outfit which supplies enough compressed air to meet drilling requirements.

Present camp facilities can handle at least a dozen men, and, with the abundance of native materials at hand, additional building poses no problem. Large stands of timber at the mill site could supply much of the lumber needed in both mill and camp construction work.

The transportation problem at this mine seems to be one that requires almost as much thought as the actual mine development.

In a small mill of 50 tons daily capacity, one large truck making one round trip daily to the Tacoma smelter would more than handle the daily output. With the type of ore available- a low grade, high tonnage ore- more mill and transport capacity would be needed. However, the large fleet of trucks necessary to haul such a resulting concentrate volume would require an enormous investment in

both initial cost and upkeep. It is my opinion that advantage should be taken of the Great Northern Railroad, which has a station at Pateros, 65 miles distant. In this way only a small number of trucks would be needed.

Another transport factor is that any lead and zinc concentrates would have to be shipped to the smelter at Kellogg, Idaho, as the Tacoma Smelter handles only copper, gold, and silver.

CONCLUSIONS

It is my opinion that the Copper Glance Mine has definite possibilities of becoming a large producing mine with proper management, development, and financing. This body of ore impresses me greatly. In my work in this state I have never seen as large an ore body as the showings at Copper Glance would seem to indicate. I am confident that further exploration and development will substantiate the expected size of the ore body and prove that it is capable of being mined at a profit.

The ore found at Copper Glance, with some exceptions, is not a high grade ore but can be classed as the "low grade, high tonnage variety" in which large volume mining and concentration are engaged. I would like to point out that most of the profitable producing mines (copper) of this age are of the above type. The largest metal mine of this state, Howe Sound's Holden Mine, for many years has mined ore worth less than $10.00 a ton and made handsome profits. In an operation of this type the ore is of low grade but is present in huge quantities, and all rock taken from the mine may carry value enough to be milled and concentrated. This makes the task of the miner easy, resulting in more tons of ore mined per man per day.

In a high grade property the development is carried on through barren country rock in the hopes of striking rich pockets of ore. If they do strike it, they are rich, if they miss they are broke.

MINERALS PRESENT AT THE COPPER GLANCE MINE

Name	Formula	Remarks
Pyrite Arsenopyrite	FeS) FeAsS)	Valueless in themselves but usually carry gold and silver.
Chalcopyrite B ornite Copper Glance	$CuFeS_2$) Cu_5FeS_4) Cu_2S)	Good copper ores and available in quantity. Carry gold and silver.
Garnierite	$(Ni,Mg)\ SiO_3nH_2O$	Nickel Ore
Cinnabar	HgS	Mercury ore
Galena	PbS	Lead ore
Sphalerite	ZnS	Zinc ore

REPORT OF VISIT TO MAZAMA QUEEN MILL AT MAZAMA

While visiting at Copper Glance I had the opportunity to visit the mill at the Mazama Queen Mine at Mazama. This mill has been acquired by the Copper Glance Mining Company in entirety and will be moved when production at Copper Glance warrants installation of a mill.

The outlay for this mill before the Second World War was approximately $75,000. Since then prices have doubled on most of the machines. Copper Glance Mine obtained this equipment for a fraction of the original cost, but it must be realized that it will involve some expense to recondition and move it. Even so, it is quite a bargain.

Roughly, the equipment consists of a jaw crusher, ball mill, rake classifier, table concentrator, flotation cells, conditioning tanks, thickeners, vacuum filter, apron feeder, misc. pumps and electric motors, air compressor, pipe, Buda engine, lumber, pipefittings, rail, fuel, tanks, assay laboratory, and all buildings. I would estimate that the present salvage value of the assay lab to be more than $1000.00

Roy E. Collins
Mining Engineer

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2422
Metal or Mineral
Date Received 3-13-52
Amount $
Participation (Government %)

Name and address of applicant

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle 3, Wash.

Date Nov. 15, 1951

If you have already filed MF-100, give date filed herewith, type of assistance requested Exploration Loan,

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

DEPARTMENT OF THE INTERIOR
Defense Minerals
RECEIVED
MAR 13 1952

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Copper Glance Mining Co
(Name of company)

By [illegible]
(Signature of authorized official)

Nov. 15th 1951
(Date)

President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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1. (a) Mining properties consisting of twelve mineralized claims in Okanogan County, Washington; in what is known as the Methow Valley Mining District, 23 miles north of town of Winthrop in State of Washington. See maps herewith.
   (b) We own the properties held under location.
   (c) Upper portion of Claim #1 as shown by dots and red markings on maps herewith.

2. (a) Copper with some gold, silver, lead, and zinc values Also on "J&G" Claim (at top of map) there is considerable showing of zinc and lead in outcropping as shown in enclosed pictures. Assays from this have run as high as $17.00 per ton. In applicant's opinion, this J&G Claim would not be developed with funds from this exploration loan. (It might be advisable for U.S.Govt.Engineer to examine this J&G claim.)
   (b) See accompanying Engineer and Geologist reports, maps, sketches, and photographs.
   Please return all of above items.

3. (a) Proposed new work.- Drive tunnel approximately 700 ft. drifting into hill on mineralized body until we come under the present dyke, where we have exposed 60 ft. of mineralized ore and considerable copper glantz ore in upper level. Then make two raises approximately 700 ft.high on this ore body. The drifting and raises will total approximately 2100 ft.or more. If engineering reports are correct, this should give us 700 ft.of backing and sufficient ore to operate for a long period of time.
   Estimated Approximate Costs;-
   $60,000.- 2100 ft.or more of tunnels & raises
   10,000.- Bulldozing for roadbuilding, surface-prospecting, and various needed clearing, etc.
   10,000.- Reserve for possible need of diamond drilling
   5,000.- Necessary additional building and equipment to house more men
   15,000.- Additional required equipment , including mucker, compressor, and miscellaneous items needed from time to time, such as fans, pipe, airhose etc.

3. (b) Start work in May, 1952

4. See map herewith

5. 2 cabins, now in good condition, will house 8 people.

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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6. For $12,500.-, we have an option to buy and move onto this property, 9 buildings and a 50-ton Denver Equipment Mill without power-plant. We estimate the above mill and buildings to be worth $75,000.00. We estimate a power-plant would cost from $3,000. to $4,500. additional. Power is expected to be developed from Copper Glance Creek. It is not contemplated to use exploration money to move above 50-ton mill to this property unless so advised by Government Engineer followed by special arrangement with the Government for such action. See Question #11.

7. (a) Equipment to be rented.- None

(b) Equipment to be purchased and estimated costs-

Power mucker	$3,000.-
Rails 1000 ft.of track	900.-
Air-compressor	5,000.-
2 Ore cars	800.-
2 Jack-hammers	600.-
2 Drifters	600.-
2 Stopers	600.-
Pipe & hose	1,000.-
Lumber	2,500.-
	15,000.-

(c) Equipment to be furnished by us.
Present camp facilities
2 Jack-hammers
GMC truck & air-compressor
Jeep
Air-hose
Ore-car
Track-rails
Miscl.mining tools

8.

1 supervisor	$500.- per mo.	
4 miners	92. each, per week	($2. per hour & 4 hours overtime @ $3. hourly)
2 muckers		
1 machinist		

9.

1 Engineer	$500.- per mo.	
1 Assayer	500.-	do
1 Cook	300.-	do
Food	500.	do
Accounting		
Office Expense	300.-	
Gas, oil, etc.	200.-	

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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10. (a) We will put up an amount equal to the amount put up by the Government.

(b) Yes

11. Copper Glance Creek carries sufficient water & fall to make it possible to develop electric power for less expense than running lines into property for use of electric power. This point should be given due consideration, as it will mean very cheap mining when property is developed.

Form MF-100
(May 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2422

Date received 3-13-52

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle 3, Wash.

Name and address of applicant

Date Nov. 15, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation
   (*b*) Are you operating this property as:
   - ☐ Owner. Owner doing exploration work
   - ☐ Lessee.
   - ☐ Contractor.

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5. Number of years in production ----------
   If not in production or operation, estimated date when production will begin at completion of exploration work
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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1. (a) Copper & a little gold and silver
   (b) Zinc & lead

2. Copper Glance Mine
   Hard-rock mine
   Mill to be installed
   (a) None
   (b) 100 ft. of crosscuts
   (c) 360 ft. of tunnels
   (d) 7 test-holes in different places on mining-property

   Mine is not flooded. No pumping problem.
   Various engineers class this mine as having the makings of one of the large mines of our country.

3. (a) 23 miles north of Winthrop in Okanogan County, Washington
   (b) Methow Mining District
   (c) Unsurveyed district in Chelan National Forest on "8-mile Creek" tributary to North Fork of Methow River. See sketch-map herewith
   (d) Okanogan County, State of Washington

4. (a) Doing exploration work
   (b) Owner

5. Not in production. Doing exploration work. Production will begin at completion of exploration work.

6. (a & b)
   R.B.LaFlamboy, President of the Copper Glance Mining Co., has had a wide business experience. His present occupation is Real Estate. He holds a Broker's License. He has been interested in mining most of his life and has assisted in the development and operation of mining at various times.
   J.R.Atkeson, Secy.-Treasurer, has been interested in mining for many years, and has been a very active leader in advancing the mining activities of the Northwest. He is considered a very capable man in this field.
   These men understand the importance of good business management and are capable of securing the right kind of mill men and placing proper men in the right positions to develop a smooth-running organization.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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7. (a) Some development work has been done; but, due to lack of roads it was impossible to properly develop until the last 3 years. Has not been in operation.
   (b) Due to lack of roads, this mineralized section of country has not been developed.
   (c) Maps and reports are enclosed herewith.

8.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
R.B.LaFlamboy Lakebay, Wash.	Pres. D	$667.82 coms.	$15,000.-	301,667	None	None	
Vice-Presidency recently vacated not yet refilled.						do	
J.R.Atkeson 4039 Evanston Av. Seattle 3, Wash.	Secy. D		$15,000.-	3,233,333		do	
C.A.Dever F.St.,Bremerton,Wn.	Stockholder			199,000		do	
Leah Hipp Lakebay,Wn.	Stockholder			125,000		do	
E.D.Richardson 2818 Valette St.,Bellingham,Wn.	Stockholder			100,000		do	
S.A.Hotchkiss Estate Winthrop	Stockholder			100,000		do	
Estate of Franklin Good,dcd. Mt.Vernon,Wash.	Stockholder			200,000		do	
	Totals	$667.82	[illegible]	4,259,000	-0-	-0-	-0-

9. Common Stock

(a) Authorized/	(b) Outstanding/	(c) Par Value/	(d) Shs. Outstanding/	(e) Dividends
$100,000.-	$87,996.-	$87,996.-	8,799,600	(None)

No Preferred Stock
Authorized or Outstanding

10. No Production to date

11. No Production to date.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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12. (a) Mining engineers and geologists report a very large body of ore which should be capable of producing for many years.

(b) 60 ft. of mineralization cross-cutiing a probable dyke, and also considerable copper-glantz ore in a cross-cut of this mineralized zone. See map.

No blocked-out ore.

(c) Not placer

13. 23 miles to Winthrop, Wash.

14. Copper Glance Creek. Sufficient water available to furnish electric power for milling, mining, and camp.

15. No power now. Now using gasoline.

16. 3 men on pay-roll during season of 1950-1951

17. Same as other report. See enclosed Form MF-103

18. No

REPORT ON COPPER GLANCE MINE

As per request of Mr. J. R. Atkenson, secretary of Copper Glance Mining Company, I visited the Copper Glance Mine August 13th and 14th with the assignment to take numerous samples for assay, to study the geology of the property, and to peruse the development work that has been completed as well as to look over the property in general. The following report is a testimony of what I have seen.

The Copper Glance property is located on the Methow River 66 miles from Pateros and 23 miles from the town of Winthrop at the junction of Copper Glance Creek and Eight Mile Creek. The mine camp is on the main road to Billy Goat Pass across the creek from the Bridgewater Forest Camp. The camp consists of a rustic log cabin which serves as a combination cook shack, bunk house, and storage room; and two smaller cabins that serve as bunk houses. This camp is within 100 feet of Eight Mile Creek and is part of the 5 acre mill site claimed by the company. The 3,900 feet of elevation at this point seems to have made the area particularly suitable for the large stand of pine forest which dominates the claim.

The actual mining claims are 12 in number and reach from the creek to the 6,500 feet elevation mark in an east-west direction. (See map of claims at the end of this report.) Claims #1 and #2 are the original claims purchased by the owners. These claims were first staked before World War I, but the extent of the mining at that time was only a small amount of development work. The original claimants did go as far as sending 2-½ tons of ore to the smelter and were paid for 20% copper and 12 ounces of silver (present value about $100). The other ten claims surround the original claims and were staked after purchase of the originals. The underground development work is on claims #1 and #2 with the lower portal being at the 5100 foot level on claim #1 and the upper portal at 5200 feet elevation on claim #2. 400 to 500 feet of development work has been performed at this time. One encouraging aspect of this work is that so far very little timbering has been needed resulting in reduced costs per foot of driven tunnel. Good mineralization is apparent underground as well as on the surface.

A 2½ mile road leads from the camp to the mine but is traversable the full distance only by company jeep. The road would need some improving to accomodate automobiles but is adequate for present work requirements.

GEOLOGY

The deposits on the mine property occur in a mineralized zone that has been estimated to be from 1800 feet to 3000 feet in width (and even greater) and running from the upper basin between Sherman and Craggy Mountains to Eight Mile Creek, a difference in elevation of 3100 feet and a distance of about three miles. Time limitations prevented accurate measurements of distances involved. The heavy sulfide ore minerals which can be found throughout so much of the above zone are the result of replacement, secondary enrichment, and metamorphosis. They occur in veins, as can be seen in the tunnels, prospect pits, and the dozen or more outcrops on the property.

Sherman and Craggy Mountains are of ingeous origin, being mainly granite cleaved by numerous quartz veins and dykes. It is probable that the mineralized zone in question is a dyke although intensive metamorphism, in addition to the porphyritic structure present, hides much of the characteristic dyke structure. Porphyritic structure is amenable to some of the world's greatest copper deposits, and it would seem to be that way at this mine with the rich copper glance mineral, a copper sulfide, occuring mostly in porphyries. The pyrite, arsenophyrite, bornite, sphalerite, galena, and garnierite that I viewed on this property occurs in veins.

The rock strata in this area strikes west-north-west and, in mining parlance, is "standing on end", its dip being 75° from the horizontal or 15° from the vertical.

The chalcopyrite, bornite, and copper glance present at the Copper Glance Mine are the principle minerals to be mined. They are dependable copper ores and usually carry good gold and silver values as can be witnessed by one $1300

assay obtained recently. Pyrite and arsenopyrite, while being of no particular value in themselves, can carry good gold and silver values. In my prospecting during this trip I found many samples of the aforementioned minerals as well as garnierite (nickel ore), galena (lead ore), sphalerite (zinc ore), and cinnabar (mercury ore). The prospect hole on the upper J. and G. claim was found to have some likely looking lead and zinc showing as well as copper.

In a highly mineralized sulfide deposit it is common to find all of the above sulfide ores occuring together. Evidence support the theory that this is a well mineralized area.

(Engineer's note: Since this report was started a spectrographic analysis of a representative pyrite, arsenopyrite, copper glance ore was made by the author. Although actual percentages of metals present were not calculated, the following estimations were made.)

Copper	7%	140 lbs. per ton	$20.00
Lead	2%	40 lbs. per ton	4.80
Zinc	2%	" "	4.80
Silver	10 ounces		9.00
Gold	½ ounce		8.75
Cadmium			
Manganese		trace - no estimate made	
Platinum metals			
			$ 55.35

I have taken 20 channel samples at regular intervals to be assayed at a later date. The samples were not necessarily taken where good mineral showings were present but at regular intervals along mineable rock which would have to be taken along with the higher grade ore. It will be the value of the lower grade that will determine the difference between profit and loss in this mine.

This property is so well mineralized that one can pick up good mineral showings at almost any hard rock exposure. Even seemingly valueless country rock shows minute metallic specks under a magnifying glass. Practically all of the test holes, excavated in the location of the claims, and outcrops show mineralization.

In prospecting above the mine many pieces of cinnabar float were found. Subsequent prospecting may result in discovery of mineable ore. With mercury selling for $100 for a 76 pound flask, it cannot be ignored in the economic possibilities of this property.

UTILITIES AND TRANSPORT

Plenty of water is available at both Copper Glance Creek and Eight Mile Creek. These two streams will furnish more than enough water for mill and camp requirements. Electric power for the mill will have to be supplied by Diesel generator units. The high cost of stringing utility lines from Twisp 32 miles away would eliminate the use of commercial power.

The Company already owns a mobile compressor outfit which supplies enough compressed air to meet drilling requirements.

Present camp facilities can handle at least a dozen men, and, with the abundance of native materials at hand, additional building poses no problem. Large stands of timber at the mill site could supply much of the lumber needed in both mill and camp construction work.

The transportation problem at this mine seems to be one that requires almost as much thought as the actual mine development.

In a small mill of 50 tons daily capacity, one large truck making one round trip daily to the Tacoma smelter would more than handle the daily output. With the type of ore available - a low grade, high tonnage ore - more mill and transport capacity would be needed. However, the large fleet of trucks necessary to haul such a resulting concentrate volume would require an enormous investment in both initial cost and upkeep. It is my opinion that advantage should be taken of the Great Northern Railroad, which has a station at Pateros, 65 miles distant. In this way only a small number of trucks would be needed.

Another transport factor is that any lead and zinc concentrates would have to be shipped to the smelter at Kellogg, Idaho, as the Tacoma Smelter handles only copper, gold, and silver.

CONCLUSIONS

It is my opinion that the Copper Glance Mine has definite possibilities of becoming a large producing mine with proper management, development, and financing. This body of ore impresses me greatly. In my work in this state I have never seen as large an ore body as the showings at Copper Glance would seem to indicate. I am confident that further exploration and development will substantiate the expected size of the ore body and prove that it is capable of being mined at a profit.

The ore found at Copper Glance, with some exceptions, is not a high grade ore but can be classed as the "low grade, high tonnage variety" in which large volume mining and concentration are engaged. I would like to point out that most of the profitable producing mines (copper) of this age are of the above type. The largest metal mine of this state, Howe Sound's Holden Mine, for many years has mined ore worth less than $10.00 a ton and made handsome profits. In an operation of this type the ore is of low grade but is present in huge quantities, and all rock taken from the mine may carry value enough to be milled and concentrated. This makes the task of the miner easy, resulting in more tons of ore mined per man per day.

In a high grade property the development is carried on through barren country rock in the hopes of striking rich pockets of ore. If they do strike it, they are rich; if they miss they are broke.

MINERALS PRESENT AT THE COPPER GLANCE MINE

Name	Formula	Remarks
Pyrite	FeS)	Valueless in themselves but usually carry gold & silver.
Arsenopyrite	FeAsS)	
Chalcopyrite	$CuFeS_2$)	Good copper ores and available in quantity. Carry gold and silver.
Bornite	Cu_5FeS_4)	
Copper Glance	Cu_2S)	
Garnierite	$(Ni, Mg)\ SiO_3nH_2O$	Nickel Ore
Cinnabar	HgS	Mercury Ore
Galena	PbS	Lead Ore
Sphalerite	ZnS	Zinc Ore

REPORT OF VISIT TO MAZAMA QUEEN MILL AT MAZAMA

While visiting at Copper Glance I had the opportunity to visit the mill at the Mazama Mine at Mazama. This mill has been acquired by the Copper Mining Company in entirety and will be moved when production at Copper Glance warrants installation of a mill.

The outlay for this mill before the Second World War was approximately $75,000. Since then prices have doubled on most of the machines. Copper Glance Mine obtained this equipment for a fraction of the original cost, but it must be realized that it will involve some expense to recondition and move it. Even so, it is quite a bargain.

Roughly, the equipment consists of a jaw crusher, ball mill, rake classifier, table concentrator, flotation cells, conditioning tanks, thickeners, vacuum filter, apron feeder, misc. pumps and electric motors, air compressor, pipe, Buda engine, lumber, pipefittings, rail, fuel, tanks, assay laboratory, and all buildings. I would estimate that the present salvage value of the assay lab. to be more than $1,000.00.

Robert E. Collins
Mining Engineer

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING COMPANY

Roy E. Corliss 8-30-50

Sample #1: J. & G. Claim, 13 ft. ledge, bottom left.

Cu	.76%	15.2 lbs.	@ 18.6¢	$ ~~2.85~~ 2.83 Rec
Pb	1.13%	22.6 "	@ 12¢	2.71
Zn	.98%	19.6 "	@ 12@	2.35
Ag	3 oz.		@ 90¢	2.70
Au	.12 oz.		@ $35	4.20
				14.79

Sample #2: J. & G. Claim, avg. sample at left ledge.

Cu	.87%	17.4 lbs.	@ 18.6	$ 3.24
Zn	.31%	6.2 lbs. Rec	@ 12¢	.74
Ag	.98 oz		@ 90¢	.88
Au	.03 oz		@ $35	1.05
				5.91

Sample #3: J. & G. Claim, avg. sample at rt. ledge.

Cu	.61%	12.2 lbs.	@ 18.6¢	$ 2.27

Sample #4: Blossom at spring, 8 ft. to right.

Cu	1.2%	24 lbs.	@ 18.6¢	$ 4.46
Ag	.23 oz			.21
Au	.09 oz			3.15
				7.82

Sample #5: Blossom at spring, 1 ft. to right

Cu	.9%	18 lbs.		$ 3.35

Sample #6: Oxidized copper, first crosscut left, main tunnel.

Cu	18.7%	374 lbs.		$69.55
Ag		2.1 oz		1.89
Au		.3 oz		10.50
				81.94

Sample #7: Av. sample, left crosscut.

Cu	2.1%	42 lbs.		$ 7.82
Ag	.76 oz			.68
Au	.1 oz.			3.50
				12.00

Sample #8: Johnson sample

Cu	13.7%	274 lbs.		$51.00
Ag	3.0 oz			2.70
Au	.87 oz			30.45
				84.15

Sample #9: Right portal. Main Tunnel

Cu	2.9%	58 lbs.	$ 10.80
Ag	.6 oz		.54
Au	.07 oz		2.45
			13.79

Sample #10: 50 ft. from turn, left side about 5 ft. from floor.

Cu	.31%	6.2 lbs.	$1.15
Ag	.4 oz.		.36
			1.51

3

Sample #11: 50 ft. from turn, right, 4 ft. from floor.

Cu	.45%	9 lbs.	1.68
Ag	.3 oz		.27
			1.95

4

Sample #12: 2nd xcut right, in 5 ft. on left wall.

Cu	.14%	2.8 lbs	.52
Ag	.7 oz		.63
			1.15

5

Sample #13: 1st xcut right, face, along vein.

Cu	REC x3.9%	78 lbs.	$14.50
Ag	7.1 oz		6.39
Au	.03 oz		1.05
			21.94

6

Sample #14: Road below tunnel, 10 ft. below stump in line with big tree, 2 ft. above road bed.

Cu	.7%	14 lbs.	$ 2.61
Ag	.8 oz		.72
Au	.07 oz.		2.45
			5.78

Sample #15: 6 ft. up road from #14.

Cu	.21%	4.2 lbs.	$ .78
Ag	1.41 oz		1.27
Au	.009 oz		.32
			2.37

Sample #16: Under stump in line with tree. 10 ft. above #14.

Cu	1.5%	30 lbs.	5.58
Ag	17.2 oz		15.48
Au	2.9 oz		101.50
			122.56

Sample #17: 10 ft. below ~~#1~~ #16 REC

Cu	1.4%	28 lbs.	$ 5.21
Ag	7.1 oz		6.34
Au	.03 oz		1.05
			12.60

Sample #18: Avg. sample on road. Vicinity of sample #16.

Cu	.3%	6 lbs.	$1.12
Ag	1.8 oz		1.62
			2.74

Sample #19: Grab sample at portal, lower tunnel, right entrance.

Cu	9.4%	188.2 lbs.	$35.20
Pb	1.6%	32 lbs.	3.84
Zn	2.1%	42 lbs.	5.04
Ag	3.3 oz		2.97
Au	.7 oz		24.50
			71.55

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING CO. BY ROY E. CORLISS
9-17-50

Grab sample taken from ledge at side of road near cabin above spring. Sample showed pyrites.

Ag	3.11 oz		$ 2.80
Au	.21 oz		7.35
Cu	.37%	7.4 lbs.	1.67
			11.82

Assays figures on the following metal prices

Ag 90¢ an oz
Au $35. an oz.
Cu 22.5¢ a lb.

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINE BY ROY E. CORLISS 9-25-50

Sample #1: Below road, below cabin

Cu	.43%	8.6 lbs.	$ 1.935
Ag	.29 oz		.261
Au	.002 oz.		.070
			2.266

Sample #2: Gray mud at spring.

Cu	.09%	1.8 lbs.	$ .405
Ag	2.1 oz		1.890
Au	.003 oz.		.105
			2.400

Sample #3: Above road at first bend near tunnel.

Cu	1.03%	20.6 lbs.	$ 4.635
Ag	3.02 oz		2.718
Au	.67 oz		23.450
			30.803

Sample #4: Sample at spring (soapy rock).

Cu	1.24%	24.8 lbs.	$ 5.580
Ag	1.97 oz		1.773
Au	.03 oz.		1.050
			8.403

Sample #5 Sample at spring (gray granular rock).

Cu	.87%	17.4 lbs.	$ 3.915
Ag	.62 oz.		.558
Au	.15 oz.		5.250
			9.723

SPECTROGRAPHICA ORE ANALYSIS PERFORMED BY

ROY E. CORLISS 9-8-50 FOR THE COPPER

GLANCE MINING COMPANY

In tunnel, 80 ft., at face.

Cu	.93%	18.6 lbs.	$ 3.46
Ag	1.5 oz.		1.35
As	Present		4.81
Mg	"		
Mo	"		
Zn	"		

7

Roy E. Corliss

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2422
Metal or Mineral
Date Received 3-13-52
Amount $
Participation (Government %)

Name and address of applicant

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle, 3, Wash

Date Nov. 15, 1951

If you have already filed MF-100, give date filed herewith, type of assistance requested exploration loan,

DMA Docket Number (if available)

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, a copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Copper Glance Mining Co. (Name of company) By [illegible] (Signature of authorized official)

Nov. 15th 1951. (Date) President (Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Copper Glance Mining Co. 4039 Evanston Av., Seattle 3, Wash.

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Application Form MF-103

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1. (a) Mining properties consisting of twelve mineralized claims in Okanogan County, Washington; in what is known as the Methow Valley Mining District, 23 miles north of town of Winthrop in State of Washington. See maps herewith.
   (b) We own the properties held under location.
   (c) Upper portion of Claim #1 as shown by dots and red markings on maps herewith.

2. (a) Copper with some gold, silver, lead, and zinc values Also on "J&G" Claim (at top of map) there is considerable showing of zinc and lead in outcropping as shown in enclosed pictures. Assays from this have run as high as $17.00 per ton. In applicant's opinion, this J&G Claim would not be developed with funds from this exploration loan. (It might be advisable for U.S.Govt.Engineer to examine this J&G claim.)
   (b) See accompanying Engineer and Geologist reports, maps, sketches, and photographs.
   Please return all of above items.

3. (a) Proposed new work.- Drive tunnel approximately 700 ft. drifting into hill on mineralized body until we come under the present dyke, where we have exposed 60 ft. of mineralized ore and considerable copper glantz ore in upper level. Then make two raises approximately 700 ft. high on this ore body. The drifting and raises will total approximately 2100 ft. or more. If engineering reports are correct, this should give us 700 ft. of backing and sufficient ore to operate for a long period of time.
   Estimated Approximate Costs:-
   $60,000.- 2100 ft. or more of tunnels & raises
   10,000.- Bulldozing for roadbuilding, surface-prospecting, and various needed clearing, etc.
   10,000.- Reserve for possible need of diamond drilling
   5,000.- Necessary additional building and equipment to house more men
   15,000.- Additional required equipment, including mucker, compressor, and miscellaneous items needed from time to time, such as fans, pipe, airhose etc.

3. (b) Start work in May,1952

4. See map herewith

5. 2 cabins, now in good condition, will house 8 people.

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Application Form MF-103

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6. For $12,500.-, we have an option to buy and move onto this property, 9 buildings and a 50-ton Denver Equipment Mill without power-plant. We estimate the above mill and buildings to be worth $75,000.00. We estimate a power-plant would cost from $3,000. to $4,500. additional. Power is expected to be developed from Copper Glance Creek. It is not contemplated to use exploration money to move above 50-ton mill to this property unless so advised by Government Engineer followed by special arrangement with the Government for such action. See Question #11.

7. (a) Equipment to be rented.- None

(b) Equipment to be purchased and estimated cost-

Power mucker	$3,000.-
Rails 1000 ft.of track	900.-
Air-compressor	5,000.-
2 Ore cars	800.-
2 Jack-hammers	600.-
2 Drifters	600.-
2 Stopers	600.-
Pipe & hose	1,000.-
Lumber	2,500.-
	15,000.-

(c) Equipment to be furnished by us.
Present camp facilities
2 Jack-hammers
GMC truck & air-compressor
Jeep
Air-hose
Ore-car
Track-rails
Miscl.mining tools

8.

1 supervisor	$500.- per mo.	
4 miners)	92.- each, per week	($2. per hour & 4 hours overtime @ $3. hourly)
2 muckers)		
1 machinist)		

9.

1 Engineer	$500.-	per mo.
1 Assayer	500.-	do
1 Cook	300.-	do
Food	500.-	do
Accounting)		
Office Expense)	300.-	
Gas, oil, etc.	200.-	

Copper Glance Mining Co. 4039 Evanston Av. Seattle 3, Wash.

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Application Form MF-103

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10. (a) We will put up an amount equal to the amount put up by the Government.

(b) Yes

11. Copper Glance Creek carries sufficient water & fall to make it possible to develop electric power for less expense than running lines into property for use of electric power. This point should be given due consideration, as it will mean very cheap mining when property is developed.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2422

Date received 3-13-52

Copper Glance Mining Co.
4039 Evanston Ave.
Seattle 3, Wash.

Name and address of applicant

Date Nov. 15 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. Not in operation
   (*b*) Are you operating this property as:
   ☐ Owner. Owner doing exploration work
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production _____
   If not in production or operation, estimated date when production will begin at completion of exploration work
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1952

Copper Glance Min[illegible]g Co., 4039 Evanston Av., Seat[illegible] 3, Wash.

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General Technical Data Form MF-100

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1. (a) Copper & a little gold and silver
   (b) Zinc & lead

2. Copper Glance Mine
   Hard-rock mine
   Mill to be installed
   (a) None
   (b) 100 ft. of crosscuts
   (c) 360 ft. of tunnels
   (d) 7 test-holes in different places on mining-property

   Mine is not flooded. No pumping problem.
   Various engineers class this mine as having the makings of one of the large mines of our country.

3. (a) 23 miles north of Winthrop in Okanogan County, Washington
   (b) Methow Mining District
   (c) Unsurveyed district in Chelan National Forest on "8-mile Creek" tributary to North Fork of Methow River. See sketch-map here-with
   (d) Okanogan County, State of Washington

4. (a) Doing exploration work
   (b) Owner

5. Not in production. Doing exploration work. Production will begin at completion of exploration work.

6. (a & b)
   R.B.LaFlamboy, President of the Copper Glance Mining Co., has had a wide business experience. His present occupation is real estate. He holds a Broker's License. He has been interested in mining most of his life and has assisted in the development and operation of mining at various times.
   J.R.Atkeson, Secy.-Treasurer, has been interested in mining for many years, and has been a very active leader in advancing the mining activities of the Northwest. He is considered a very capable man in this field.
   These men understand the importance of good business management and are capable of securing the right kind of mill men and placing proper men in the right positions to develop a smooth-running organization.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

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General Technical Data Form MF-100

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7. (a) Some development work has been done; but, due to lack of roads it was impossible to properly develop until the last 3 years. Has not been in operation.
   (b) Due to lack of roads, this mineralized section of country has not been developed.
   (c) Maps and reports are enclosed herewith.

8.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
R.B.LaFlamboy Lakebay, Wash.	Pres. D	$667.82 coms.	$15,000.-	301,667	None	None	
Vice-Presidency recently vacated not yet refilled						do	
J.R.Atkeson 4039 Evanston Av. Seattle 3, Wash.	Secy. D		$15,000.-	3,233,333		do	
C.A.Dever F.St.,Bremerton,Wn.	Stockholder			199,000		do	
Leah Hipp Lakebay,Wn.	Stockholder			125,000		do	
E.D.Richardson 2818 Valette St.,Bellingham,Wn.	Stockholder			100,000		do	
S.A.Hotchkiss Estate Winthrop	Stockholder			100,000		do	
Estate of Franklin Good,dcd. Mt.Vernon,Wash.	Stockholder			200,000		do	
Totals		$667.82		4,259,000	-0-	-0-	-0-

9. Common Stock

(a) Authorized/	(b) Outstanding/	(c) Par Value/	(d) Shs. Outstanding/	(e) Dividends
$100,000.-	$87,996.-	$87,996.-	8,799,600	(None)

No Preferred Stock
Authorized or Outstanding

10. No Production to date.

11. No Production to date.

Copper Glance Mining Co., 4039 Evanston Av., Seattle 3, Wash.

****

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12. (a) Mining engineers and geologists report a very large body of ore which should be capable of producing for many years.

(b) 60 ft. of mineralization cross-cutting a probable dyke, and also considerable copper-glantz ore in a cross-cut of this mineralized zone. See map.

No blocked-out ore.

(c) Not placer

13. 23 miles to Winthrop,Wash.

14. Copper Glance Creek. Sufficient water available to furnish electric power for milling, mining, and camp.

15. No power now. Now using gasoline.

16. 3 men on pay-roll during season of 1950-1951.

17. Same as other report. See enclosed Form MF-103

18. No

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING COMPANY

ROY E. CORLISS 8-30-50

Sample #1: J. & G. Claim, 13 ft. ledge, bottom left.

cu.	.76%	15.2 lbs. @ 18.6¢	$ 2.83 Rec.
Pb	1.13%	22.6 " @ 12¢	2.71
Zn	.98%	19.6 " @ 12¢	2.35
Ag	3 oz.	@ 90¢	2.70
Au	.12 "	@ $35	4.20
			14.79

Sample #2: J. & G. Claim, avg. sample at left ledge.

cu	.87%	17.4 lbs. @ 18.6	$ 3.24
Zn	.31%	6.2 "Rec @ 12¢	.74
Ag	.98 oz	@ 90¢	.88
Au	.03 "	@ $35	1.05
			5.91

Sample #3: J. & G. Claim, avg. sample at rt. ledge.

Cu	.61%	12.2 lbs. @ 18.6¢	$ 2.27

Sample #4: Blossom at spring, 8 ft. to right.

Cu	1.2%	24 lbs. @ 18.6¢	$ 4.46
Ag	.23 oz		.21
Au	.09 "		3.15
			$ 7.82

Sample #5: Blossom at spring, 1 ft. to right

Cu	.9%	18 lbs.	$ 3.35

Sample #6: Oxidized copper, first crosscut left, main tunnel.

Cu	18.7%	374 lbs.	$69.55
Ag		2.1 oz	1.89
Au		.3 "	10.50
			81.94

Sample #7: Av. sample, left crosscut.

Cu	2.1%	42 lbs.	$ 7.82
Ag	.76 oz		.68
Au	.1 "		3.50
			12.00

Sample #8: Johnson sample

Cu	13.7%	274 lbs.	$51.00
Ag	3.0 oz		2.70
Au	.87 "		30.45
			84.15

Sample #9: Right portal. Main Tunnel.

Cu	2.9%	58 lbs.	$10.80
Ag	.6 oz		.54
Au	.07 "		2.45
			13.79

Sample #10: 50 ft. from turn, left side about 5 ft. from floor.

Cu	.31%	6.2 lbs.	$ 1.15
Ag	.4 oz.		.36
			1.51

Sample #11: 50 ft. from turn, right, 4 ft. from floor.

Cu-	.45%	9 lbs.	1.68
Ag	.3 oz		.27
			1.95

Sample #12: 2nd xcut right, in 5 ft. on left wall.

Cu	.14%	2.8 lbs.	.52
Ag	.7 oz		.63
			1.15

Sample #13: 1st xcut right, face, along vein.

Cu Rec	3.9%	78 lbs.	$14.50
Ag	7.1 oz		6.39
Au	.03 "		1.05
			21.94

Sample #14: Road below tunnel, 10 ft. below stump in line with big tree, 2 ft. above road bed.

Cu	.7%	14 lbs.	$ 2.61
Ag	.8 oz		.72
Au	.07 "		2.45
			5.78

Sample #15: 6 ft. up road from #14.

Cu	.21%	4.2 lbs.	$ .78
Ag	1.41 oz		1.27
Au	.009 oz		.32
			2.37

Sample #16: Under stump in line with tree. 10 ft. above #14.

Cu	1.5%	30 lbs.	$ 5.58
Ag	17.2 oz		15.48
Au	2.9 oz		101.50
			122.56

Sample #17: 10 ft. below #16 Rec

Cu	1.4%	28 lbs.	$ 5.21
Ag	7.1 oz		6.34
Au	.03 oz		1.05
			12.60

Sample #18: Avg. sample on road. Vicinity of sample #16.

Cu	.3%	6 lbs.	$ 1.12
Ag	1.8 oz		1.62
			2.74

Sample #19: Grab sample at portal, lower tunnel, right entrance.

Cu	9.4%	188.2 lbs.	$35.20
Pb	1.6%	32 "	3.84
Zn	2.1%	42 "	5.04
Ag	3.3 oz		2.97
Au	.7 oz		24.50
			71.55

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINING CO. BY ROY E. CORLISS
9-17-50

Grab sample taken from ledge at side of road near cabin above spring.
Sample showed pyrites.

Ag	3.11 oz		$ 2.80
Au	.21 oz		7.35
Cu	.37%	7.4 lbs.	1.67
			11.82

Assays figures on the following metal prices.

Ag 90¢ an oz
Au $35 an oz
Cu 22.5¢ a lb.

ASSAYS PERFORMED FOR THE COPPER GLANCE
MINE BY ROY E. CORLISS 9-25-50

Sample #1: Below road, below cabin.

Cu	.43%	8.6 lbs.	$ 1.935
Ag	.29 oz		.261
Au	.002 oz.		.070
			2.266

Sample #2: Gray mud at spring.

Cu	.09%	1.8 lbs.	$ .405
Ag	2.1 oz		1.890
Au	.003 oz.		.105
			2.400

Sample #3: Above road at first bend near tunnel.

Cu	1.03%	20.6 lbs.	$ 4.635
Ag	3.02 oz		2.718
Au	.67 oz		23.450
			30.803

Sample #4: Sample at spring (soapy rock).

cu	1.24%	24.8 lbs.	$ 5.580
Ag	1.97 oz		1.773
Au	.03 oz		1.050
			8.403

Sample #5 Sample at spring (gray granular rock).

Cu	.87%	17.4 lbs.	$ 3.915
Ag	.62 oz		.558
Au	.15 oz		5.250
			9.723

SPECTROGRAPHICA ORE ANALYSIS PERFORMED BY
ROY E. CORLISS 9-8-50 FOR THE COPPER
GLANCE MINING COMPANY

In tunnel, 80 ft., at face.

Cu	.93%	18.6 lbs.	$ 3.46
Ag	1.5 oz		1.35
As	Present		4.81
Mg	"		
Mo	"		
Zn	"		

Roy E. Corliss

/s/ ROY E. CORLISS

REPORT ON COPPER GLANCE MINE

As per request of Mr. J. R. Atkeson, secretary of Copper Glance Mining Company, I visited the Copper Glance Mine August 13th and 14th with the assignment to take numerous samples for assay, to study the geology of the property, and to peruse the development work that has been completed as well as to look over the property in general. The following report is a testimony of what I have seen.

The Copper Glance property is located on the Methow River 66 miles from Pateros and 23 miles from the town of Winthrop at the junction of Copper Glance Creek and Eight Mile Creek. The mine camp is on the main road to Billy Goat Pass across the creek from the Bridgewater Forest Camp. The camp consists of a rustic log cabin which serves as a combination cook shack, bunk house, and storage room; and two smaller cabins that serve as bunk houses. This camp is within 100 feet of Eight Mile Creek and is part of the 5 acre mill site claimed by the company. The 3,900 feet of elevation at this point seems to have made the area particularly suitable for the large stand of pine forest which dominates the claim.

The actual mining claims are 12 in number and reach from the creek to the 6,500 feet elevation mark in an east-west direction. (See map of claims at the end of this report.) Claims #1 and #2 are the original claims purchased by the owners. These claims were first staked before World War I, but the extent of the mining at that time was only a small amount of development work. The original claimants did go as far as sending 2-$\frac{1}{4}$ tons of ore to the smelter and were paid for 20% copper and 12 ounces of silver (present value about $100). The other ten claims surround the original claims and were staked after purchase of the originals. The underground development work is on claims #1 and #2 with the lower portal being at the 5100 foot level on claim #1 and the upper portal at 5200 feet elevation on claim #2. 400 to 500 feet of development work has been performed at this time. One encouraging aspect of this work is that so far very little timbering has been needed resulting in reduced costs per foot of driven tunnel. Good mineralization is apparent underground as well as on the surface.

A $2\frac{1}{4}$ mile road leads from the camp to the mine but is traversable the full distance only by company jeep. The road would need some improving to accomodate automobiles but is adequate for present work requirements.

GEOLOGY

The deposits on the mine property occur in a mineralized zone that has been estimated to be from 1800 feet to 3000 feet in width (and even greater) and running from the upper basin between Sherman and Craggy Mountains to Eight Mile Creek, a difference in elevation of 3100 feet and a distance of about three miles. Time limitations prevented accurate measurements of distances involved. The heavy sulfide ore minerals which can be found throughout so much of the above zond are the result of replacement, secondary enrichment, and metamorphosis. They occur in veins, as can be seen in the tunnels, prospect pits, and the dozen or more outcrops on the property.

Sherman and Craggy Mountains are of ingeous origin, being mainly granite cleaved by numerous quartz veins and dykes. It is probable that the mineralized zone in question is a dyke although intensive metamorphism, in addition to the porphyritic structure present, hides much of the characteristic dyke structure. Porphyritic structure is amenable to some of the world's greatest copper deposits, and it would seem to be that way at this mine with the rich copper glance mineral, a copper sulfide, occuring mostly in porphyries. The pyrite, arsenophyrite, bornite, sphalerite, galena, and garnierite that I viewed on this property occurs in veins.

The rock strata in this area strikes west-north-west and, in mining parlance, is "standing on end", its dip being 75° from the horizontal or 15° from the vertical.

The chalcopyrite, bornite, and copper glance present at the Copper Glance Mine are the principle minerals to be mined. They are dependable copper ores and usually carry good gold and silver values as can be witnessed by one $1300

assay obtained recently. Pyrite and arsenopyrite, while being of no particular value in themselves, can carry good gold and silver values. In my prospecting during this trip I found many samples of the aforementioned minerals as well as gernierite (nickel ore), galena (lead ore), sphalerite (zinc ore), and cinnabar (mercury ore). The prospect hole on the upper J. and G. claim was found to have some likely looking lead and zinc showing as well as copper.

In a highly mineralized sulfide deposit it is common to find all of the above sulfide ores occuring together. Evidence support the theory that this is a well mineralized area.

(Engineer's note: Since this report was started a spectrographic analysis of a representative pyrite, arsenopyrite, copper glance ore was made by the author. Although actual percentages of metals present were not calculated, the following estimations were made.)

Copper	7%	140 lbs. per ton	$20.00
Lead	2%	40 lbs. per ton	4.80
Zinc	2%	" "	4.80
Silver	10 ounces		9.00
Gold	$\frac{1}{4}$ ounce		8.75
Cadmium Manganese Platinum metals	trace - no estimate made		
			$ 55.35

I have taken 20 channel samples at regular intervals to be assayed at a later date. The samples were not necessarily taken where good mineral showings were present but at regular intervals along mineable rock which would have to be taken along with the higher grade ore. It will be the value of the lower grade that will determine the difference between profit and loss in this mine.

This property is so well mineralized that one can pick up good mineral showings at almost any hard rock exposure. Even seemingly valueless country rock shows minute metallic specks under a magnifying glass. Practically all of the test holes, excavated in the location of the claims, and outcrops show mineralization.

In prospecting above the mine many pieces of cinnabar float were found. Subsequent prospecting may result in discovery of mineable ore. With mercury selling for $100 for a 76 pound flask, it cannot be ignored in the economic possibilities of this property.

UTILITIES AND TRANSPORT

Plenty of water is available at both Copper Glance Creek and Eight Mile Creek. These two streams will furnish more than enough water for mill and camp requirements. Electric power for the mill will have to be supplied by Diesel generator units. The high cost of stringing utility lines from Twisp 32 miles away would eliminate the use of commercial power.

The Company already owns a mobile compressor outfit which supplies enough compressed air to meet drilling requirements.

Present camp facilities can handle at least a dozen men, and, with the abundance of native materials at hand, additional building poses no problem. Large stands of timber at the mill site could supply much of the lumber needed in both mill and camp construction work.

The transportation problem at this mine seems to be one that requires almost as much thought as the actual mine development.

In a small mill of 50 tons daily capacity, one large truck making one round trip daily to the Tacoma smelter would more than handle the daily output. With the type of ore available - a low grade, high tonnage ore - more mill and transport capacity would be needed. However, the large fleet of trucks necessary to haul such a resulting concentrate volume would require an enormous investment in both initial cost and upkeep. It is my opinion that advantage should be taken of the Great Northern Railroad, which has a station at Pateros, 65 miles distant. In this way only a small number of trucks would be needed.

Another transport factor is that any lead and zinc concentrates would have to be shipped to the smelter at Kellogg, Idaho, as the Tacoma Smelter handles only copper, gold, and silver.

CONCLUSIONS

It is my opinion that the Copper Glance Mine has definite possibilities of becoming a large producing mine with proper management, development, and financing. This body of ore impresses me greatly. In my work in this state I have never seen as large an ore body as the showings at Copper Glance would seem to indicate. I am confident that further exploration and development will substantiate the expected size of the ore body and prove that it is capable of being mined at a profit.

The ore found at Copper Glance, with some exceptions, is not a high grade ore but can be classed as the "low grade, high tonnage variety" in which large volume mining and concentration are engaged. I would like to point out that most of the profitable producing mines (copper) of this age are of the above type. The largest metal mine of this state, Howe Sound's Holden Mine, for many years has mined ore worth less than $10.00 a ton and made handsome profits. In an operation of this type the ore is of low grade but is present in huge quantities, and all rock taken from the mine may carry value enough to be milled and concentrated. This makes the task of the miner easy, resulting in more tons of ore mined per man per day.

In a high grade property the development is carried on through barren country rock in the hopes of striking rich pockets of ore. If they do strike it, they are rich; if they miss they are broke.

MINERALS PRESENT AT THE COPPER GLANCE MINE

Name	Formula	Remarks
Pyrite Arsenopyrite	FeS) FeAsS)	Valueless in themselves but usually carry gold & silver.
Chalcopyrite Bornite Copper Glance	$CuFeS_2$) Cu_5FeS_4) Cu_2S)	Good copper ores and available in quantity. Carry gold and silver.
Garnierite	(Ni, Mg) SiO_3nH_2O	Nickel Ore
Cinnabar	HgS	Mercury Ore
Galena	PbS	Lead Ore
Sphalerite	ZnS	Zinc Ore

REPORT OF VISIT TO MAZAMA QUEEN MILL AT MAZAMA

While visiting at Copper Glance I had the opportunity to visit the mill at the Mazama Mine at Mazama. This mill has been acquired by the Copper Mining Company in entirety and will be moved when production at Copper Glance warrants installation of a mill.

The outlay for this mill before the Second World War was approximately $75,000. Since then prices have doubled on most of the machines. Copper Glance Mine obtained this equipment for a fraction of the original cost, but it must be reqlized that it will involve some expense to recondition and move it. Even so, it is quite a bargain.

Roughly, the equipment consists of a jaw crusher, ball mill, rake classifier, table concentrator, flotation calls, conditioning tanks, thickeners, vacuum filter, apron feeder, misc. pumps and electric motors, air compressor, pipe, Buda engine, lumber, pipefittings, rail, fuel, tanks, assay laboratory, and all buildings. I would estimate that the present salvage value of the assay lab. to be more than $1,000.00.

Roy E. Carlson
Mining Engineer

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Platinum metals)			
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Present camp facilities can handle at least a dozen men, and, with the abundance of native materials at hand, additional building poses no problem. Large stands of timber at the mill site could supply much of the lumber needed in both mill and camp construction work.

The transportation problem at this mine seems to be one that requires almost as much thought as the actual mine development.

In a small mill of 50 tons daily capacity, one large truck making one round trip daily to the Tacoma smelter would more than handle the daily output. With the type of ore available - a low grade, high tonnage ore - more mill and transport capacity would be needed. However, the large fleet of trucks necessary to haul such a resulting concentrate volume would require an enormous investment in both initial cost and upkeep. It is my opinion that advantage should be taken of the Great Northern Railroad, which has a station at Pateros, 65 miles distant. In this way only a small number of trucks would be needed.

Another transport factor is that any lead and zinc concentrates would have to be shipped to the smelter at Kellogg, Idaho, as the Tacoma Smelter handles only copper, gold, and silver.

CONCLUSIONS

It is my opinion that the Copper Glance Mine has definite possibilities of becoming a large producing mine with proper management, development, and financing. This body of ore impresses me greatly. In my work in this state I have never seen as large an ore body as the showings at Copper Glance would seem to indicate. I am confident that further exploration and development will substantiate the expected size of the ore body and prove that it is capable of being mined at a profit.

The ore found at Copper Glance, with some exceptions, is not a high grade ore but can be classed as the "low grade, high tonnage variety" in which large volume mining and concentration are engaged. I would like to point out that most of the profitable producing mines (copper) of this age are of the above type. The largest metal mine of this state, Howe Sound's Holden Mine, for many years has mined ore worth less than $10.00 a ton and made handsome profits. In an operation of this type the ore is of low grade but is present in huge quantities, and all rock taken from the mine may carry value enough to be milled and concentrated. This makes the task of the miner easy, resulting in more tons of ore mined per man per day.

In a high grade property the development is carried on through barren country rock in the hopes of striking rich pockets of ore. If they do strike it, they are rich; if they miss they are broke.

MINERALS PRESENT AT THE COPPER GLANCE MINE

Name	Formula	Remarks
Pyrite Arsenopyrite	FeS) FeAsS)	Valueless in themselves but usually carry gold & silver.
Chalcopyrite Bornite Copper Glance	$CuFeS_2$) Cu_5FeS_4) Cu_2S)	Good copper ores and available in quantity. Carry gold and silver.
Garnierite	$(Ni, Mg)\ SiO_3 nH_2O$	Nickel Ore
Cinnabar	HgS	Mercury Ore
Galena	PbS	Lead Ore
Sphalerite	ZnS	Zinc Ore

REPORT OF VISIT TO MAZAMA QUEEN MILL AT MAZAMA

While visiting at Copper Glance I had the opportunity to visit the mill at the Mazama Mine at Mazama. This mill has been acquired by the Copper Mining Company in entirety and will be moved when production at Copper Glance warrants installation of a mill.

The outlay for this mill before the Second World War was approximately $75,000. Since then prices have doubled on most of the machines. Copper Glance Mine obtained this equipment for a fraction of the original cost, but it must be reqlized that it will involve some expense to recondition and move it. Even so, it is quite a bargain.

Roughly, the equipment consists of a jaw crusher, ball mill, rake classifier, table concentrator, flotation calls, conditioning tanks, thickeners, vacuum filter, apron feeder, misc. pumps and electric motors, air compressor, pipe, Buda engine, lumber, pipefittings, rail, fuel, tanks, assay laboratory, and all buildings. I would estimate that the present salvage value of the assay lab. to be more than $1,000.00.

Roy E. Collins
Mining Engineer

Room 13, Post Office Building
Knoxville, Tennessee

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
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Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Admin.
Dept. of the Interior
Washington 25, D. C.

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Photo. of Aug 17- 1946
Shows the large ore outcrop on the J. and G. Claim in the Basin at head of Copper Glance Creek. one of the claims of the Copper Glance mining Company.
The Vein or outcrop is over 12 feet wide See map No (7)
Perry Gibson. in the lower right corner of picture.
8-30-1950.
See assays - No. 1-2-4-3

Photo taken early in Sept 1949 at the Copper Glance [redacted] mining Co Camp. shows main log Cabin and the small 10x10 Cabin built for extra sleeping Quarters.

See map

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Avenue, Seattle, Wash.

July 6 - 1950

COPPER GRANGE MINING COMPANY, INC.
4000 Evanston Ave., Seattle, Wash.

Shows entrance to the lower tunnel at Copper Grange mine. See map No (4)

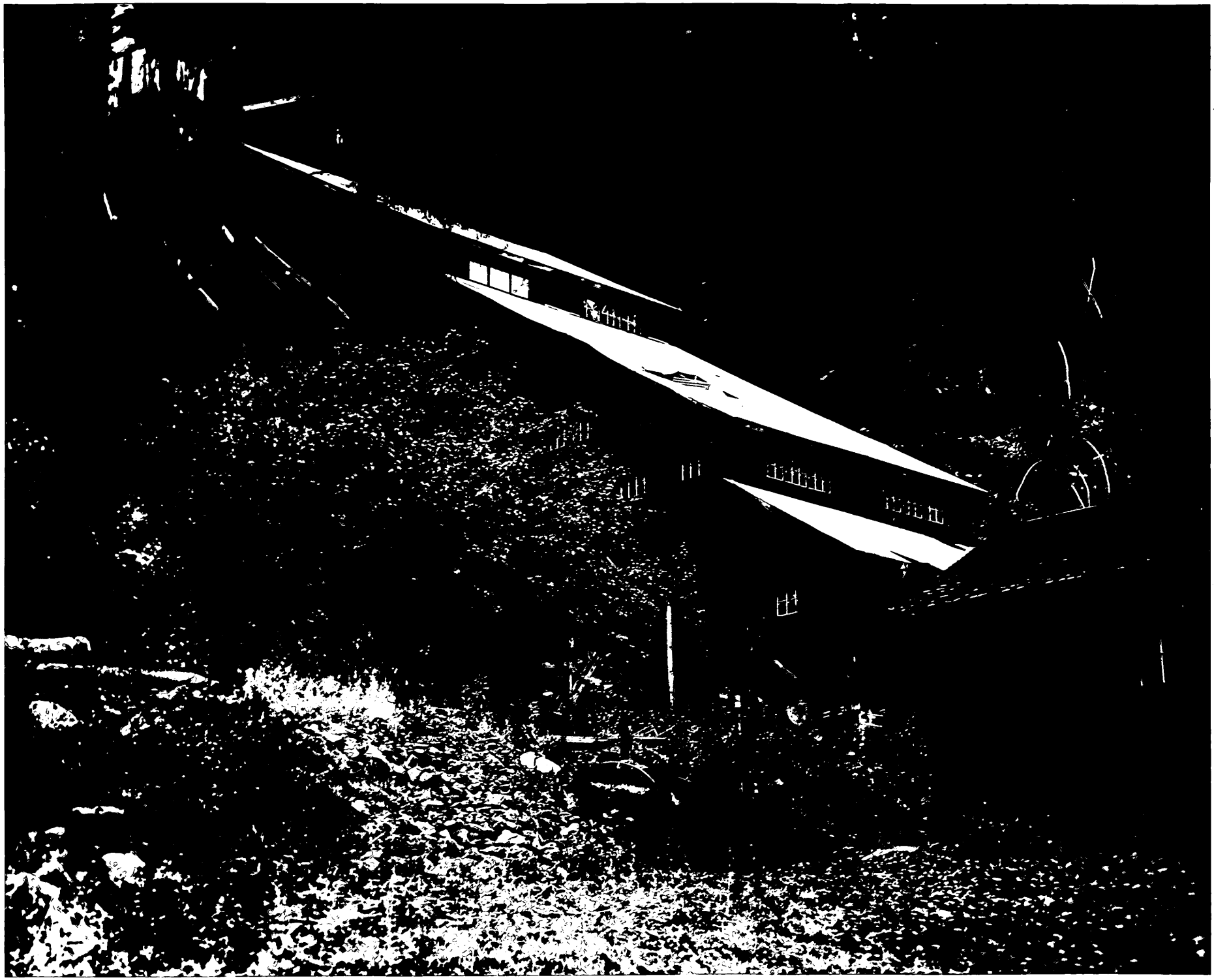
Left to right

J R Atkeson - Sec + Treas

R B. La Flamboy - President

Bert Wood V-President

Sam Sather - miner



COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Avenue, Seattle, Wash.

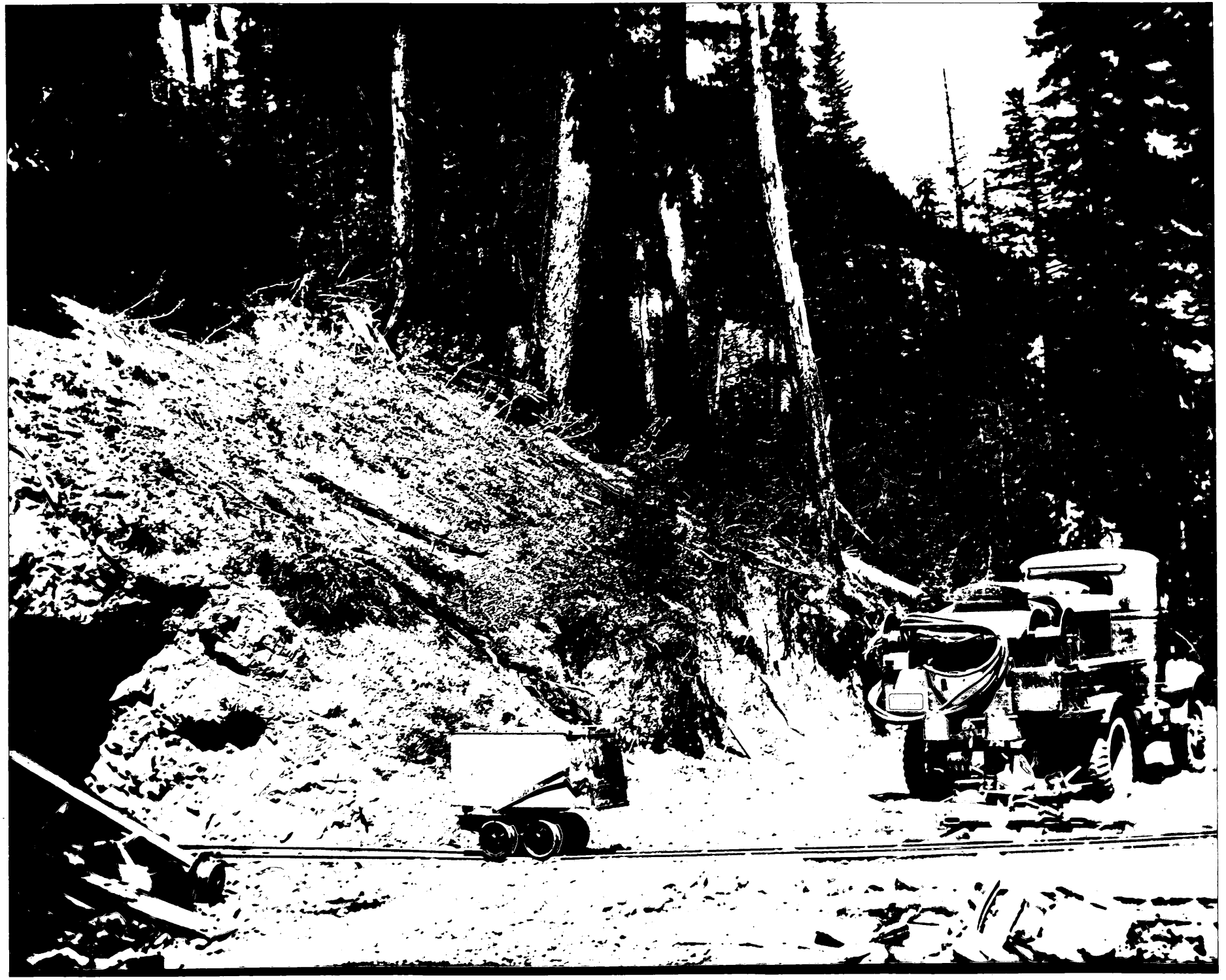
August 14 - 1950

Shows magama Queen mill and assay office which was contracted for by the Copper Glance mining Company in 1950. mill to be moved to Copper Glance mine soon as possible. Contract of purchase includes all Buildings machinery. equipment and fixtures - including all the Comp. equipment.

August 14 - 1950.

COPPER GRANGE MINING COMPANY, INC.
4030 Evanston Ave., Chicago, Ill.

Shows the Truck and Compressor and the Jeep on the Bridge across Copper Glance Creek on the road we built to the mine from our lower Camp about 2 1/4 miles at a Cost of about $5000.00 See map No (5)



COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

August 13. 1950

Shows entrance to the lower tunnel at the lower left corner of Photo. Track and Ore Car Truck and Compressor at the Copper Glance mine See map. No (4)

8-30-1950.

See assays by Carlise No. 6-7-9-10-11-12 + 13 and (9-8-1950 - #4,81)

June 22nd 1951

Compressor & truck - Jeep and ore car on the track at entrance to the lower tunnel at Copper Blaine mine. also couple of the men at mine. looking in the entrance of the tunnel.

COPPER CLAMOR MINING COMPANY, INC.
4030 Evanston Ave., Seattle, Wash.

Sept 14 - 1950

Everett & Swayne standing in front of ore deposit below the Old log Cabin. at the Copper Clamor mine we opened up with the dozer - about 25 feet wide see map No (2)

8-30-1950.

See assays by Carlise - 9-17-1950 - # 11.82
9-25-1950 - 2.26

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Sept 14 - 1950

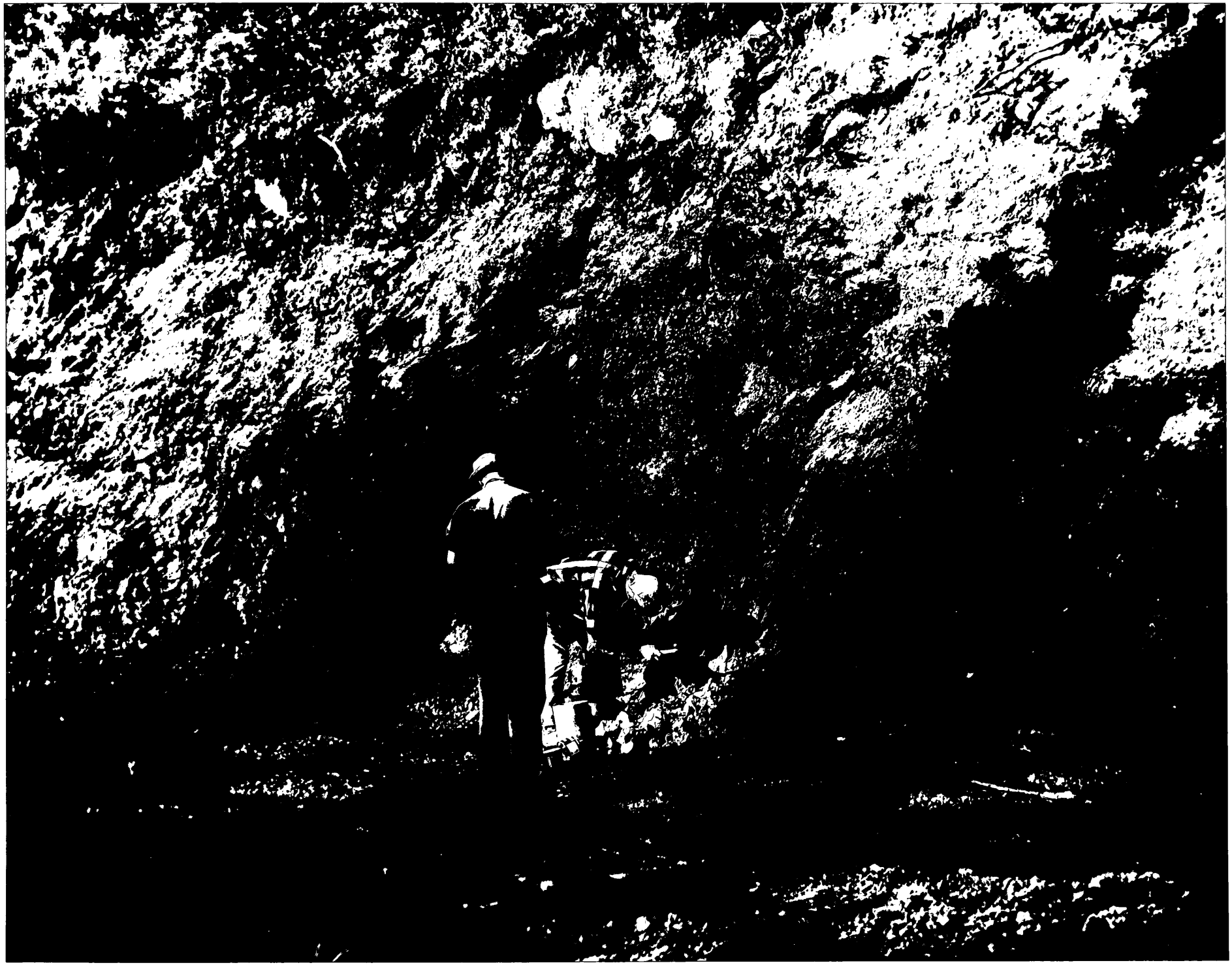
Shows a part of the large mineralized deposit at the spring near the old log cabin at the Copper Glance mine opened up with the Dozer. see map No (1)

left to right
J B Atkeson
Everett E Swayne

8-30-1950 -

9-25-1950

See assays by Carlise - No 445. (No - 2 - 4 - 5)



COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Sept 14 - 1950

Shows Cut made with the Dozer at the Spring near the old log Cabin at the Copper Glance mine. shows the large deposit of mineral bearing Ore. see map. No (1)

left to right
Everett R Swayne
Edan Johnson

8-30-1950.

See assays by Corliss - No 4+5. (+9-25.1950 - No 2.4+5

June 22 1951

Truck - Compressor - Ore Car and Jeep - and two of the men at entrance to the lower tunnel at Copper Blanco mine

August 13. 1950

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

at entrance to lower tunnel at the Copper Glance mine
left to right See map

Ray E Corliss - mining Engineer
J B Atkeson Sec & Treas
Sam Sather - miner

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Sept 14 - 1950

Shows large ore deposit along the road above the old log Cabin at the Copper Glance mine opened up with the Dozer, a distance of about 80 feet.

Everett & Swayne standing at about the Center of the deposit. the Jeep is near the upper end where it dips under the road see map. No (3)

8-30-1950.

See assays by Carlisa No 8-14-15-16-17-18

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

August 13. 1950.

Shows entrance to lower tunnel at lower left Corner of Photo. Track and Ore Car. Truck and Compressor. at the Copper Glance mine see map. No. (4)

8-30-1950
See assaye by Carlise - No - 6 - 7 - 9 - 10 - 11 - 12 - 13 and (9-8-1950 # 4.81

copper Glance Mining Company, Inc.
4039 Evanston Ave., Seattle, Wash.

Sept 14- 1950

Shows a part of the large mineralized deposit at the spring. near the old log Cabin at the Copper Glance mine opened up with the dozer. see map No (1)

left to right

J W Atkeson
Everett L Swayne

8-30-1950.

9-25-1950

See assays by Carlin No 4 + 5- (No -2-4-5)

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Sept 14 - 1950

Shows cut made with the Dozer at the spring near the old log Cabin at the Copper Glance mine - shows the large mineralized deposit that is partly opened up - see map No 1

left to right

Everett L Swayne

Edan Johnson

8-30-1950 -

See assays by Carlise No 4 + 5 - (+ 9-25-1950 - No 2-4-5)

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

Sept 14 - 1950
Everett & Swayne standing in front of ore deposit below the old log Cabin we opened up with the dozer about 25 feet wide see map. No (2)

8-30-1950
See assays by Corliss - 9-17-1950 - # 1182
9-25-1950 - 2,26

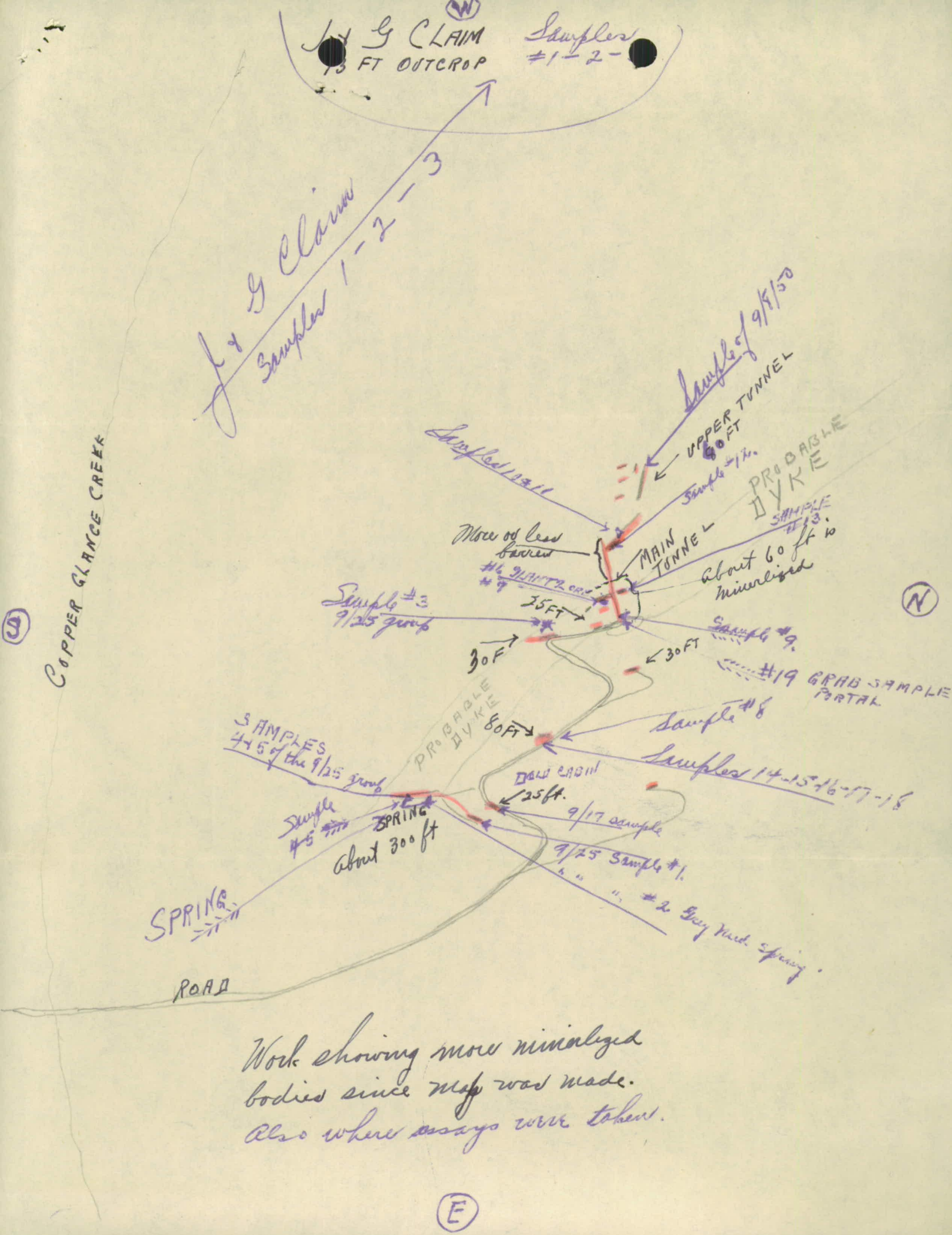
COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.

August 14 - 1950.

Shows the Truck and Compressor and the Jeep on the Bridge across Copper Glance Creek on the road we built to the mine from our lower Camp about 2 1/4 miles at a Cost of about $5000.00 See map No (5)

June 22 - 1951

Compressor and Truck - Jeep and Ore Car at entrance of the lower tunnel at Copper Bluce mine.
Also Couple of the men facing the tunnel entrance

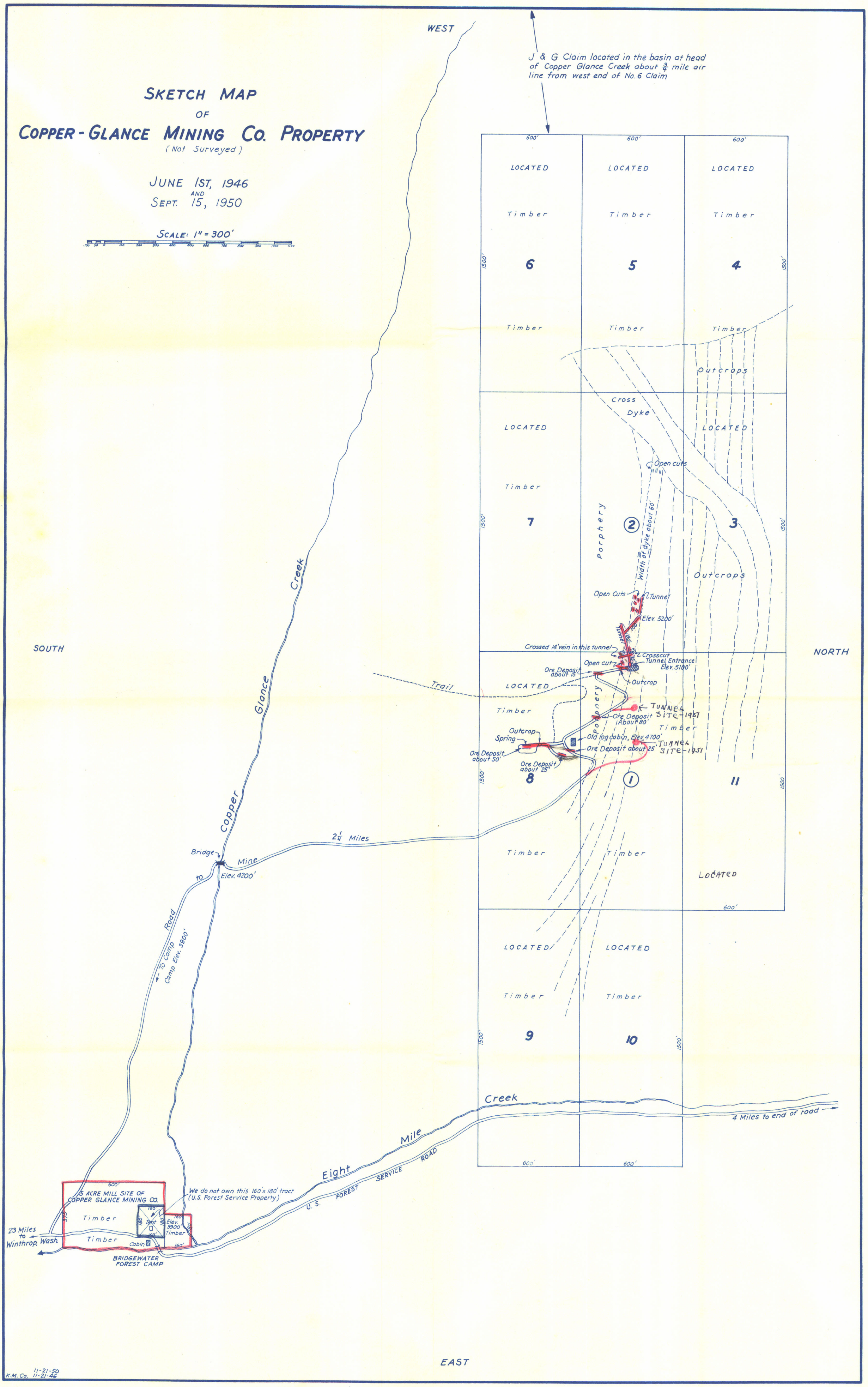


Work showing more mineralized bodies since map was made. Also where assays were taken.

SKETCH MAP
OF
COPPER-GLANCE MINING CO. PROPERTY
(Not Surveyed)

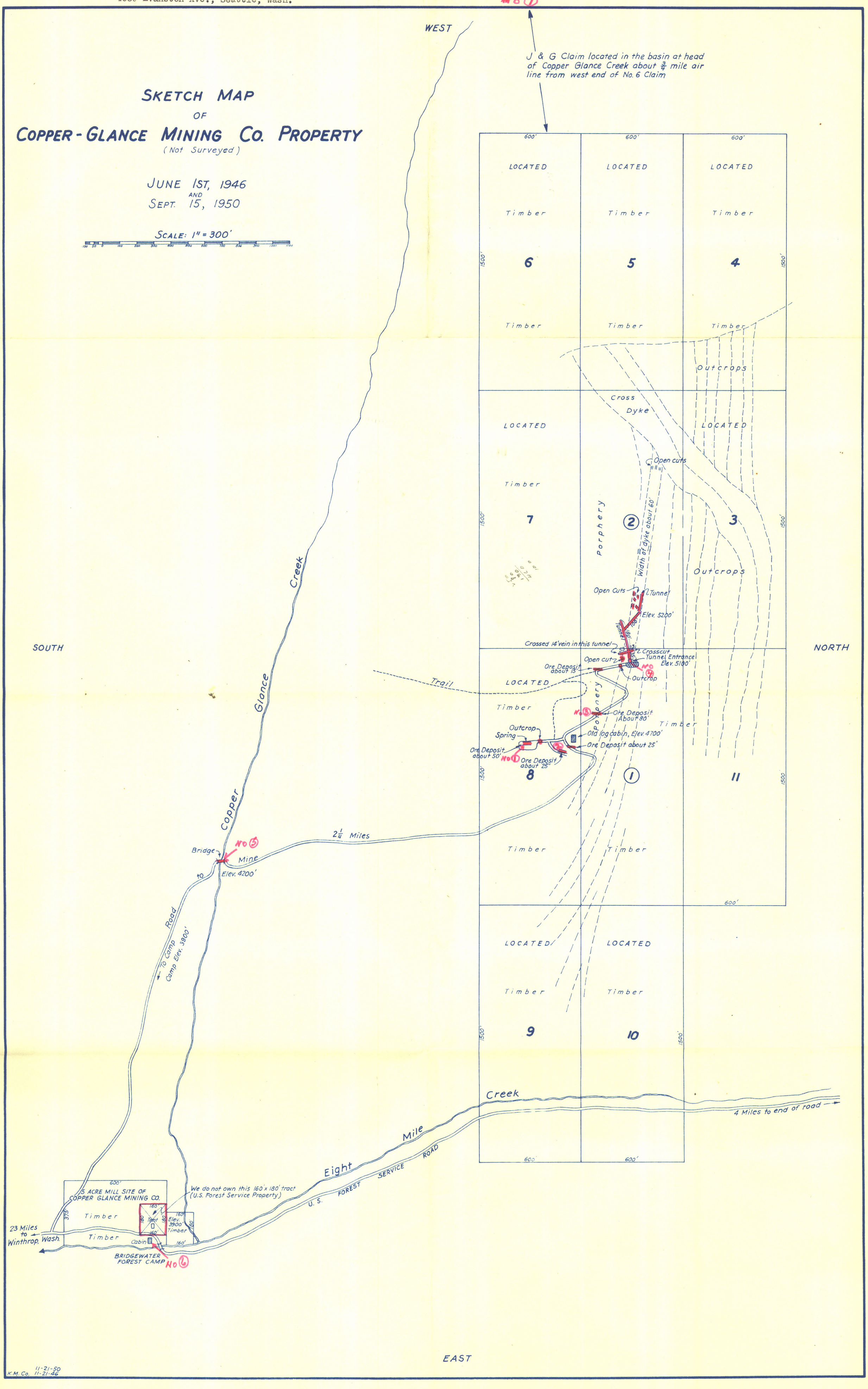
JUNE 1ST, 1946
AND
SEPT. 15, 1950

SCALE: 1" = 300'

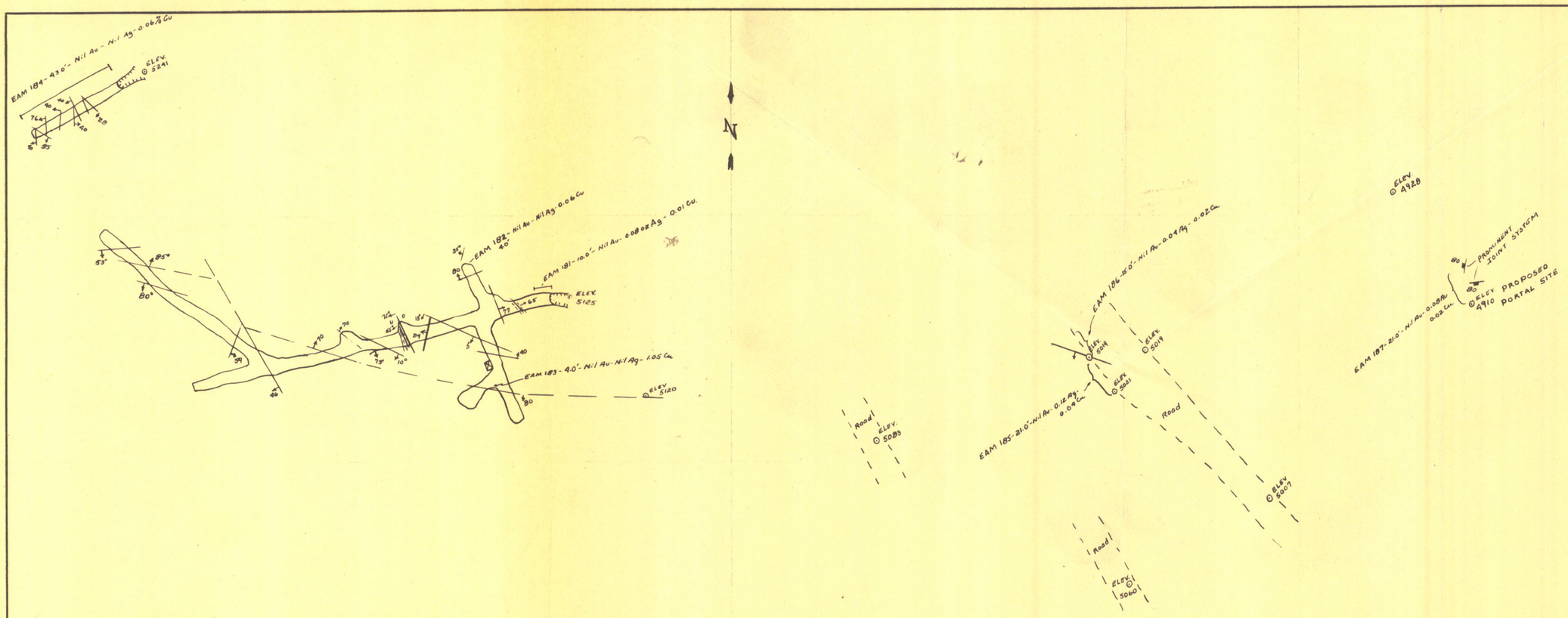


K.M. Co. 11-21-50 11-21-46

COPPER GLANCE MINING COMPANY, INC.
4039 Evanston Ave., Seattle, Wash.



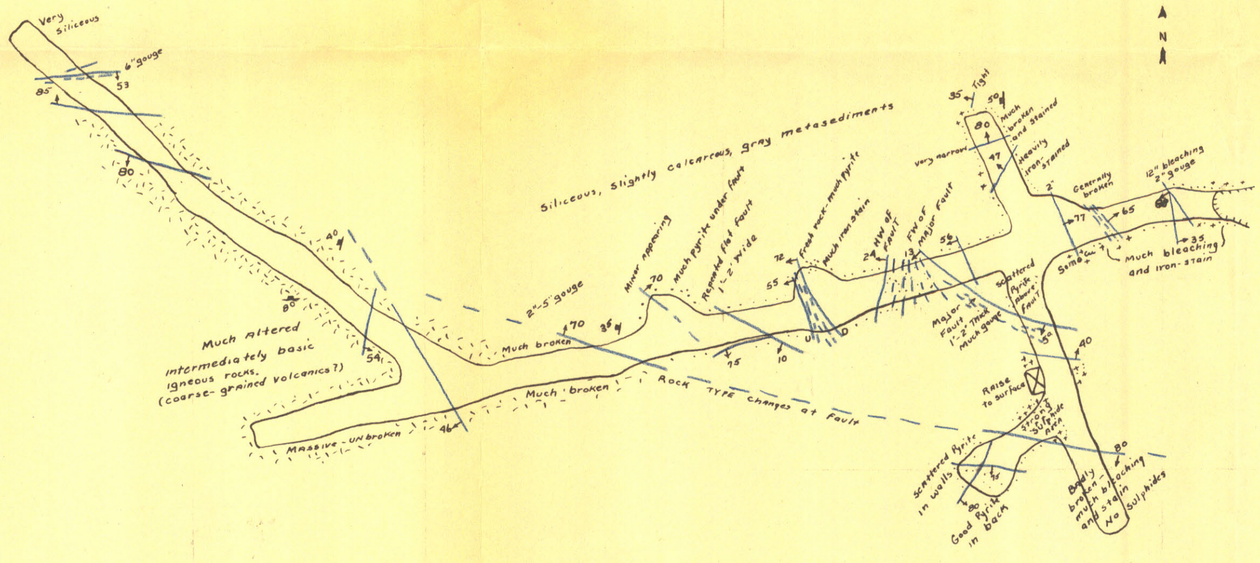
K.M. Co. 11-21-50 11-21-46



COMPOSITE OF TUNNELS AND PROPOSED NEW ADIT PORTAL SITE

1" = 40'

ASSAY DATA- EAM #- WIDTH- OZ AU- OZ AG- % Cu



MAIN ADIT

1" = 20'

LEGEND

Strike and dip of Joints

Fault, showing dip

PYRITE

Copper Minerals

COPPER GLANCE MINE

UNSURVEYED T. 38N., R. 20E., W. M.

OKANOGAN COUNTY, WASHINGTON

Tape and Compass Survey 6/16/52
E.A. Magill, USBM
W.P. Puffett, USGS
Geology by Puffett