UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Mine[illegible] Exploration Administration

OFFICIAL DOCKET FILE

Terminated [X] Cancelled [ ] Withdrawn [ ] DMEA No. 2335

This is the official contract file of a project closed without certification. It contains all official records of the project arranged in this manner:

Left Side

Certificate of Audit (Final).

Interim Audit(s).

✓ Report of Review.

✓ Closing Letter

Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

✓ Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

Subordination Agreement.

Leases and assignments of leases.

✓ Application and attachments.

Schedule of Collections.

✓ Operator's monthly reports and all attachments (latest on top).

Right Side

✓ Project summary.

✓ Work completed analysis.

✓ All other material is filed in chronological order with correspondence including the following reports as checked:

✓ Final Field Team Report. (Tab)

✓ Operator's Final Report.

✓ Interim Reports.

✓ On-Site Exam Report(s). (Tab)

Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number ____

Operator's Monthly Reports in folder number ____

ER 1/26/57
Reviewer's Initials and Date

10390

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of

Glacier Mining Company, Inc.
(a Washington Corporation)
4039 Evanston Avenue
Seattle 3, Washington

pertaining to Exploration Project Contract No. Idm-E362, Docket No. DMEA 2335, for the months of July 1952 through January 1953, covering a project for the exploration of copper.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Government representative who visited and examined the project, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reasons:

The administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

The Monthly Reports were supported by documentary proof of the costs incurred under the contract.

The major portion ($5,250.00) of the cost covered crosscutting at rates specified in the contract.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by contractor	$6,788.34
Exceptions:	-0-
Total accepted cost	$6,788.34

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Three thousand three hundred ninety four and 17/100 Dollars

$3,394.17

is considered valid and proper.

May 21, 1953

Robert M. Hull
Robert M. Hull, Auditor

C
O
P
Y

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

June 16, 1953

Mr. R. B. La Flamboy, President
Glacier Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Re: Docket No. DMEA-2335 (Copper)
Contract No. Idm-E362
Glacier Mine
Whatcom County, Washington

Dear Mr. La Flamboy:

This is with reference to the subject exploration contract between the Glacier Mining Company and the Government.

The final audit of the contract expenditures and the final reports of the Operator and the Field Team have been received and accepted by this Administration. Only $6,788.34 was expended of the total amount of $7,415.00 approved under the contract, 50 percent of which, or $3,394.17, represented the Government's share. There were no unused materials, supplies or equipment to be disposed of for the joint account of the Operator and the Government. The exploration work was completed in a satisfactory manner.

Because the results of the exploration were unfavorable, it is not our intention to make a certification of discovery of development which would create a lien against the subject property. We are, therefore, clearing our books and records with respect to this project. Your attention is called, however, to Article 7 (d) of the contract which requires the Operator to "keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract".

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

/s/ C. O. Mittendorf

Administrator

FLKnouse/db
6/15/53
cc to: Adm. Reading File
Docket
Messrs. C. H. Johnson, Rm. 3621
A. R. Kinkel, Rm. B-242A, GSA
Ellis

(Amendment to Change Starting and Completion Dates)

Docket No. DMEA 2335
(copper)

AMENDMENT NO. 2

It is agreed this 20th day of Nov. 195 2, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Glacier Mining Company

4039 Evanston Ave., Seattle 3, Wash.

each acting in consideration of the agreement to the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E362 of June 30 195 2 between the parties hereto be modified and amended to change ~~the starting date from to within of the date of the contract and the~~ completion period from 4 (No. of months) to eight (8) (No. of months) from the date of the contract. The effective date of this amendment shall be October 30 195 2.

This amendment is made by authority granted the Executive Office, DMA Field Team, Region II in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum".

Executed in sextuplicate the day and year first above written.

GLACIER MINING COMPANY
(Operator)
By [signature] Pres.

The United States of America
By [signature]
~~A. E. Weissenborn, Exec. Officer~~
DMEA Field Team, Region II
M. E. Volin, Acting Exec. Officer

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

GLACIER MINING COMPANY

Docket No. DMEA 2335 (copper) Contract Idm-E362

Justification of Amendment No. 2

Amendment No. 2 changes the completion date of the contract from four to eight months. Progress on the project has been slower than anticipated and the extension is necessary to complete the project.

E. A. Magill

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

AMENDMENT NO. 1

It is agreed this 15 day of October 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and Glacier Mining Company, 4039 Evanston Ave., Seattle 3, Washington

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 362 of June 30 1952 between the parties hereto be modified and amended as described in Exhibit "F" attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be June 30 1952.

This amendment is made by authority granted the Executive Officer, DMEA Field Team, Region II, in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum."

Executed in sextuplicate the day and year first above written.

Glacier Mining Company
(Operator)

By [signature]
Pres.

THE UNITED STATES OF AMERICA

By [signature]
A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

GLACIER MINING COMPANY

AMENDMENT NO. I

EXHIBIT "F"

Charges and Modifications

Under Estimated Cost of the Project

Stage I under:

(7) Miscellaneous

Add:

Moving bulldozer to and from project	$25.00
Travel for supplies	20.00

GLACIER MINING COMPANY

Justification for Amendment No. 1

Amendment No. 1 has been prepared to allow for certain contingencies which were not foreseen when the contract was prepared and which were necessary in order that the work could be done.

Travel in the amount of $20.00 has been allowed. Moving the bulldozer to and from the property in the amount of $25.00 has been allowed.

With these allowances Stage I of the project was completed satisfactorily at a cost of $326.66 less than the allowable cost.

E. A. Magill

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2335

COMMODITY copper

Idm-E362

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR Government's copy
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 30th day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Glacier Mining Company, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Washington
4039 Evanston Avenue
Seattle 3, Washington
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Washington, County of Whatcom, described as follows:[3] The Glacier Mine located 1½ miles North of Glacier in Sec. 4, T.39 N., R.7E. W. M. Mt. Baker Mining district, and consisting of the following mining claims: Bralorne, Midas, No. 10, Wedge, Glacier, and No. 4, situated as outlined on the attached survey map marked "Exhibit 'B'" and made a part hereof.
the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

~~(b) That the Operator is a lessee in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within thirty days from the date of this contract shall commence work on a project of exploration for[5] Copper

in or upon the described land; and shall bring the project to completion within a period of 4 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related ~~initial~~ allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—Repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance and payroll taxes.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes) or any other indirect costs, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $3,707.50, which is 50 percent of $7,415.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* ----------

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. O. Mittendorf
Acting Administrator
Defense Minerals
Exploration Administration

Glacier Mining Company, Inc.
(Operator)

By J. R. Atkeson Sec.

I, I hereby, certify that I am the Secretary of the corporation named as Operator herein; that I am the party, who signed this contract on behalf of the Operator, was then Secretary of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

J. R. Atkeson

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
GLACIER MINING COMPANY, INC.
GLACIER MINE
DOCKET NO. DMEA-2335

EXHIBIT "A"

Description of the Work

The purpose of the work is to explore for copper mineralization. The property is described on the attached map, "U. S. Department of Interior, D.M.E.A. Docket No. 2335-Glacier Mine, Whatcom County, Washington." This work is to be done in two stages, and if the results obtained from the work done in Stage No. 1 does not justify further work, in the opinion of the Government, the work in Stage No. 2 will not be undertaken.

The work to be done consists of the following:

Stage No. 1

Trenching six "Proposed cuts" with a tractor-dozer as indicated on the aforementioned map.

Stage No. 2

Drive 150 feet of not to exceed 5' x 7' cross-section size "Proposed crosscut" as indicated on the aforementioned map.

Estimated Cost of the Project
(*Indicates allowable maximum)

Stage No. 1

(1) Independent Contracts

Tractor w/dozer (D-8 caterpillar or equivalent size) including operator, supplies and repairs -- 80 hours @ $15/hr.	$1,200.00*	$1,200.00*

(2) Labor, Supervision, Consultants

One Foreman Supervisor to supervise and direct the tractor work, camp maintenance, keep the working time record of laborers and tractor operators, prepare required reports and do whatever is needed to keep the program progressing - 10 eight-hour shifts @ $20/shift	$ 200.00	
Two Laborers - 12.5 eight-hour shifts @ $16/shift	200.00	
A mining engineer and a geologist to map, sample and prepare technical progress reports for the Government- 2 days @ $50/day	100.00*	$ 500.00

(The costs above indicated include overtime pay on a 48-hour week basis, Workmen's Compensation and Employees' Liability Insurance)

(3) Operating Materials & Supplies

Miscellaneous tools and supplies	140.00

(4) Operating Equipment

None

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

None

(7) Miscellaneous

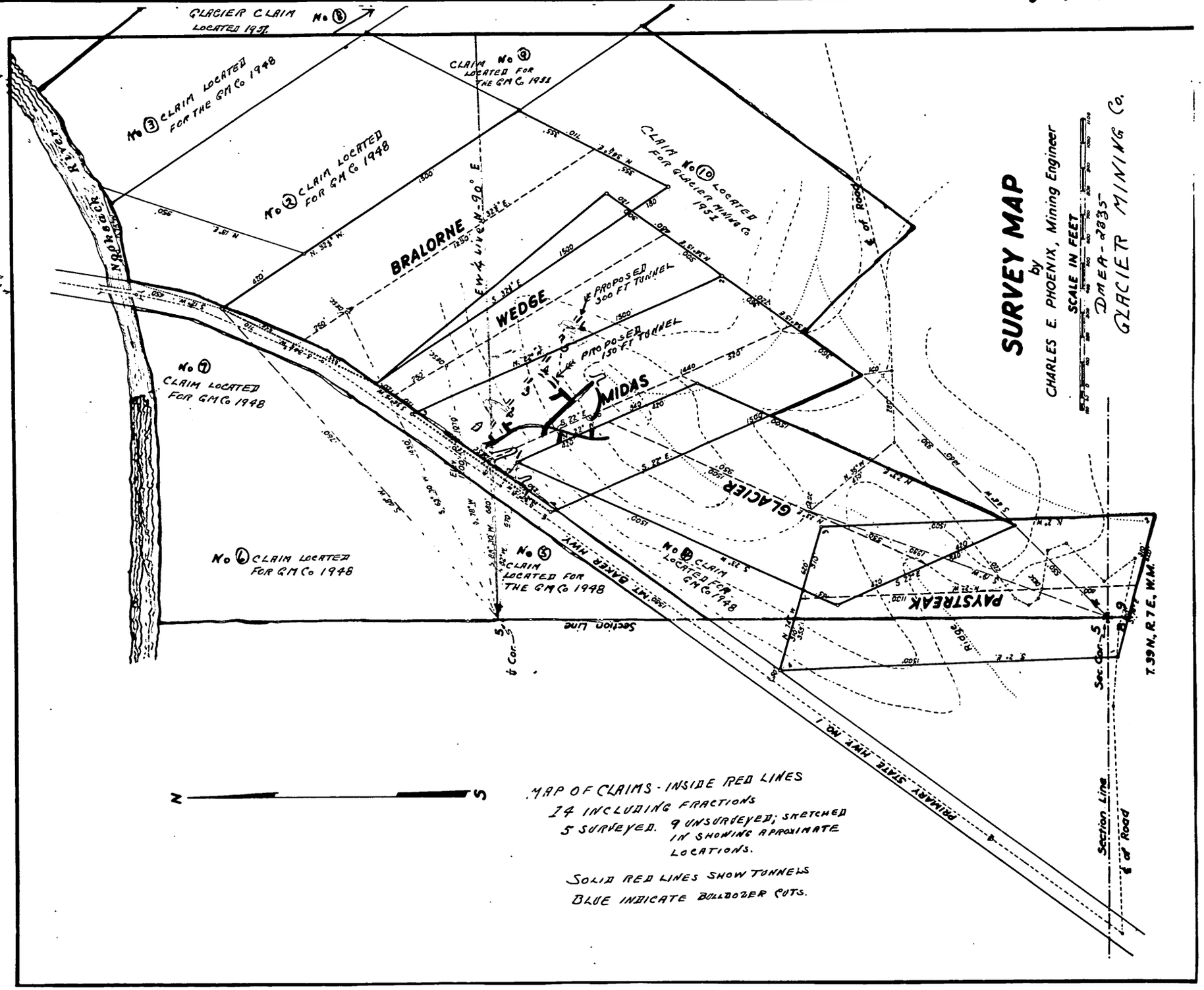
Sample Analyses	25.00*
Total estimated costs, Stage I	$1,865.00*

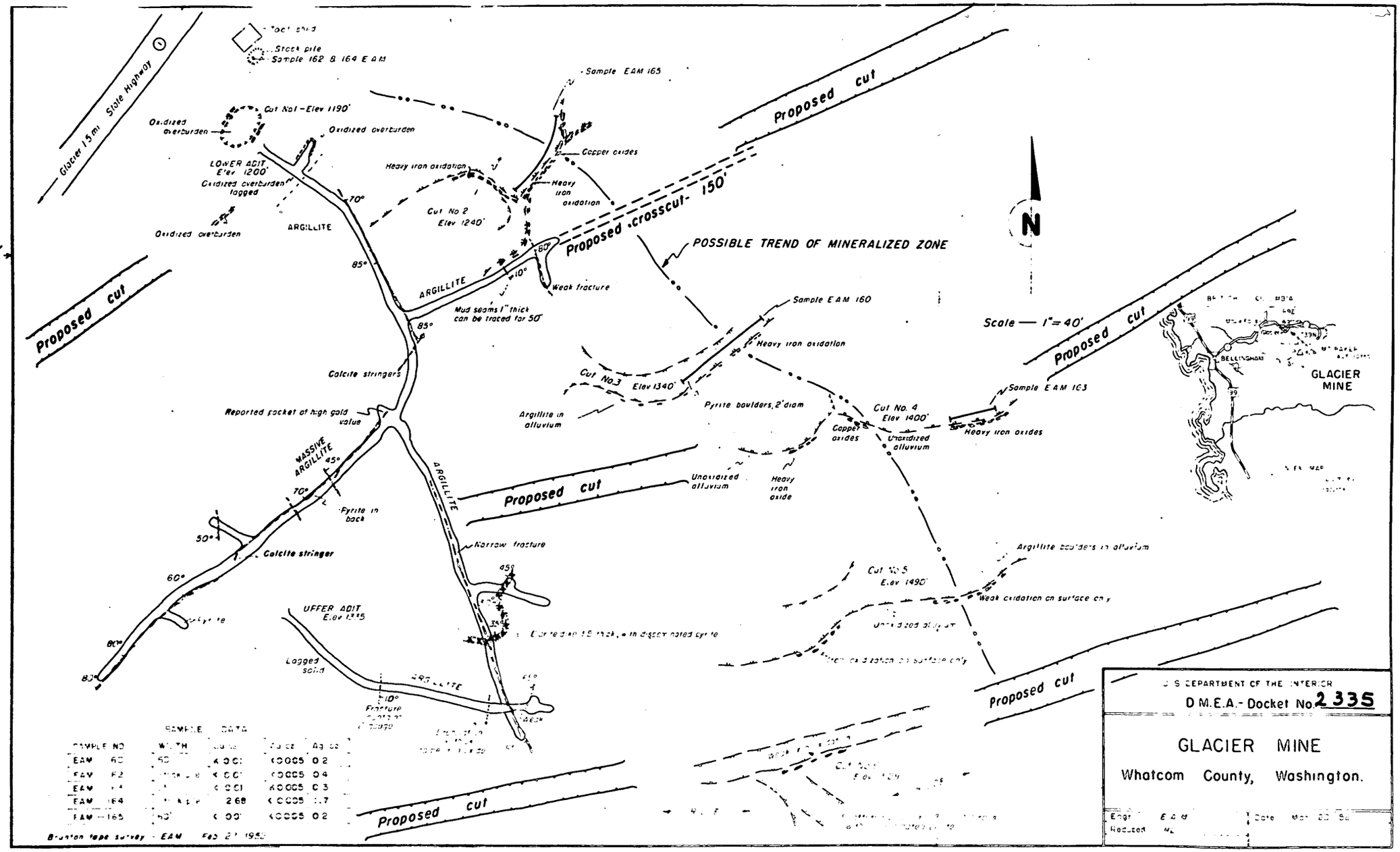
Stage No. 2

The Government will contribute to the cost of crosscutting on the basis of unit cost in lieu of actual cost and to the engineering and geology costs and the cost of sample analyses on the basis of actual costs as below indicated.

Crosscutting 150 feet of 5'x7' cross section @ $35/ft. (excluding engineering and geology)	$5,250.00*	
A mining engineer and a geologist to map, sample, and prepare technical progress reports for the Government- 4 days divided between them @ 50/day	200.00*	
Sample analyses	100.00	
Total estimated cost of Stage 2		$5,550.00*
Total estimated cost of contract		$7,415.00*
Government participation @ 50%		$3,707.50*

EXHIBIT "B"


SURVEY MAP
by
CHARLES E. PHOENIX, Mining Engineer
SCALE IN FEET
DMEA-2835
GLACIER MINING Co.
GLACIER CLAIM LOCATED 1951 No. 8
No. 3 CLAIM LOCATED FOR THE GM Co 1948
No. 2 CLAIM LOCATED FOR GM Co 1948
CLAIM No. 9 LOCATED FOR THE GM Co. 1951
CLAIM No. 10 LOCATED FOR GLACIER MINING Co 1951
BRALORNE
WEDGE
MIDAS
GLACIER
PAYSTREAK
PROPOSED 300 FT TUNNEL
PROPOSED 150 FT TUNNEL
No. 7 CLAIM LOCATED FOR GM Co 1948
No. 6 CLAIM LOCATED FOR GM Co 1948
No. 5 CLAIM LOCATED FOR THE GM Co 1948
No. 4 CLAIM LOCATED FOR GM Co 1948
RIVER
Section Line
Sec. Cor.
T.39N., R.7E., W.M.
PRIMARY STATE HWY. NO. 1
MT. BAKER HWY.
MAP OF CLAIMS - INSIDE RED LINES
24 INCLUDING FRACTIONS
5 SURVEYED. 9 UNSURVEYED; SKETCHED IN SHOWING APROXIMATE LOCATIONS.
SOLID RED LINES SHOW TUNNELS
BLUE INDICATE BULLDOZER CUTS.
N
S


Glacier 1.5 mi State Highway
Stock pile
Sample 162 & 164 E A M
Sample E A M 165
Cut No1 – Elev 1190'
Oxidized overburden
Oxidized overburden
LOWER ADIT
Elev 1200'
Oxidized overburden
lagged
Oxidized overburden
ARGILLITE
Heavy iron oxidation
Cut No 2
Elev 1240'
Copper oxides
Heavy iron oxidation
Proposed crosscut - 150'
POSSIBLE TREND OF MINERALIZED ZONE
Proposed cut
Proposed cut
ARGILLITE
Weak fracture
Mud seams 1" thick can be traced far 50'
Calcite stringers
Reported pocket of high gold value
MASSIVE ARGILLITE
Pyrite in back
Calcite stringer
ARGILLITE
Narrow fracture
Proposed cut
UPPER ADIT
Elev 1335
Lagged solid
ARGILLITE
Fracture
Proposed cut
Sample E A M 160
Heavy iron oxidation
Cut No.3
Elev 1340'
Argillite in alluvium
Pyrite boulders, 2' diam
Cut No. 4
Elev 1400'
Copper oxides
Unoxidized alluvium
Heavy iron oxides
Sample E A M 163
Unoxidized alluvium
Heavy iron oxide
Argillite boulders in alluvium
Cut No 5
Elev 1490'
Weak oxidation on surface only
Proposed cut
Proposed cut
Proposed cut
Scale — 1" = 40'
N
BELLINGHAM
GLACIER MINE
SAMPLE DATA
SAMPLE NO | WIDTH | Au oz | Cu oz | Ag oz
EAM 60 | 50 | <0.001 | <0.0005 | 0.2
EAM 62 | [illegible] | <0.001 | <0.0005 | 0.4
EAM [illegible] | [illegible] | <0.001 | <0.0005 | 0.3
EAM 164 | [illegible] | 2.68 | <0.0005 | 1.7
EAM 165 | 50' | <0.001 | <0.0005 | 0.2
Brunton tape survey - EAM Feb 27 1950
U S DEPARTMENT OF THE INTERIOR
D.M.E.A.- Docket No. 2335
GLACIER MINE
Whatcom County, Washington.
Engr E A M
Reduced M.L.
Date Mar 20 '50

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-2335
Metal or Mineral
Date Received 1-21-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1952

Glacier Mining Co.Inc.
4039 Evanston Av.
Seattle 3, Wash.

Name and address of applicant

Date Dec.31,1951

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

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.

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.

Glacier Mining Co., Inc.
(Name of company)

By [illegible]
(Signature of authorized official)

Dec. 31, 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

Glacier Mining Co.,Inc. MF-103
4039 Evanston Av., Seattle 3, Wash.
****

1.(a) Fourteen claims including fractions, located in Mt.Baker District, some adjoining highway, 1½ miles north of town of Glacier, Wash.

(b) Held under Miner's Location Claims

(c) Midas, and part of Wedge, Sec.4, T 39, NR 7E
Note 1- Same
Note 2- No

2.(a) Copper; possibly some gold and silver

(b) R.E.Corliss, Mining Engineer's report, and assays, together with maps, AND PHOTOS.
-------Please return above Engineer's report, maps, and assays.-----
Oxidization zone uncovered by bulldozer, approximately 40 ft.to 60 ft. in width, showing considerable iron pyrites; assays fair per cent of copper for surface showing. Six cuts have been made across this zone, showing it extends to apex of hill.

****

3.(a) Propose to drive tunnel approximately 300 ft. through the oxidized zone to intersect the outcrop showing in the 5th cut as marked on map.
Propose to drive tunnel approximately 150 ft. from present tunnel as shown on map, to cut underneath and cross cut outcrop approximately 200 ft. below showing on surface.
Propose to hold in reserve $20,000.00 for diamond drilling, providing this is necessary.

$9,000.-	300 ft. tunnel @ $30.- per ft.
4,500.-	150 ft. do @ $30.- do
	Includes gas, oil, powder, track, fuse, caps, bits, etc.
10,000.-	Bulldozing to open ore body on surface
20,000.-	Reserve for diamond drilling
750.-	Drifter
300.-	Ore car
3,500.-	Mucking machine 12 B
5,000.-	Engineering supervising estimate
2,000.-	Clearing & burning estimate
500.-	Repairs
250.-	Accounting
1,000.-	Misc.expense, trucking, supplies, etc.
350.-	Assays
57,150.00	

(b) With no delays or breakdowns, four to six months

Glacier Mining Co., Inc.
4039 Evanston Av., Seattle 3, Wash.

MF-103

****

4. R.E.Corliss, Mining Engineer's Report
   Marked Map, showing tunnels and open cuts
   Assays

Please return all above.

****

5. None

****

6. None

Glacier Mining Co. Inc. LF-103
4039 Evanston Av., Seattle 3, Wash.

****

7.(a) None

(b) Drifter $750.00
Ore Car 300.00
(Mucking Machine
(12B / 3500.00

(c) Compressor, air-hose,
Jack-hammer
Other small tools
Total Value - - - $3100.00

Glacier Mining Co.Inc. NF-103
4039 Evanston Av., Seattle 3, Wash.

****

8.-

$4725.36	2 miners	$2.38 per hour	4½ months
3510.--	2 muckers	$1.87½ do	do
8235.36			

2340.- 1 supervisor $20.- per day

10080.- 1 dozer man & dozer $96.- per day
1 helper @ $16.- per day
Estimated 90 days @ $112.- per day

1920.- Clearing & burning
2 men 60 days @ $16.- per man per day

****

9.-

Power, gas, oil, fuse, caps, powder,
grease, track, bits, etc.,
are all covered under blanket estimate
of $30.- per foot cost of tunnel 450 ft. long.

$2660.-, Engineering costs, approximate.
Based on $500.- per mo. for a
little over 4½ months.

350.- Assaying

250.- Accounting

-0- Water - no cost

-0- No utilities

1000.- Miscl.Expense- Such as going after supplies,
trucking here, and unforeseen expenses

500.- Repairs to equipment, estimated

****

10-

(a) 50% of the estimated cost

(b) Yes

****

11.-

When we opened up this property, chalcopyrite boulders were found imbedded in the oxidized gravel near foot of the hill. We put in a prospect tunnel to determine if it was a mineralized zone or a glacier deposit. Our tunnel work of about 1300 ft. of tunnel and crosscuts showed us to be in a mineralized bed of argelite, or as some engineers have spoken of as andesite. This bed had many faults and little stringers carrying gold values and some values in copper. We then found in this mineralized argelite, many places where there were chalcopyrite buttons imbedded in the argelite. These buttons assayed about the same as the boulders. This has led us to believe that the copper ore lies below the bed of argelite.

We feel that these chalcopyrite boulders must have broken through this argelite and rolled down the hill.

Our next step was to bulldoze some cuts around the hill to see if we could find the place where the chalcopyrite boulders might have come through from below. We now have uncovered an iron pyrite showing which looks like a capping to a vein.

We have spent a great deal of money on this property and new need Government help to assist us in finishing the job.

Some of above referred to boulders weighed over 2 tons each, and if they came from depth as indications led us to believe, there would seem to be a likely prospect of uncovering a copper ore body under the argelite. If a good geological report could be made on this property, we believe it would be of benefit, and we feel that the cost of such a report should be incorporated in this expleration program.

If a real body of milling ore is uncovered on this property, it will mean cheap mining.

We adjoin the river, and our claims on which we are doing the exploration work, are bordered by the Mt.Baker Highway, which is a good paved road.

We are located 1½ miles from railway shipping point.

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-2335

Date received

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1952

Glacier Mining Co. Inc.
4020 Yanston Av.
Seattle 3, Wash.

Name and address of applicant

Date Dec. 31, 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.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____
   If not in production or operation, estimated date when production will begin _____
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.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
R. D. Larimoboy, Takeby, Wn.	Pres. D	—	15,000-	55017	None	None	
Robt. Lood, Bellingham, Wn. BELFAIR	Vice Pres. D	3887.50 Coms	20,000-	751500	None	None	
J. R. Atkeson, Seattle	Sec. Treas. D		15,000-	1021100		do	
L. V. Mickenbach Bremerton Wn.				1000000		do	
S. L. Kerr, Bremerton, Wn.				250000		do	
D. D. Schmeer do				250000		do	
Elizabeth Abby, Seattle				187500		do	
Dorothy L. Cumins do				187000		do	
	Total		x x x x x	4000000	None	x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 100,000.	$ 00,210.00	$ 00,310.00	0,021000	None Paid
Preferred stock None	$ xx	$ xx	$ xx		do

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

Glacier Mining Co. Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

1. (a) Copper, some gold and silver
   (b) Still in exploration stage

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

2. (a) None
(b) Approximately 1300 ft. of drifts and crosscuts
(c) Approximately 1300 ft. Two adits
(d) None

No water to contend with on present levels

Glacier Mining Co. Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

3. (a) 1½ miles northeast of town of Glacier, Wash., railroad shipping point.
   (b) Mt. Baker mining district
   (c) Sec. 4, Twp. 39, NR 7 E
   (d) Whatcom County, Wash.

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

4. (a) Exploration work is being carried on
(b) Owners

***

5. (Not in production. Production can begin in 4½ to 6 months, providing present exploration program proves ore body of sufficient size and value

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

6. (a) Glacier Mining Co. has men on its board who have a good general business experience. One is a real estate broker of many years experience who understands the importance of good business management. One, J.R.Atkeson, has had many years experience in mine development management.

(b) The Directors look after the management of the property through an experienced mine supervisor.

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

7. (a) Up to this time we have driven approximately 1300 ft. of tunnels and crosscuts. We have also made 6 cuts with a dozer across the side of the hill to prove oxidized zone runs to top of hill. Most of work has been in mineralized rock. We have not suspended operations.

(b) No adjoining properties. Mt.Baker mining district. Neighboring properties are ; Lone Jack, Silver Tip, Great Excelsior

(c) Refer to enclosed
Engineer's report
Assays
Maps
Please return these to us

***

10.- See enclosed photostat of test shipment.

FORM 6-A SHORT 5M

TACOMA SMELTER

AMERICAN SMELTING AND REFINING COMPANY
SETTLEMENT STATEMENT

TACOMA, WASHINGTON, AUGUST 10, 1951 19

SHIPPER GLACIER MINING COMPANY
4039 Evanston Avenue
Seattle, Washington

MATERIAL Bulk Ore

SMELTER LOT 1974 MINE LOT DATE RECEIVED July 26-51

CAR OR VESSEL Truck ENTRY NO. DATED

GOLD QUOT.	SILVER QUOT.	FOREIGN / DOMESTIC COPPER QUOT.	
DATE	DATE	DATE July 23-28	DATE
$ PER OZ.	LESS	24.2 LESS 2.75 21.45	LESS

PB.	ZN.	AS.	SB.	NI.	BI.	SN.	FE.	SiO2.	CAO.	S.	CL.
	.80	-	-	-				14.9			

LOT NO.	NO. SACKS REC'D.	NET WGT. INCLUDING CLEAN UP	H2O	DRY WEIGHT	ASSAYS AU	ASSAYS AG	ASSAYS CU	CONTENTS GOLD OZS.	CONTENTS SILVER OZS.	CONTENTS COPPER LBS.
		8,822	1.00	8,734	.02	.89	4.59		3.89	401
					Less .50 Ag				2.18	
					Less 1 unit Cu					87
									1.71	314

Silver @ 90.16 $1.54
Copper @ 21.45¢ 67.35 $ 68.89

Base Charge $10.00 per ton 43.67
(Sampling $12.50 paid July 26) -

$ 25.22

Per ton not including sampling $5.72
" " including sampling $2.88

TACOMA SMELTER

No. 86322

AMERICAN SMELTING AND REFINING COMPANY

TACOMA, WASHINGTON AUGUST 10, 1951

34-1
1251

PAY TO THE ORDER OF GLACIER MINING COMPANY $25.22
4039 EVANSTON AVENUE
SEATTLE, WASHINGTON

A.S.&R.Co. $25 and 22 cts DOLLARS

TO NATIONAL BANK OF WASHINGTON
TACOMA, WASHINGTON

NOT VALID UNLESS COUNTERSIGNED BY

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

11- Not in production

Glacier Mining Co.Inc. LF-100
4039 Evanston Av., Seattle 3, Wash.

***

12.(a) See enclosed Engineer's Report by Roy Corliss, Mining Engineer

(b) 1- See enclosed map of property
2- None as yet blocked out

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

13. Paved road 1½ miles from rail point at Glacier, Wash.

Glacier Mining Co.Inc. MF-100
4039 Evanston Av.,, Seattle 3, Wash.

***

14. River adjoining property and spring on property

Glacier Mining Co. Inc. LJF-100
4039 Evanston Av., Seattle 3, Wash.

***

15. Diesel power or electric. At present time we are using gas with our compressor.

Glacier Mining Co.Inc. MF-100
4039 Evanston Av., Seattle 3, Wash.

***

16. 3 miners &/or muckers
1 Bulldozer operator & helper

Glacier Mining Co.Inc. Mf-100
4039 Evanston Av., Seattle 3, Wash.

***

17.

Compressor and compressor house in A-1 condition
Jack-hammer
Ore-car
Air-hose
Small tools, etc.

***

18.

Not that we know of.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, even or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

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.

Glacier Mining Co. Inc.

(Name of company)

By [signature]

(Signature of authorized official)

President.

Dec. 31, 1951

(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—63792-1

REPORT ON THE GLACIER MINE

by

Roy E. Corliss

A Report Submitted to Mr. Bob Boad,

Vice President

for

THE GLACIER MINING COMPANY

GLACIER, WASHINGTON

BREMERTON, WASHINGTON

December 20, 1949

ROY E. CORLISS

1912 15th Street

BREMERTON, WASHINGTON

MR. BOB BOAD

VICE PRESIDENT

GLACIER MINING CO.

BELFAIR, WASHINGTON

Dear Sir:

I respectfully submit to you this report, as per your request, covering my findings and data gathered during two trips to the Glacier mine in addition to research performed at the University of Washington Department of Mines.

If at any time you desire additional information, please call me.

Yours truly,

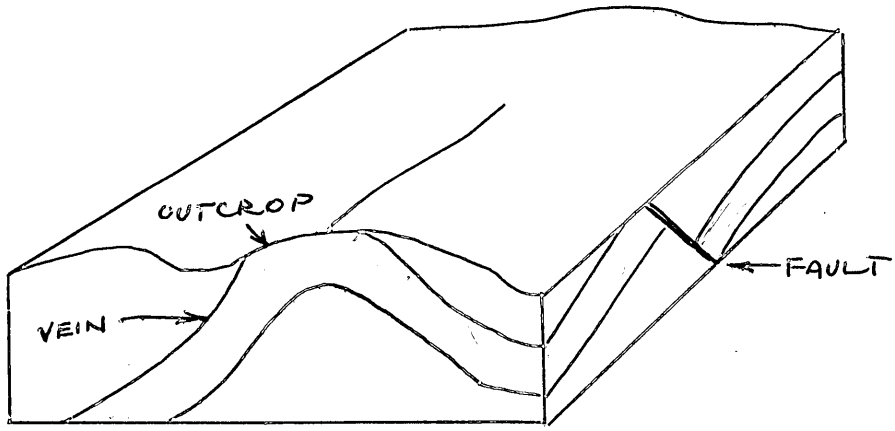
Roy E. Corliss

ROY E. CORLISS

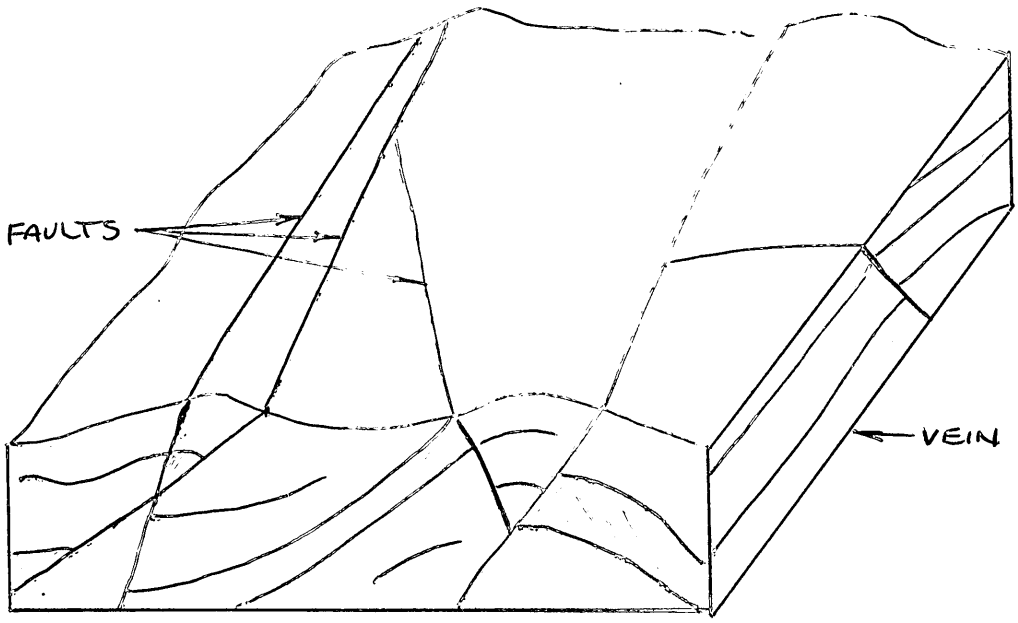
GLACIER MINING COMPANY

GEOLOGY:

The geology of the Glacier area is the most unique and interesting of the whole state. It consists of minute folding of the rock strata in addition to innumerable faults and slips. This particular formation, although highly mineralized, is difficult to map because of the impossibility of tracing the structure. The sketches below will help illustrate this.



SIMPLE FAULT



COMPLEX FAULTS

In the case of the Glacier mine the problem diminishes because of the surface mineralization. This mineralization is found in quantity as well as quality on the side of the hill nearest the highway, and it is hoped the opposite side will show up as well with further tests and exploration.

The country rock at Glacier is commonly an impure limestone grading to argillaceos or slaty, clayey limestone. The clay is from buff to blue in color and seems to be high in silver. Some rock outcroppings on this property are a bluish green color which is characteristic of chlorites.

The chloritization of mineralized pillow lavas and associated dioritic intrusives is commonly intense, yielding a green schist known to prospectors as killas and rightly regarded as a favorable country rock for ore.

The overburden near the main tunnel entrance is pyritic with bands of blue clay being present. The pyritic mass is a secondary product being finely ground weathered grains held together by a clay cement. In general this overburden is highly mineralized with the exception of about one foot nearest the surface.

The chlorites and limestones have pyrite and chalcopyrite replacements along with calcite and quartz veinlets or stringers. This replacement is by diffusion and often gold and silver have accompanied the above materials. Much of this rock has no apparent value, but upon examining with a hand lens, it will be found that small shots of gold and silver are present.

It would seem that the precious metals tand to follow the pyrites and chalcopyrites; at least all the assays so far show a good value in the pyritic structures. Although higher values have been found in other than pyritic rocks, the values have been more consistent in the pyrites.

RESEARCH NOTES:

(From "Hydrometallurgy of Gold and Silver," Chapt. XI, page 289, HANDBOOK OF NONFERROUS METALLURGY)

When gold is found apparently disseminated in igneos or metamorphic rocks, minute veinlets of calcite or quartz usually accompany it. (Good examples of this at Glacier.)

(From Dana's HANDBOOK OF MINERALOGY)

Limestones are made up dominantly of calcite but may contain small amounts of other minerals. If impurities of clay are abundant, limestone grades toward shale and would be called an argillaceous limestone.

(From MINING TECHNOLOGY, T.P. 1209, July 1940)

Diffusion is a means of staining limestones that have no visible fractures. (Stains have been found regularly in the limestones underground.)

Bands or masses of pure limestone are very resistant to replacement by ore solutions, but argillaceous limestones are spoken of as being highly favorable to ore formation.

GENERAL:

The property of the Glacier Mining Company consists of ten claims located at a point one and one half miles northeast of the town of Glacier on the Mt. Baker highway at T39N, R7E, WM.

This property is located very favorably, being close to water, electricity, and transportation. Some of the claims are on the Nooksak River, but the main source of water will be from a spring above the mill site. A reservoir can be erected and sufficient water collected to run the mill.

The main power line ends at Glacier necessitating running another line to the mine. Investigation will prove whether or not this would be cheaper than investing in a diesel generator plant.

The Glacier milling plant will be situated within 100 feet of the Mt. Baker highway facilitating trucking of supplies and concentrates. The railroad also has a line into Glacier if rail haulage is desired.

Douglas fir and maple abound on the property and can be a supply of fuel for heating the bunkhouse, mill, etc., as well as being used as fuel for retorting the gold mercury amalgam.

A very interesting development has come about through the use of the M Scope, a prospecting instrument. A concentration or vein has been located approximately midway between the main tunnel and the prospect tunnel. This vein runs S32°E from about 50 feet east of

the highway to about 700 feet east of the highway, then S44°W for 100 feet. The width, as charted by the scope, varies from 20 to 80 feet. Much conjecture has been voiced about the content of this vein. From what I have seen of the formations adjacent to and above the vein, I am inclined to believe that this mass is a pyrite--either pyrite, chalcopyrite, or one of the many peacock ores, and valuable in gold and silver. So far this type of vein on a smaller scale has had varying precious metal content from moderate to extremely high. Some assays in this mine have run as high as $2,500 per ton. It might be well to mention here that no assay has gone less than $4 per ton, which is right on the borderline of profitable ore. No blanks have ever been found in any sample taken to my knowledge. Even in apparently barren country rock values from $4 to $17 have been found.

A natural question now is if this mine is so rich, why isn't it in production and making money? The biggest reason is the difficulty in following or ferreting out the high grade ore by ordinary underground mining methods. Another reason is that the mill has yet to be installed to treat the run of mine ore. Underground work is very expensive and, until the mill is installed, should be limited to prospecting and development work. Important factors involved after the mill is installed are:

1. All the rock shows value from undetermined depth to surface.

2. Underground mining is difficult because of complex rock structure.

3. Underground mining is expensive.

4. Mine property is on hill with value showing from top to bottom.

5. Mill is at bottom of hill.

6. In order to mine this hill from underground, valuable pillars would have to be left to support the upper reaches.

7. Underground work requires good ventillation. It limits amount of blasting at any time and the working time is limited to the time between shots when the air is free of poisonous gases. Suitable methods must be found to carry off ground waters. Some expensive timbering is necessary.

From a study of the above factors it can be seen that sub surface mining is anything but economical: it is wasteful. Since every engineer, foreman, stockholder, etc., is striving for economy of operation which means more profits, it is necessary that either changes be made or a new method of mining be found. An economy must be found that will enable mining of the low grade ore along with the high grade without selective mining, and still be able to show a profit on all grades. The only answer, in my opinion, is stripping or open cut mining.

The advantages of stripping are: more ore can be mined per man per unit of time; advantage can be taken of gravity in transporting the ore downhill to the mill; no ventillation system is needed; cheap blasting powders can be used; no pillars are left, all ore is mined; specialized drilling equipment can be eliminated for the cheaper jackhammers. The only serious disadvantage is that particle sizes of the blast product will be larger.

CONCLUSION:

In conclusion I would like to say that stripping will clear the overburden giving a clear picture of the stratigraphy of the property. It is entirely possible that the strata can be followed through to the other side of the hill with a subsequent discovery of minerals.

It is fairly obvious, everything considered, that the stripping operation would be the most satisfactory and economical as far as the Glacier mine is concerned.

Roy E. Corliss

ROY E. CORLISS

ASSAYS PERFORMED FOR THE GLACIER MINING COMPANY BY

ROY E. CORLISS, METALLURGIST

	SILVER	GOLD	COPPER	TOTAL
	90¢/oz.	$35/oz.	22.5¢/lb.	
Assayed 9-17-50				
Sample #1: Second crosscut, 9-7-50 round.				
	0.32 oz.	0.063 oz.	0.47% (9.4 lbs.)	
	$0.29	$2.22	$2.12	$4.63
Sample #2: Face, second left crosscut, 9-3-50 round.				
	0.71 oz.	0.012 oz.	0.78% (15 lbs.)	
	$0.64	$0.42	$3.38	$4.44
Sample #3: Face, second left crosscut, 9-3-50 round.				
	1.13 oz.	0.028 oz.	0.91% (18.2 lbs.)	
	$1.02	$0.98	$4.09	$6.09
Sample #4: Face main left crosscut, 9-3-50 round.				
	0.80 oz.	0.51 oz.	1.06% (21.2 lbs.)	
	$0.72	$17.86	$4.77	$23.35
Sample #5: Face left crosscut from main crosscut, 9-3-50 round.				
	0.63 oz.	0.009 oz.	0.37% (6.4 lbs.)	
	$0.57	$0.32	$1.44	$2.33
Spectrographic analysis, second left crosscut				
	2.00 oz.	present	0.75% (15 lbs.)	
	$1.80		$3.38	$5.18
Spectrographic analysis, red ore				
	8.00 oz.	trace	4.6% (92 lbs.)	
		1.7% Lead		
	$7.20	$4.08	$17.10	$28.38
Spectrographic analysis, grey ore in main crosscut.				
	2.00 oz.		1.1% (22 lbs.)	
	$1.80		$4.10	$5.90
Assayed 11-12-49				
Assay #18: Pyrite in overburden at portal.				
	0.039 oz.	2.073 oz.	11% (220 lbs.)	
	$0.004	$72.555	$49.50	$122.059
Assay #19: Oxidized portion of pyrite.				
	[illegible]	1.0003 oz.	2% (40 lbs.)	
	trace	$35.011	$9.00	$44.011

Roy E. Corliss

(Copy)

W.W.GIBSON

Manufacturer of Mining Machinery

246 Market St.
San Francisco,11,Calif.

Dec.11,1951

Letter to Robert Boad
Hotel Leopold
Bellingham, Wash.

Dear Mr.Boad,

The three pieces of ore you sent-by mistake were put in one sample and we are herewith enclosing you the assay. You will note it was assayed only for copper.

We are enclosing you one of Abbot A.Hanks price lists, and if you wish any more assays made send them direct to him.

Flotation is the only method of handling the ore you sent.

Very truly yours

W.W.Gibson

Above copy submitted by
Glacier Mining Co.
4039 Evanston Av.
Seattle 3, Wash.

(Copy)

Report of Assay

ABBOT A.HANKS, INC.

624 Sacramento St.
San Francisco,Cal.

Nov.30,1951

For-
W.W.Gibson
246 Market St.
San Francisco 11, Calif.

Lab.#	Mark	Per Centage
37099	Sample #2	Copper - 8.67

Above copy submitted by
Glacier Mining Co.
4039 Evanston Av.
Seattle 3, Wash.

DATE	GOLD	SILVER	COPPER	TOTAL
		NORTHWEST LABORATORIES		
#6855 9-6-51	nil	nil	0.92%	$4.50
#2841 10-9-47	9.40 oz.	3.86 oz.	10.3%	
	$329.00	$2.74	$44.29	$376.03
	0.48 oz.	0.52 oz.	trace	
	$16.80	$0.37		$17.17
#4329 4-13-49	0.06 oz.	0.64 oz.	4.54%	
	$2.10	$0.58	$21.33	$24.01
4-19-50	$0.70	$0.20	$17.55	$18.45
	$1.05	$0.66	$3.39	$5.10
	$1.75	$0.91	$2.61	$5.27
	$0.70	$0.93	$0.04	$1.67
	$1.05	$0.53	$13.26	$14.84
		U.S. GOVERNMENT ASSAY OFFICE, SEATTLE		
#91 4-25-51	nil	0.98 oz.	2.4%	
#92	nil	0.45 oz.	3.1%	
		LAUCKS LABORATORIES INC., SEATTLE		
#110959-C 12-19-50	0.02 oz.	0.3 oz.	2.19%	
	$0.70	$0.27	$10.51	$11.48
	0			
	0.01 oz.	0.1 oz.		
	$0.35	$0.09		$0.44
	0.07 oz.	2.5 oz.	0.68%	
	$2.45	$2.25	$3.26	$7.96

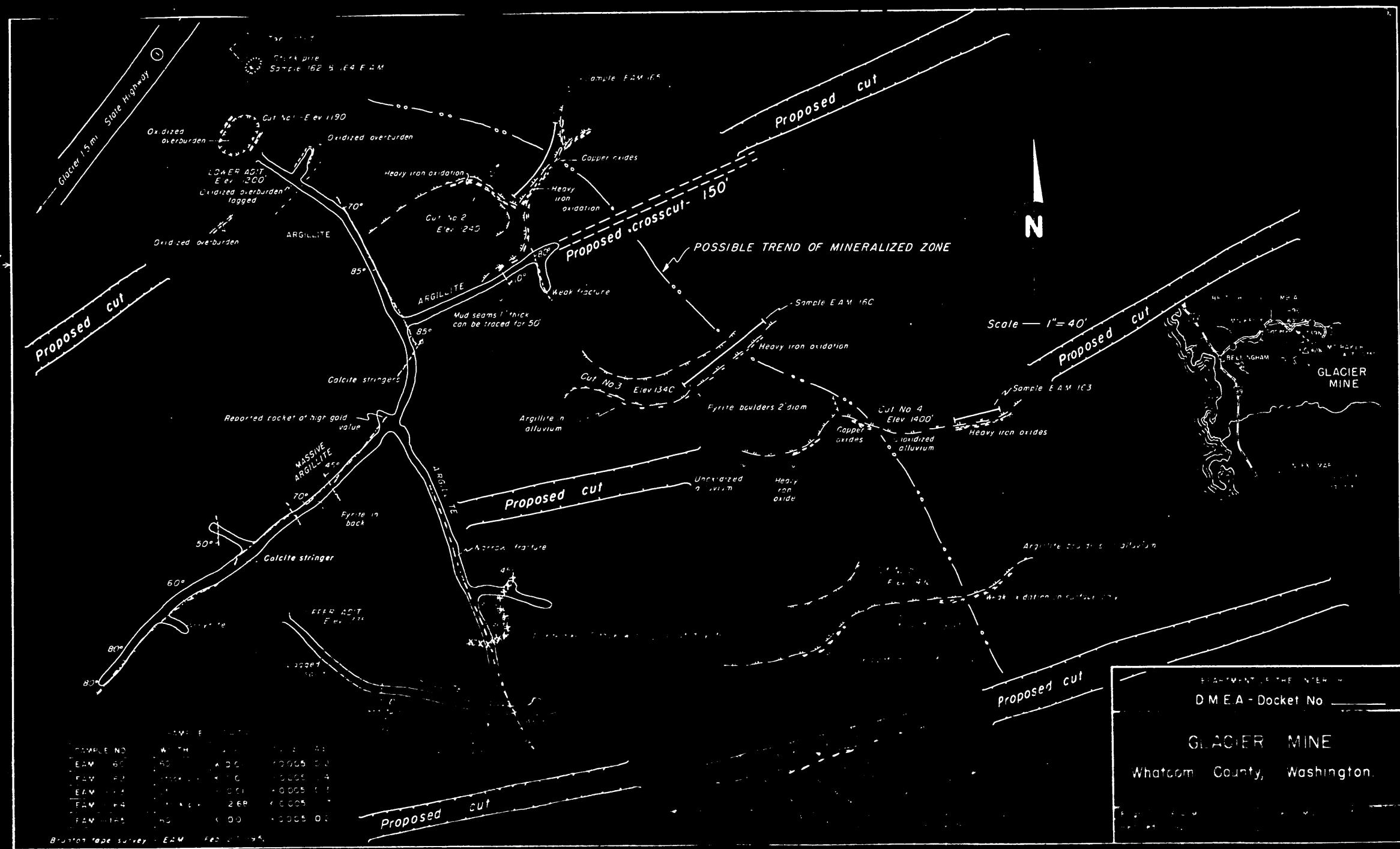
Spectrographic Analysis

	#110959-A 12-19-50	#111950 5-10-51
Silicon as SiO_2	20% to 25%	37% to 42%
Iron as Fe_2O_3	45% to 50%	35% to 40%
Copper	2%	3%
Sulphide sulphur	present	present
Zinc as Zn		0.8%

Note: The above values have been taken from certified copies of assays. Certified copies can be furnished on request.

Original Maps

Pictures sent to with Appln.


Glacier 1.5 mi State Highway
Proposed cut
Oxidized overburden
Oxidized overburden
LOWER ADIT
Oxidized overburden tagged
Oxidized overburden
ARGILLITE
Heavy iron oxidation
Cut No 2
Copper oxides
Heavy iron oxidation
Proposed crosscut - 150'
POSSIBLE TREND OF MINERALIZED ZONE
N
Weak fracture
Mud seams 1" thick can be traced for 50'
Calcite stringers
Reported pocket of high gold value
MASSIVE ARGILLITE
Fyrite in back
Calcite stringer
Sample E A M 16C
Heavy iron oxidation
Cut No 3
Elev 1340
Argillite in alluvium
Fyrite boulders 2' diam
Cut No 4
Elev 1400'
Copper oxides
Unoxidized alluvium
Heavy iron oxides
Sample E A M 1C3
Heavy iron oxide
Scale — 1" = 40'
GLACIER MINE
D M E A - Docket No
GLACIER MINE
Whatcom County, Washington.

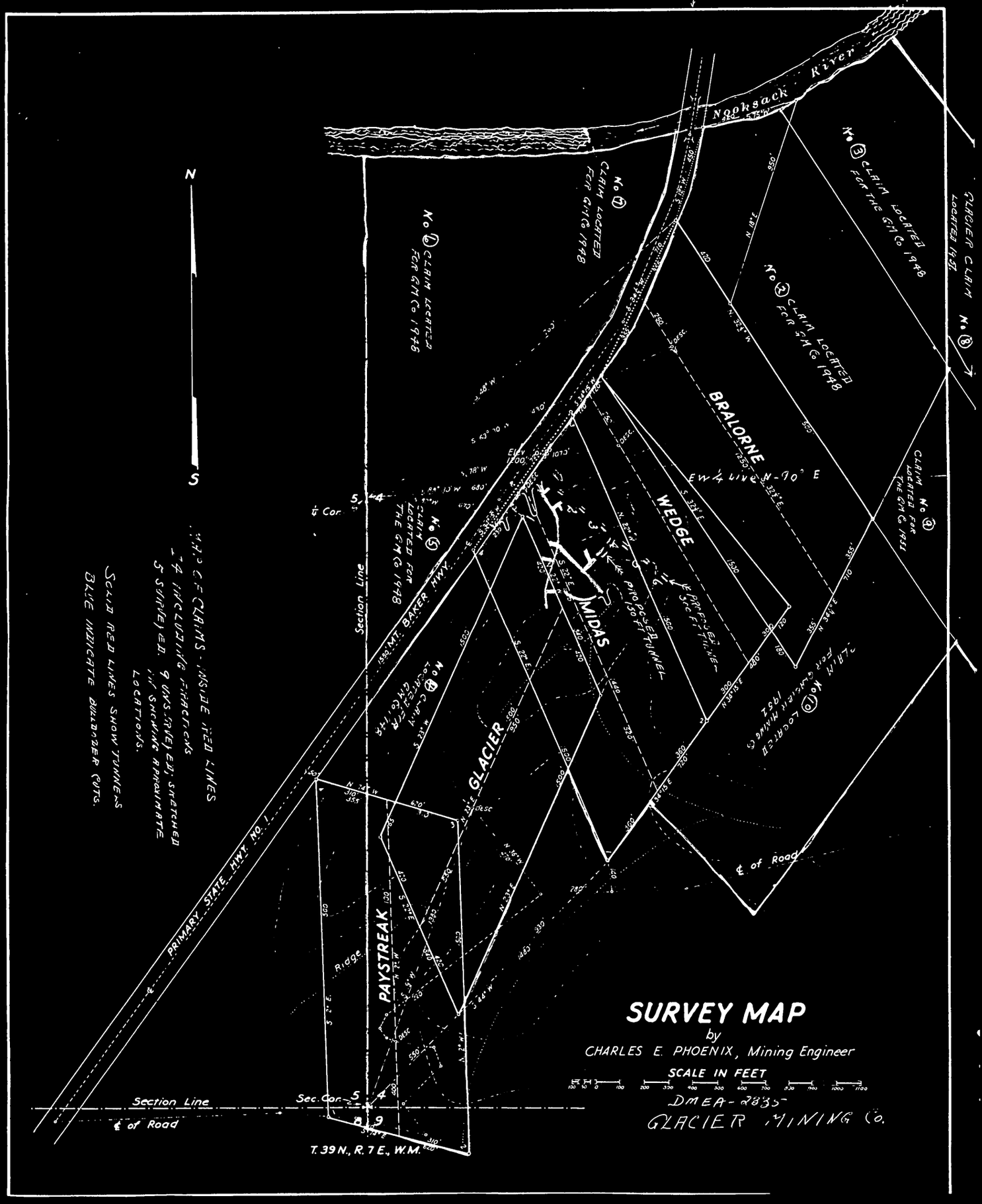

SURVEY MAP
by
CHARLES E. PHOENIX, Mining Engineer
SCALE IN FEET
DMEA-2835
GLACIER MINING CO.
Nooksack River
GLACIER CLAIM No. 8 LOCATED 1948
No. 3 CLAIM LOCATED FOR THE GM Co 1948
No. 2 CLAIM LOCATED FOR GM Co 1948
No. 1 CLAIM LOCATED FOR GM Co 1948
No. 6 CLAIM LOCATED FOR GM Co 1948
No. 5 CLAIM LOCATED FOR THE GM Co 1948
No. 4 CLAIM LOCATED FOR GM Co 1948
No. 7 CLAIM LOCATED FOR GLACIER MINING Co 1952
CLAIM No. 9 LOCATED FOR THE GM Co 1952
BRALORNE
WEDGE
MIDAS
GLACIER
RAYSTREAK
EW 4 LINE N-70° E
PROPOSED 150 FT TUNNEL
APPROXIMATE SURF. TUNNEL
MT. BAKER HWY.
PRIMARY STATE HWY. No. 1
Section Line
Sec. Cor.
Ridge
℄ of Road
T. 39 N., R. 7 E., W.M.
MAP OF CLAIMS - INSIDE RED LINES
14 INCLUDING FRACTIONS
9 UNSURVEYED SKETCHED
5 SURVEYED.
APPROXIMATE LOCATIONS.
SOLID RED LINES SHOW TUNNELS
BLUE INDICATE DRAINAGE CUTS.

Photo taken July 1948 at Glacier mining Co. Property.
Shows two of the large chalcopyrite copper ore boulders-
largest estimated to weigh over two ton.
Also shows the hole in the bank over top of car that the
boulder nearest the camera came from. We got these
and a lot more when we bulldozed off this spot at foot
of the hill along the highway.

(2)

July 21st 1951.

Photo shows the first large cut made by the Bulldozer above the lower tunnel at the Glacier mine.

Left to right

William Farrow

Robert Boad

July 21st 1951.

Photo shows the second large cut above the lower tunnel made by the Bulldozer at Glacier mine.

Left to right
William Farrow
Robert Boad.

(4)

July 21st 1951.

Phots show the large outcrop uncovered by the Bulldozer in the third cut above the lower tunnel at the Glacier mine

Left to right

William Farrow

Robert Boad.

(5)

July 21 - 1951.

Photo shows the fourth large cut above the lower tunnel made by the Bulldozer at Glacier mine

William Sparrow.

(6)

July 21st, 1951.

Photo shows William Farrow standing in the fifth cut above the lower tunnel made by the bulldozer at Glacier mines. This is near top of the hill.

6/8/53-dl.

Form MF-104 (Rev.) (April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3. Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

DMEA 2335

Month of Jan. 1953 Docket No. DMEA 2335 Contract No. IIIME 362
Operator's Name Glacier Mining Co Minerals Copper
Address 4039 Evanston Ave Seattle Wn
Contract Amount, $ 7415.00 Government Participation 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling		985.00	985.00		985.00	985.00
Bulldozing						
Crosscutting	315.00	4935.00	5250.00	315.00	4935.00	5250.00
Drifting						
(2) Labor and Supervision:						
Labor		246.25	246.25		246.25	246.25
Supervision		197.00	197.00		197.00	197.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.88	50.88		50.88	50.88
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes		39.21	39.21		39.21	39.21
Liability Insurance						
Transporting Supplies		20.00	20.00		20.00	20.00
(8) Contingencies (specify):						
TOTALS	315.00	6473.34	6788.34	315.00	6473.34	6788.34

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Feb 3, 1953 *Payee Glacier Mining Co
Per R B Hamilton Title Pres.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
157.50
$ 157.50

Signature
(Authorized Certifying Officer)

Date 5/28/53 Vou. No. 799
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 362 in accordance with the terms of the contract.

Signature /S/ Elwin A Mazzill Title Mining Engr Date Feb 5-1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Thomas E Howard Title Mining Engr Date Feb 6/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Jan 1953 . Docket No. DMEA 2335 Contract No. 10ME 362
Operator's Name Glacier Mining Co Minerals Copper
Address 4039 Evanston Ave Seattle Wash.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	FT	315.00	9	5250.00	150	35.00	150	35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1			1538.34	6	256.39	6	320.83
Test Pits								
Roads and Trails								
Total Distributed Costs		315.00	9	6788.34				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		315.00	9	6788.34				

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

Date Feb 3rd Operator Glacier Mining Co

Per R. Pattlamboy Title Pres.

Remarks:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

C O P Y

Glacier Mining Co.
Contract Idm-E362
January, 1953

NARRATIVE REPORT

In report of December month the drifting done showed that we were still in Argillite and our supervisor, Wm. Farrow, stated we were drifting to much parallel with the copping. This last nine feet bears out that statement and we have asked for an amendment to our present contract for diamond drilling in the direction we are now going as we had previously made a turn more to the left, where we can cross the expected ore body.

/s/ R. B. LaFlamboy

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 40-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 26 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1952. Docket No. DMEA 2335 Contract No. DME 362
Operator's Name Glacier Mining Co. Minerals Copper
Address 4039 Evanston Ave Seattle 3 Wash.
Contract Amount, $ 7415.00 Government Participation 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing		985.00	985.00			
Crosscutting						
Drifting	1645.00	3290.00	4935.00			
(2) Labor and Supervision:						
Labor		246.25	246.25			
Supervision		197.00	197.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.88	50.88			
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes		39.21	39.21			
Liability Insurance						
Transporting Supplies		20.00	20.00			
(8) Contingencies (specify):						
TOTALS	1645.00	4828.34	6473.34	[illegible]	[illegible]	[illegible]

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan. 3 1953 Payee Glacier Mining Co.
Per [signature] Title Pres.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 822.50

Signature [signature]
(Authorized Certifying Officer)

Date 1/12/53 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-362 in accordance with the terms of the contract.

Signature /s/ E. A. Magill Title Mining Engr. Date 1/12/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ E. A. Magill Title Mining Engr. Date 1/12/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MT-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Oct 1952 Docket No. DMEA 2335 Contract No. DME 362
Operator's Name Glacier Mining Co Minerals Copper
Address 1439 Lowman Bldg Seattle 2 Wash

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	FT	1645.00	47	4935.00	141	35.00	150	35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1			1538.34	6	256.39	6	320.83
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1645.00	47	6473.34				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1645.00		6473.34				

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

Date Jan. 3 1953 Operator Glacier Mining Co

Per [signature] Title Pres.

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Glacier Mining Co.

Contract Ium-E362 Docket No. 2335 (copper)

Narrative January 3, 1953

In this past month we have been in argillite. In the last several feet we have encountered more calcite stringer and pyrites. These have been encountered in changes of formation. We will go through a wall of argillite and come into a fracture of broken-up argillite and blue clay and stringers of calcite, etc. and go right back into a layer of hard argillite again. More water is coming in during the last few shots made this month. Wm. Farrow who is looking after the work seems to feel we have not gone far enough as yet, and that we have been going too much parallel with the capping and should go about 100 to 150 feet more in the direction we are now working.

R. B. LaFlamboy

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval Expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952. Docket No. DMEA 2335 Contract No. III ME 362
Operator's Name Glacier Mining & Seattle 3 Minerals Copper.
Address 4039 Evanston Ave Wash.
Contract Amount, $ 7415.00 Government Participation 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		985.00	985.00			
Bulldozing						
Crosscutting	945.00	2345.00	3290.00	945.00		
Drifting						
(2) Labor and Supervision:						
Labor		246.25	246.25			
Supervision		197.00	197.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.88	50.88			
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes		39.21	39.21			
Liability Insurance						
Transporting Supplies		20.00	20.00			
(8) Contingencies (specify):						
TOTALS	945.00	3883.34	4828.34	945.00	3883.34	4828.34

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Dec. 2nd 52 Payee Glacier Mining Co
Per R B Stillemoy Title Pres.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 472.50

Signature [illegible]
(Authorized Certifying Officer)

Date 12/5/52 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 362 in accordance with the terms of the contract.

Signature E a Magill Title Min Engr Date 12-3-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E Howard Title Min Engr Date 12-3-52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Nov. 1952. Docket No. DMEA 2335 Contract No. TIME 362
Operator's Name Glacier Mining Co Seattle 3 Minerals Copper.
Address 4039 Evanston Ave Wash.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	FT	945.00	27	3290.00	94	35.00	150	35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1			1538.34	6	256.39	6	320.83
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		945.00	27	4828.34				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		945.00		4828.34				

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

Date Dec. 2nd 52 Operator Glacier Mining Co
Per R. B. Fathomley Title Pres.

REMARKS:

→ NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To-Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

GLACIER MINING COMPANY

Docket No. 2335 Contract Idm-E362

NARRATIVE

In this 27 feet we have encountered several changes and many stringers of calcite and iron pyrites. We are still in argillite but last shot shows a fault that we are coming into. Some of this rock we have been going through is very hard and has made progress slow. Quite a little water is now coming into the tunnel. Rock is a gray color now more than black as has been mostly in past. Some copper buttons are showing in the rock.

Standard Form No. 1034a—Revised
Form prescribed by
Comptroller General, U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

D. O. Vou. No. .....

Bu. Vou. No. 533

U. S. Interior, Mines
(Department, bureau, or establishment)

Voucher prepared at Spokane, Washington 11/24/52
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idm-E362

To Glacier Mining Co.
(Payee)

4039 Evanston Ave., Seattle 3, Wash.
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	October 1952	As per certified attached form MF-104 dated 11/4/52				735	00
PAYMENT: Complete ☐ Partial ☐ Final ☐		Use continuation sheet(s) if necessary					

Shipped from to Weight Government B/L No. Total 735 00

(Payee must NOT use this space)

Differences .....

Account verified; correct for 735 00

(Signature or initials) .....

Contract No. Idm-E362 Date Req. No. Date Invoice Rec'd.

735.00

MEMORANDUM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount
14X4402	Revolving Fund, Defense Production Act, Interior	735.00	735.00

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. ..... dated ....., 19....., for $..... } on Treasurer of the United States in favor of payee named above.
{ Cash, $....., on ....., 19.....

16—22900a-2

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. Advertising in newspapers Yes ☐ No ☐.
2. (*a*) Advertising by circular letters sent to ..... dealers.
   (*b*) And by notices posted in public places Yes ☐ No ☐.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.
4. Without advertising in accordance with .....
5. Without advertising, it being impracticable to secure competition because of .....

.....

.....

.....

.....

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, as amended.)

U. S. GOVERNMENT PRINTING OFFICE : 1950 O—75805

16—22000a-2

Form MF-104 (Rev.)
(April 1952)

Wash

Budget Bureau No. 42-R1030.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1952 Docket No. DMEA 2335 Contract No. IAM E 362
Operator's Name Glacier Mining Co Minerals Copper
Address 4039 E. Yancton Ave Seattle 3 Wash
Contract Amount, $ 7415.00 Government Participation 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing		985.00	985.00			
Crosscutting	1470.00					
Drifting						
(2) Labor and Supervision:						
Labor		246.25	246.25			
Supervision		197.00	197.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.88	50.88			
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes		39.21	39.21			
Liability Insurance						
Transporting Supplies		20.00	20.00			
(8) Contingencies (specify):						
TOTALS	1470.00	2413.34	3883.34	1470.00	2413.34	3883.34

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 4 '52 Payee Glacier Mining Co

Per R. E. Patterson Title Pres

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 735.00

Signature (Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 362 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mining Engr Date Nov 6, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1952 Docket No. DMEA 2335 Contract No. DMA E-362
Operator's Name Glacier Mining Co Minerals Copper
Address 4039 Ednarsth Ave Seattle 3 Wn

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	FT	1470.00	42	2345.00	67	35.00	150	35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1			1538.34	6	256.39	6	320.83
Test Pits								
Roads and Trails								
Total Distributed Costs		1470.00	42	3883.34				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1470.00		3883.34				

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

Date Nov. 4 1952 Operator Glacier Mining Co
Per W. B. Hawley Title Pres.

Remarks:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

GLACIER MINING COMPANY
Whatcom County, Wash.

Contract Idm-E362
Docket No. 2335 (copper)

November 4, 1952

NARRATIVE

We have been in a faulted area for the last 15 feet and it now looks as if we were through this and drilling again into argillite rock.

This gouge showed mineralis ation and contact seams. The gangue showed considerable iron pyrites, lime or quarts stringers, and mineral stain, brown and blue stain. Water is coming in more freely through the breaks in the rock and water shows some copper stain.

R. B. LaFlamboy

Standard Form No. 1034a—Revised
Form prescribed by
Comptroller General, U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

D. O. Vou. No. .....

Bu. Vou. No. IMA 497

U. S. Interior, Mines
(Department, bureau, or establishment)

Voucher prepared at Spokane, Wash
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idm-E362

To Glacier Mining Company
(Payee)

4039 Evanston Avenue, Seattle 3, Wash.
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
July & Aug. 1952-Supplement		As per attached certified form MF-104 dated 10/27/52				263	73
September 1952		As per attached certified form MF-104 dated 10/27/52				437	50
PAYMENT: Complete ☐ Partial ☐ Final ☐		Use continuation sheet(s) if necessary					

Shipped from to Weight Government B/L No. Total 70[illegible] 23

(Payee must NOT use this space)

Differences .....

Account verified; correct for .....

(Signature or initials) .....

Contract No. Idm-E362 Date Req. No. Date Invoice Rec'd.

70[illegible].23

MEMORANDUM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount
14X4401	Revolving Fund, Defense Production Act, Interior	70[illegible].23	70[illegible].23

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. ..... dated ....., 19....., for $..... } on Treasurer of the United States in favor of payee named above.
{ Cash, $....., on ....., 19.....

16—22900a-2

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. Advertising in newspapers Yes ☐ No ☐.
2. (*a*) Advertising by circular letters sent to ..... dealers.
   (*b*) And by notices posted in public places Yes ☐ No ☐.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.
4. Without advertising in accordance with .....
5. Without advertising, it being impracticable to secure competition because of .....

.....

.....

.....

.....

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, as amended.)

U. S. GOVERNMENT PRINTING OFFICE : 1950 O—75805

16—22000a-2

Form MF-104 (Rev.)
(April 1952)

Wash.

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1952 Docket No. DMEA 2335 Contract No. Idn-1362
Operator's Name Glacier Mining Company Minerals Copper
Address 4039 Evanston Ave., Seattle 3, Wn.
Contract Amount, $ 7415.00 Government Participation: 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		985.00	985.00			
Bulldozing						
Crosscutting	875.00		875.00			
Drifting						
(2) Labor and Supervision:						
Labor		246.25	246.25			
Supervision		197.00	197.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.00	50.00			
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes		39.21	39.21			
Liability Insurance						
Transporting Supplies		20.00	20.00			
(8) Contingencies (specify):						
TOTALS	875.00	1538.34	2413.34	875.00	1538.34	2413.34

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 27th *Payee Glacier Mining Co.

Per [signature] Title Pres.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 437.50

Signature [signature]
(Authorized Certifying Officer)

Date 10/30/52 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 362 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mining Engr Date Oct 28 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1952 Docket No. DMEA _____ Contract No. Idn-8362

Operator's Name Glacier Mining Co. Minerals Copper

Address 4039 Evanston Ave., Seattle 3, Wn.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	ft.	875.00	25	875.00	25	35.00	150	35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1			1538.34	6	256.39	6	320.83
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		875.00		2413.34				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		875.00		2413.34				

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

Date Oct. 27 Operator Glacier Mining Co.

Per [signature] Title Pres.

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

COPY

GLACIER MINING CO
4039 Evanston Ave.
Seattle 3, Wash.

October 3, 1952

On this first 25 feet the showing is still in argillite, however it now shows a tendency to be of a lighter color. More like a whiteish gray and harder.

Also it is commencing to show a slab formation that runs in a north east direction and we are starting to cut through this formation, which breaks off over the face of the tunnel in a perfectly smooth cleaveage.

/s/ Glacier Mining Co,

R. B. LaFlamboy

[illegible]-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPORATION ADMINISTRATION

Supplementary Report No. I

Stage 3

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July & Aug., 1952 Docket No. DMEA 233 Contract No. Idn-2362
Operator's Name Glacier Mining Co. Minerals Copper
Address 1039 Evanston Ave., Seattle 3, Wn.
Contract Amount, $ 7[illegible]9.00 Government Participation: 90 % Amount, $ 3[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing	25.00	960.00	985.00	25.00	960.00	985.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	246.25	—	246.25	246.25	-0-	246.00
Supervision	197.00		197.00	197.00		197.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		50.88	50.88		50.88	50.88
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes	39.21		39.21	39.21	-0-	39.21
Liability Insurance						
(8) Contingencies (specify):						
Emergency Supplies	20.00		20.00	20.00	-0-	20.00
TOTALS	527.46	1010.88	1538.34	527.46	1010.88	1538.34

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 27 '52 *Payee Glacier Mining Co.

Per R. B. Hawley Title Pres.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 263.23

Signature [illegible] (Authorized Certifying Officer)

Date 10/30/52 Vou. No. (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 362 in accordance with the terms of the contract.

Signature Elson A. Mazzill Title Mining Engr Date Oct. 28, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

SEPTEMBER REPORT

Month of July & Aug. 1952 Docket No. DMEA 2339 Contract No. Min-1362
Operator's Name Chester Mining Co. Minerals Copper
Address 1039 Evanston Ave., Seattle 3, Wn.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching		527.46	—	1538.34	6	256.39	6	320.00
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		527.46		1538.34				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		527.46		1538.34				

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

Date Oct. 27 '52 Operator Chester Mining Company

Per [signature] Title Pres.

NOTE.—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.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Standard Form No. 1034a—Revised
Form prescribed by
Comptroller General U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

Washington

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

D. O. Vou. No. .....

Bu. Vou. No. DMA-416

U. S. Interior, Mines
(Department, bureau, or establishment)

Voucher prepared at Albany, Oregon 10/13/52
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idm-E 362

To Glacier Mining Co., Inc.,
(Payee)

4039 Evanston Ave., Seattle 3, Washington
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary)	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	July & August 1952	Discount Terms net As per attached certified form MF-104 dated August 22, 1952				505	44
PAYMENT: Complete ☐ Partial ☐ Final ☐		Use continuation sheet(s) if necessary					
Shipped from	to	Weight	Government B/L No.		Total	505	44

(Payee must NOT use this space)

Differences .....

Account verified; correct for 505 44

(Signature or initials) .....

Contract No. Idm-E 362 Date Req. No. Date Invoice Rec'd.

505.44

MEMORANDUM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount
14X4401	Revolving Fund, Defense Production Act, Interior	505.44	505.44

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. ..... dated ....., 19....., for $..... on Treasurer of the United States in favor of payee named above.
Cash, $....., on ....., 19.....

OCT 8 1952

16—22900a-2

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. Advertising in newspapers Yes ☐ No ☐.
2. (*a*) Advertising by circular letters sent to ..... dealers.
   (*b*) And by notices posted in public places Yes ☐ No ☐.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.
4. Without advertising in accordance with .....
5. Without advertising, it being impracticable to secure competition because of .....

.....

.....

.....

.....

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, as amended.)

U. S. GOVERNMENT PRINTING OFFICE : 1950 O—75805

16—22000a-2

Form MF-104 (Rev.) (April 1952)

Budget Bureau No. 42-R1036.3. Approval expires 6-30-53.

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage I

Month of JUL. & AUG. 1952 Docket No. DMEA 2335 Contract No. Idm-E362

Operator's Name Glacier Mining Co.Inc. Minerals Copper

Address 4039 Evanston Av., Seattle 3, Wash.

Contract Amount, $ 7415.00 Government Participation: 50 % Amount, $ 3707.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing	985.00	x	985.00	960.00	-0-	960.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	167.45	x	167.45	149.75	-0-	149.75
Supervision	275.00	x	275.00	200.00	-0-	200.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	50.88	x	50.88	50.88	-0-	50.88
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes	39.21	x	39.21	40.00	-0-	40.00
Liability Insurance						
(8) Contingencies (specify): 2 trips to Bellingham & 1 trip to Seattle to buy supplies	20.00	x	20.00	-0-		-0-
TOTALS	1538.34	xx	1538.34	1010.88	-0-	1010.88

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Aug. 22, 1952 *Payee Glacier Mining Co.Inc.

Per J B Atkeson Title Secretary

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—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.

(Instructions on reverse)

DEPARTMENT OF THE INTERIOR Defense Minerals Exploration Administration RECEIVED OCT 2 1952

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 505.44

Signature [illegible] (Authorized Certifying Officer)

Date 10-9-52 Vou. No. (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 362 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mining Engr Date Aug 29, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E. Howard Title Mining Engr Date 9/3/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

F-104A
(1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage I

Month of Jul.& Aug 1952 Docket No. DMEA 2335 Contract No. Idm-2362

Operator's Name Glacier Mining Co.Inc. Minerals Copper

Address 4039 Evanston Av., Seattle 3, Wash.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	1	~~1538.34~~	6	1538.34	6		6	1865.00
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		~~1538.34~~ 1410.88		~~1538.34~~ 1410.88				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		~~1538.34~~ 1410.88		~~1538.34~~ 1410.88				7415.00

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

Date Aug.22,1952 Operator Glacier Mining Co.Inc.

Per J.B. Peterson Title Secy.

REMARKS: This completes in full, bulldozing or cutting trenches, Stage I of our loan contract.

NOTE.—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.

(Instructions on reverse)

(For Government use only)

Completes Stage I

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

Glacier Mining Co.Inc.
4039- Evanston Ave.
Seattle 3 Wash.

Stage 1
July & Aug.,1952 Docket #DMA 2335 Contract #Idm-2362
Copper

Narrative Aug.14,1952
****

Work has been completed on Stage 1 of our contract, Copper Loan, Docket 2335 , Contract #Idm-2362.
Six cuts were made by bulldozer; three on each side of what has been outlined as the possible trend of the ore zone. These cuts were each about 100 ft.long, and made to a depth as great or greater than the cuts previously made into the mineralized zone. No mineralization or oxidized mass was found in any of these cuts such as was encountered in the mineralized zone. Hence it is assumed that the oxidation is confined to the section as mapped out by your engineer.

J R Atkeson

J.R.Atkeson, Secy.

Albany, Oregon

Region II

October 10, 1952

Glacier Mining Company
4099 Evanston Avenue
Seattle 3, Washington.

Reference: July & August MF-104
Contract Ida-E-362

Gentlemen:

Your July and August Invoice MF-104 has been approved for $1,010.88 and payment will be made in the amount of $505.44. We have made deductions as follows:

The Labor payroll must be furnished showing the days worked, hours worked per day, rate of pay, deductions and the net amount paid. Gross amount earned is allowable.

Supervision has been deleted for the same reason stated above for Labor.

Payroll taxes in the amount of $39.21 deleted inasmuch as above payrolls were deleted.

The above items may be reclaimed upon presentation of data in proper form. In this connection Liability Insurance should be shown separately on MF-104 Tree Taxes.

Travel of $20.00 and Moving of dozer charge of $25.00 not allowable under the Contract.

Very truly yours

W. Eulon Lee
Finance Officer

wsh
cc: R/F
Contract File
Voucher File
Wolin (2)
Wash. (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

PROJECT SUMMARY REPORT

By: F. M Murphy January 11, 1955

1. Docket No. DMEA-2335 (Copper)
   Contract No. Idm-E362
   Property: Glacier Mine
   Whatcom County, Washington

   Operator: Glacier Mining Company, Inc.
   Mr. R. B. LaFlambay, President
   4039 Evanston Avenue
   Seattle 3, Washington

   Operator's Property Rights: Owners - Six (6) lode claims in Section 4, T. 39N, R.7E., located 1 1/2 miles north of Glacier on east side of state Highway No. 1

2. Contract dated June 30, 1952. To complete - 4 months

Work Authorized

Stage I	Cut six bulldozer trenches -	$1,865.00
Stage II	Drive crosscut 150 feet	5,550.00
	Total estimated cost	$7,415.00
	Government's participation at 50%	$3,707.50

Amendments

No. 1 Dated October 15, 1952

At no additional cost adds $25.00 to move bulldozer to and from property and $20.00 for transportation of supplies.

No. 2 Dated November 20, 1952

Extends completion date from a 4 month period to 8 months

Work Completed

Stage I	Six (6) bulldozer trenches	$1,538.34
Stage II	150 feet crosscutting	5,250.00
	Total cost	$6,788.34

Work was completed December 31, 1952.

3. Audit - Report of Review issued May 21, 1953 - No exceptions

Total accepted cost	$6,788.34
Government's participation at 50%	$3,394.17

4. Certification of Discovery - none issued

5. Comments:

The exploration work was completed in a satisfactory manner.

The object of the project was to discover the source of pyritic boulders, containing commercial values (4.9% copper), which were found embedded in the overburden at the Glacier Mine.

Previous to applying for DMEA assistance the Operator had tried to discover the source of these boulders by means of about 1300 feet of tunnel work and various bulldozer-cut trenches without success.

The Operator's application was for the sum of $57,150.00, the work to consist of surface trenching, diamond drilling, and additional drifting from the face of the present tunnels. However, the more modest program outlined in the contract was finally agreed upon.

The work completed failed to find ore in place. The trench work uncovered what appeared to be a definitely aligmed iron-stained zone that might represent a gossan above a copper deposit. However, the underground drifts in this area disclosed the rock at depth was a heavily pyritized argillite.

At the conclusion of the contract, the Operator requested additional aid to diamond drill two holes to the north from the underground adits. This request was denied.

A visit to the property on February 16, 1954, by a member of the Field Team, disclosed that the Operator had completed the two proposed drill holes on his own account. Hole No. 1 was drilled from the face of the DMEA crosscut on a bearing N1° W, dip minus 6 degrees, to a depth of 270 feet.

Hole No. 2 was drilled at a point 71½ feet in from the portal of the main adit, on a bearing N. 26° W., dip minus 30°, to a depth of 294 feet. Both holes, drilled with a diamond-core AX size bit, were in the same heavily pyritized argillite throughout, that was cut by the drifts and crosscuts in this area.

On March 2, 1953, the Executive Officer, DMEA Field Team, Region II recommended denial of further assistance after completion of the contract. However, the final Field Team, report, dated January 14, 1954, recommended diamond drilling two holes to the north from the present underground workings.

In a letter to Mr LaFlamboy, dated April 23, 1953, the DMEA Administrator denied an application to amend the contract to provide for additional work.

Mr. C. H. Johnson, U.S. Bureau of Mines in a memorandum to Mr. Ellis, dated February 8, 1954 calls attention to the discrepancy in the Field Team's recommendations.

F M Murphy

F. M. Murphy

FMMurphy/er 5/3/55

Copy to: Docket
Base Metals
Chron.

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

August 25, 1953

SUMMARY

Rare and Misc. Metals Division

DMEA

Docket No. DMEA-2335
Contract No. Idm-E362
Contract date: June 30, 1952
Commodity: Copper
Contractor: Glacier Mining Company, Inc.,
Location of property: Whatcom County, Washington
Contract amount: $ 7,415.00
Government participation: $ 3,707.50

Audit Certificate: dated May 21, 1953
Total Accepted Cost $ 6,788.34
50% Govt. participation: $ 3,394.17

The work to be done under this contract consisted of two phases, the first stage to do surface trenching, and the second stage to drive 150 feet to explore the area under the oxidized zone.

The Bureau of Mines field engineer, reporting on his progress examination made of the subject property on January 6, 1953, by memorandum dated February 4 stated that the total advance of 150 feet had been accomplished, thus completing Stage II of the contract. He reported that no mineralized zone, such as was exposed on the surface, had been encountered underground, this failure perhaps being due to the zone having a different strike than was originally anticipated along with a much flatter drip. His examination of the new (Stage I) surface cuts along with plotting of the exploration project contract crosscut appeared to bear this out.

On January 8, 1953, the Operator submitted a request to the DMEA Office, Region II, for an amendment to the contract to provide additional funds for future exploration work. This request was forwarded to the DMEA Washington Office by the Field Team on March 2, 1953. It was pointed out by the Field Team that the Operator had expended about $50,000.00 on the property before the present contract began but failed to find the source of the pyrite-calcopyrite boulders. Almost $7,000.00 was expended under the DMEA exploration project contract, but this work, too, failed to find the mineralized source. It was the Field Team's conclusion that to thoroughly test the area would probably take more drilling than requested in the Operator's request, and because the work to that date had not been successful in developing information about the target, it was recommended that the request for additional funds be denied rather than continue

to feed small amounts of funds toward an objective that could not be better defined. The Commodity Members of the Geological Survey and the Bureau of Mines in Washington concurred in the Field Team's recommendation.

Accordingly, on April 23, 1953, the Operator's request for additional Government aid, at an estimated cost of $4,000.00, was denied.

Following receipt of the Auditor's Report of Review, dated May 21, 1953, a "completion" letter was forwarded to the Operator on June 16, 1953.

Ernest Wm. Ellis

☒ Audited

WORK ANALYSIS SHEET - DMEA PROJECT

☒ Actual Cost

☐ Certified

Analysis as of 12-7-'54
Incl. Voucher for January 1953

☐ Agreed Unit Costs

Name Glacier Mining Company, Inc.,

Docket No. 2335

State Washington

Commodity Copper

Idm-E No. 362

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	150	5550.00	150'	5250.00	5250.00
Raising					
Shafts					
Winzes					
Drilling (Specify)					
Surface Excavation		1865.00		1538.34	1538.34
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Analyses, Supervision, Technical Labor & Supplies		125.00 800.00 140.00		482.46 70.88	553.34
Totals		7415.00		6788.34	6788.34
		965.00		553.34	

Prepared by J L Kennon

71626

DMEA-2335

OFFICIAL FILE COPY

Date	Surname	Code
3/22	Mrowell	500
		120
		110
3/22	gad	220

MME Form 7
(10-58)

MAR 2 2 1961

See copies of incoming correspondence
filed in OME-6007

Hon. Warren G. Magnuson
United States Senate
Washington 25, D. C.

Re: OME-6007 (Copper)
Glacier Mining Company
Midas, et al., Claims
Whatcom County, Washington
and
DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Glacier Mine
Whatcom County, Washington
Contract Idm-E362

T-23

Dear Senator Magnuson:

We have your memorandum request of March 15, addressed to the Secretary of the Interior, with enclosed letter of Vincent P. McMurdo and the copy of a letter by R. B. LaFlamboy.

After a careful review of both the dockets referred to above, we replied to Mr. LaFlamboy on February 17, copies enclosed. Our review did not reveal any basis for reopening the application.

In addition to the work performed under the DMEA contract, a considerable amount of other work has been performed without success in finding the source of mineralized boulders which occurred on the surface of the property. However, if additional work has been done since the OME application was denied and new evidence can be furnished which shows further exploration of the property is warranted, we shall be glad to consider a new application.

As requested, we are returning the letters sent with your memorandum.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

(ph)

Enclosures

WRGriswold/FEJohnson/gla
3-22-61

cc to: Director's Reading File
Region I (2) w/cys incoming letters
DL

Docket OME-6007
Docket DMEA-2335
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
2/16		500
		120
		110
		220

February 16, 1961

Memorandum

To: The Files

From: W. R. Griswold, Chief, Division of Minerals

Subject: OME-6007 (Copper)
Glacier Mining Company
Midas, et al., Claims
Whatcom County, Washington
and
DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Glacier Mine
Whatcom County, Washington
Contract Idm-E362

This is with reference to the Applicant's letter of February 9, 1961. The inference that the original project (DMEA-2335) was terminated by the "Esenhower administration" is unwarranted--the project was fully completed as provided for in the contract.

The statement covering the second application (OME-6007), saying "after much delay", is likewise unwarranted. To the contrary, the application was handled quickly all along the line.

A project of this sort is of a particularly tantalizing nature and one can forgive the Applicant for being reluctant to give up on it. We have all known projects of this sort--where loose boulders of good ore are found in the overburden and a frantic attempt is then made to find the source of the float. In all too many instances, the source is probably a long distance away and nothing is ever found. But it always remains a tantalizing and irritating problem.

WR Griswold

WRGriswold/gla
cc to: Director's Reading File
Docket OMe-6007
Docket DMEA-2335
Chron

43683

DMEA-2335

2[illegible] 500

r/r o gad

Mr. R. B. LaFlamboy
President
Glacier Mining Company
4039 Evanston Ave.
Seattle 3, Washington

FEB 17 1961

Re: OME-6007 (Copper)
Glacier Mining Company
Midas, et al., Claims
Whatcom County, Washington
and
DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Glacier Mine
Whatcom County, Washington
Contract Idm-E362

Dear Mr. LaFlamboy:

Your letter of February 9 to Secretary Udall has been referred to this office for reply. We have reviewed the docket covering your original project (DMEA-2335) and note that the work was fully completed as provided for in the contract.

With reference to your second application (OME-6007), you mention that there was "much delay". We have also reviewed this docket and note that the application was received on February 11, 1959. After a field examination of the property by Government engineers and geologists, a careful study of all available information was made and the application was denied on April 9, 1959. Consequently, less than two months elapsed between the time the application was received and final action taken. In our letter of denial you were informed that, "If additional work should reveal a definite geological target which would materially alter this opinion, be assured that we will be pleased to consider a new application."

We fully endorse your remarks that if a mine could be established in this section, it would promote work and benefit many. However, our review of the available information concerning your property confirms the denial of your application.

You should feel free to make a new application at any time additional work reveals a definite geological target that might change our conclusions. We assure you that such application will be given fair and careful consideration.

WRGriswold/FEJohnson/gla
2-17-61

Sincerely yours,

(signed) FRANK E. JOHNSON
Acting Director

cc to: Secretary's Reading File
MR (2)
Director's Reading File
Dockets OME-6007 and DMEA-2335
Region I (2) w/2 cys incoming letter

PHONE MEL. [illegible] 2183

GLACIER MINING COMPANY

4639 EVANSTON AVE.

SEATTLE 3, WASHINGTON

MDM

500

Feb. 9th., 1961.

Mr. Stewart L. Udall,
Sec. Interior,
Washington, D.C.

Dear Mr. Udall:

DMEA-233 [illegible]

We at one time started a program under Government help for exploration work on The Glacier Mining Co's property in the Mi. Baker mining district in this State.

When the Eisenhower administration took over we were notified that our agreement would be terminated. The Government had helped us up to that time with a little more than Three Thousand Dollars ($3,000.00)

Since that time we have endeavored to carry on and bring the property into a stage where it could definately be proven as a mine.

We employed the best Geologists, Forbes Robertson of the Bureau of mines, Butte, Mont., and after he left for Brizal to help the Government in the mining industry, we employed Juan Munoz who is recognized as a leading Geologist. These men feel that we have a very good potential property.

Our efforts were such, that it was felt that it would be reasonable for again asking for Government assistance. We had much work accomplished and considerable added information that we felt would give proof of this being a valuable property.

A filing was made Dated Feb. 7th., 1960, Docket No [illegible]

Mr. A.E. Wissenburn of Spokane, has been very cooperative at all times in our efforts. After much delay, Hon. Warren G. Magnuson of the U.S. Senate enquired about our application and was informed that the additional work should reveal a definate geological target, and he would be pleased to consider a new application.

[illegible] are mostly with the working class, and the development of the property would benifit many. If the mine is developed in this section, it would promote work and provide Gold and other minerals for the Countrys' welfare.

We are wondering if it would not be to our advantage to ask for a review of our application, as we feel definate progress has been made. Could such a review be made, or would we have to file a new application.

Thanking you for any help or information, you can give, we remain,

Sincerly yours,

Glacier Mining Co.

Per

Pres.

R.R. LeFlamboy

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

1201 N. Division St.
Spokane 2, Washington
February 23, 1954

RECEIVED
15 1954

MEMORANDUM

To: DMEA Field Team, Region II

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

Subject: Glacier Mining Co., Whatcom County, Washington, Contract Idm-E362 (completed), Docket No. DMEA 2335 (copper)

A visit was made to the subject property on February 16, 1954 to examine the cores from two diamond drill holes which the company has drilled in the last month. Mr. LaFlamboy of the Glacier Mining Company accompanied me on the trip.

The Glacier Mining Company completed a DMEA exploration project in December 1952. This project was unsuccessful in locating the source of the pyrite boulders which have been found in the overburden on the property. To further explore for a source of the pyrite the Glacier Mining Company at its own expense has just completed two diamond drill holes (shown on the attached sketch), the total length of which is 564 feet. The drilling was done by Lynch Bros. Diamond Drilling Company of Seattle, Wash.

Hole No. 1 was drilled from the heading of the crosscut which was driven under the DMEA project. The bearing of the hole is N. 1 W., dip minus 6 degrees, total length 270 feet. It is AX core. The hole was entirely within the argillite. From 129 to 130 feet a soft, limy zone was encountered which contained about 50 percent pyrite. Small blebs of pyrite and disseminated pyrite were scattered in the argillite practically throughout the length of the core. In most cases the pyrite is associated with small irregular masses of fine-grained calcite, which gives a mottled appearance to the core. The drillers reported a flow of green-colored water at about 117 feet. The hole is now flowing water which has a decided sulfur smell. A white precipitate of lime (?) is being deposited in the collar of the hole and on the rocks which the water from the hole flows over. The amount of material which has been deposited in the three weeks since the hole was completed is not sufficient so that a good sample could be taken.

Hole No. 2 was drilled in the bottom of the main adit 71½ feet in from the portal. The bearing of the hole is N. 26 W., dip minus 30 degrees, and length 294 feet. It is AX core. This hole is also entirely within the argillite. Blebs of pyrite are scattered sparsely throughout

the core. There is the same mottled appearance caused by calcite with pyrite as in hole No. 1. A number of stringers of calcite up to 1/4-inch in thickness cut the core at varying angles.

These two diamond drill holes, along with the work done previously, make it appear doubtful that the pyrite boulders found on the surface have a source on the property. However, before dropping this hypothesis entirely, it would be very interesting to make a petrographic study of the association of the calcite and pyrite with the argillite in an attempt to determine if the pyrite and calcite were constituents of the original formation or whether they were introduced later.

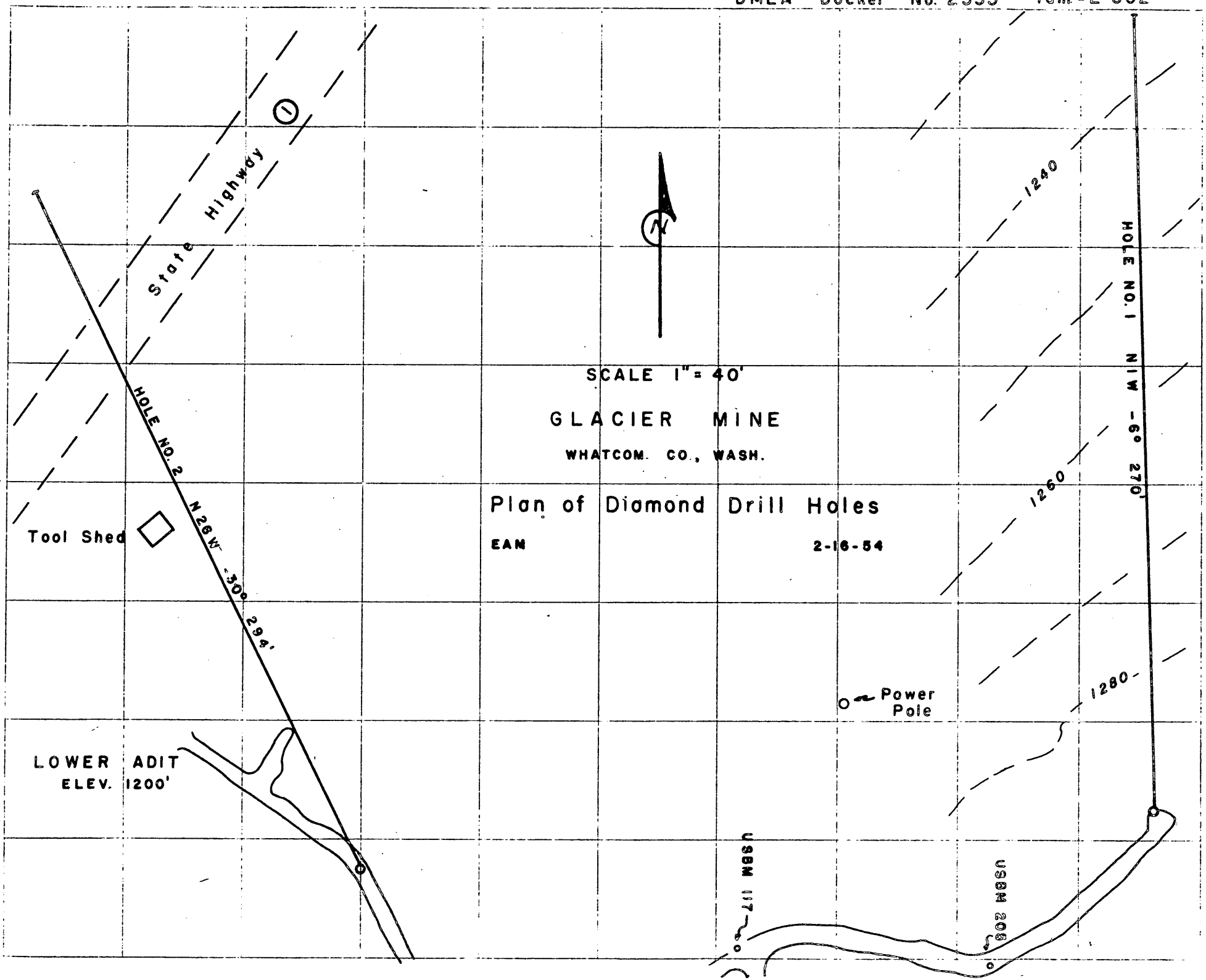
The two alternate hypotheses as to the source of the boulders are:

1. From Church Mountain across the valley to northeast of the mine.
2. Glacial deposits carried down from the Mt. Baker area.

The Operators have no further plans for work on the property at the present time.

E. A. Magill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
EAM/he


State Highway
1
HOLE NO. 2
N 28 W -30° 294'
Tool Shed
LOWER ADIT
ELEV. 1200'
SCALE 1" = 40'
GLACIER MINE
WHATCOM CO., WASH.
Plan of Diamond Drill Holes
EAM
2-16-54
N
1240
1260
1280
HOLE NO. 1 N 1 W -6° 270'
Power Pole
USBM 117
USBM 206

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

February 8, 1954

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Base Metals Branch

Subject: DMEA-2335 (Copper), Glacier Mining Company, Incorporated
Whatcom County, Washington

I have reviewed the final report of the Field Team on this project, and am of the opinion that the information presented amply justifies the recommendation that no Certification of Discovery be made.

There is a recommendation in the final report to which I take exception, this being that two diamond-drill holes should be drilled. Presumably, in view of the previous negative recommendation of the Field Team on an application for assistance in further drilling, this feature of the final report does not have the approval of the Field Team.

C. H. Johnson
C. H. Johnson

Copy to - Minerals Division
E. L. Newcomb, Room 242, GSA
Mr. Johnson
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

Defense Minerals Administration
JAN 29 1954

January 25, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Whatcom County, Washington
Contract No. Idm-E362

Dear Mr. Selfridge:

Enclosed are four copies of the Field Team's final report on the subject contract which has been prepared by E. A. Magill, Mining Engineer, U. S. Bureau of Mines, and Willard P. Puffett, Geologist, U. S. Geological Survey.

Magill and Puffett do not recommend a Certification of Discovery be issued as the project was unsuccessful in locating a copper-mineralized zone in place. The Field Team concurs with this recommendation.

By Field Team, Region II

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

Thomas E. Howard
Thomas E. Howard, Acting Member
(U. S. Bureau of Mines)

Enclosure 1 (in quad.)

cc: USBM (2)
Puffett

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 29 1954

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION II

FINAL REPORT

Contract Idm-E362

Final Fld Team Report

by

E. A. Magill
Mining Engineer
U. S. Bureau of Mines

Willard P. Puffett
Geologist
U. S. Geological Survey

GLACIER MINING COMPANY, INC.
4039 Evanston Avenue
Seattle 3, Washington

Docket No.:	DMEA-2335
Commodity:	Copper
Contract date:	June 30, 1952
Completion date:	December 1952

GLACIER MINE
Mt. Baker Mining District
Whatcom County, Washington

Reviewed by
DMEA OPERATING COMMITTEE
2-1-54
(date)

Spokane, Washington

January 14, 1954

OPERATOR'S
MONTHLY
RPTS

FINAL REPORT

GLACIER MINING COMPANY, INC.
Glacier Mine
Section 4, T. 39 N., R. 7 E., W.M.
Mt. Baker Mining District
Whatcom County, Washington

Contract Idm-E362

* * * *

INTRODUCTION

This report describes an exploration project for copper ore at the Glacier mine, Whatcom County, Washington, which was participated in jointly by the Glacier Mining Company, Inc., and the Government, acting through the Defense Minerals Exploration Administration.

Authorship

W. P. Puffett, Geological Survey, was the author of the section on geology, whereas all other sections were written by E. A. Magill, Bureau of Mines, with the exception of the concluding paragraphs which were authored jointly.

Summary

An exploration project contract in the amount of $7,415 was entered into on June 30, 1952, with the Glacier Mining Company, Inc., 4039 Evanston Avenue, Seattle 3, Washington. The project was set up to explore for sources of copper-mineralized boulders found in the overburden at the Glacier mine. Six bulldozer trenches explored an iron-stained area in the overburden. One hundred fifty feet of crosscutting failed to locate any copper-mineralized zone underground. There remains the remote possibility that the crosscutting was not carried far enough to intersect a metallized zone. The Operator requested additional funds to check this possibility. Such funds were denied.

The project was completed in December 1952 with the total expenditures amounting to $6,788.34, the Government's share being $3,394.17. A Certification of Discovery was not declared.

Recommendations

A Certification of Discovery is not recommended as the project was unsuccessful in locating a copper-mineralized zone in place.

To prove or disprove the property as the source of the pyrite-chalcopyrite boulders which have been found on the surface, it is believed that two diamond drill holes totaling 500 feet are warranted.

LOCATION AND ACCESSIBILITY

The Glacier mine is located in section 4, T. 39 N., R. 7 E., W. M., Mt. Baker Mining District, Whatcom County, Washington. The property is 1½ miles northeast of Glacier, Washington, on State Highway No. 1. The portal of the lower adit is about 100 feet east of the highway at an elevation of 1,200 feet. The property is accessible all year.

PROPERTY

The unpatented mining claims involved in the exploration project are the Bralorne, Midas, No. 10, Wedge, Glacier, and No. 4. These claims are owned by the Glacier Mining Company, Inc.

The mine workings consist of eight large bulldozer cuts and two adits. The lower adit has about 1,125 feet of workings. The upper adit has about 200 feet of workings.

All workings were in good condition when last examined, and no support is required except at the portals in the overburden. The workings make very little water.

The only building on the property is a small tool and compressor shed near the portal of the lower adit.

THE PROJECT

The exploration project was set up to explore for the source of pyrite-chalcopyrite boulders which had been discovered in overburden.

The originally proposed program was to determine the limits of the iron-stained zone in the overburden by six bulldozer

trenches (in most cases extending existing ones). If these limits could be determined, the second stage of the program was 150 feet of crosscutting underground in an attempt to locate sulfide metallization beneath the iron-stained area. The program was completed without any changes.

When the program was unsuccessful in finding a mineralized zone underground, the Operator requested additional funds in the amount of $4,000 to be used for two diamond drill holes to further check the underground source of the pyrite-chalcopyrite boulders. These additional funds were denied.

Work under the exploration project contract was commenced in July 1952 and completed in December 1952.

Geology

The Glacier mine is on the northern slope of the narrow, elongate divide between the Nooksack River to the north and Thompson Creek to the south. Relief in the vicinity of the mine is about 1,000 feet, whereas the average regional relief is in excess of 5,000 feet. The region has been extensively glaciated and several glaciers remain in the area, the most notable of which are those on Mt. Baker, about 10 miles to the south.

Glacial and stream deposits obscure most of the bedrock, and recent volcanic flows to the east cover many of the older sediments and intrusives known in the district. The most recent publication concerning the geology of the area is in Geological Society of America Bulletin, Vol. 50, pp. 1493-1509, Mt. Baker, A Cascade Volcano, by H. A. Coombs, published in October 1939. According to this report, three general types of formations exist beneath the recent volcanics. These formations include a greenstone of possible Carboniferous age, carbonaceous phyllites also of Carboniferous (?) age, and a series of thinly laminated, buff to dark gray shales, graywackes, and impure sandstones younger than the phyllites, possibly of Mesozoic age. Mention is also made of a very thick series of Tertiary rocks, consisting of shales, arkoses, and thin coal seams, bordering the west on Mt. Baker. To the northeast of Mt. Baker and thus considerably to the east of the Glacier mine, the area is underlain by granodiorite.

The most predominant type of rock exposed in the mine area is fine-grained, relatively massive, very dark gray shale or argillite. It is probably a member of that series indicated by Coombs as of Mesozoic age. Where observed, this formation strikes N. 72° E. and dips 15°-20° S.

One narrow dike of dioritic composition is exposed in the lower adit. Approximately 500 feet to the southeast of the

east end of Cut No. 6, rock similar to the dike is exposed. In both instances, this rock contains considerable disseminated pyrite. There are insufficient exposures of this rock southeast of Cut No. 6 to determine whether it is in the form of a dike, or a small stock.

The major portion of the overburden is sharply angular to subrounded, fine-grained volcanic rocks. At only one location near the top of the ridge in Cut No. 6 has this material been completely intersected by bulldozer cuts, and here it was found that this unconsolidated material is nearly 12 feet thick. Dark gray argillite was found to underly it.

Scattered boulders, up to 3 feet in diameter, containing considerable pyrite plus significant quantities of copper sulfides, have been found in the overburden. In the vicinity of these boulders, the surrounding rock material is heavily iron stained and locally there is some green copper stain. A sufficient quantity of these sulfide-containing boulders were recovered for a shipment of 2.36 tons in 1951 to the A. S. & R. Smelter at Tacoma, Washington. Returns from this shipment show its average value to be 0.02 oz. per ton of gold, 0.89 oz. per ton of silver, 4.59 percent copper, 0.80 percent zinc, and 14.9 percent SiO_2.

Two adits, one at 1,190 feet and the other at 1,335 feet elevation, had been driven southeastward into the hill to search for possible sources of the mineralized boulders (see attached map). These adits have followed narrow, joint-like fractures in dark gray argillite which contain sparsely disseminated pyrite and very minor amounts of chalcopyrite. A narrow dioritic dike was intersected in the lower adit. At no place in these workings is there evidence of material which could conceivably be considered as the source for the boulders in the overburden.

Prior to the DMEA contract, the Operator excavated a series of east-west bulldozer trenches exploring the area between the portal of the lower adit and the top of the ridge, a vertical distance exceeding 400 feet. In all of these trenches, some heavily iron-stained material was exposed, and there was a suggestion of an alignment of this material in a general northwest direction. Because of this, it was postulated that perhaps there could be a mineralized zone in bedrock trending northwest but occurring some distance to the east of the underground workings.

The first stage of the contract was to extend the six bulldozer trenches to more fully check this suggested alignment of the iron-stained material. These extended trenches exposed some more iron-stained material, plus scattered exposures of green copper-stained material. However, they appeared to limit the iron-stained material to a definite zone with a northwest alignment.

The second stage of the contract specified extending a crosscut 150 feet from the lower adit eastward to attempt to intersect a possible mineralized zone or contact zone which might be the source material for the boulders. This completed crosscut failed to intersect any type rock other than dark gray argillite such as is exposed in the rest of the underground workings. A few narrow fractures were intersected, along which some iron stain and calcite had been deposited. Strong magnetic anomalies occur in the eastern extension of the crosscut, but no source for these anomalies was found.

Exploitation Possibilities

There was no ore discovered during the exploration project. The mine contains no ore reserves other than a few tons of pyrite-chalcopyrite boulders which have been sorted out while trenching on the surface prior to the exploration contract. These boulders assay 2.68 percent copper, less than 0.005 oz. per ton of gold, and 1.7 ozs. per ton silver.

Summary of Factual Data

Work

Under Stage No. 1 of the contract, six bulldozer cuts were made for a total cost of $1,538.34, or $256.39 per cut.

Stage No. 2, consisting of 150 feet of crosscutting, was on a unit cost basis with $35 per foot being allowed.

The total authorized amount of the contract was $7,415. The Government's share was 50 percent, or $3,394.17. Total expenditures amounted to $6,788.34. The amount that the Government actually paid the Operator was $3,394.17. The amount of Government funds unexpended amounts to $313.33. These unexpended funds were from Stage No. 1 of the contract when the work was performed for less than the estimated amount.

There was no production during the exploration project, and no royalties were paid.

Equipment

There was no equipment purchased for the exploration project. There were no unexpended supplies remaining at the end of the contract.

Discussion of Conclusions

The exploration project was completed without any unusual difficulties. The crosscutting was on a unit cost basis with a

contract being let to the local miners, therefore, the Operator's costs cannot be analyzed.

There remains the remote possibility that the mineralized zone strikes more easterly or northeasterly than originally anticipated. If this is the case, the underground crosscut would not have cut the zone. Therefore, it is believed that two drill holes totaling about 500 feet are warranted to prove or disprove the theory that the iron oxide and pyrite boulders came from an underground source on the property.

In the report on the original examination by DMEA personnel, two other hypotheses for the origin of the boulders were given. These suggested either glacial deposition from a distant source or an extension of a mineralized zone from Church Mountain, a prominence north of the Nooksack River. If further work fails to find ore in place in the mine area, either of these two hypotheses might still be valid.

Enclosure
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Docket
Puffett

FILE COPY
SURNAME:

Docket.
F.E. Kyme
Ellis
Chambers

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

JUN 16 1953

BL

Mr. R. B. La Flamboy, President
Glacier Mining Company
1039 Evanston Avenue
Seattle 3, Washington

Re: Docket No. DMEA-235 (Copper)
Contract No. Idm-6362
Glacier Mine
Okanogan County, Washington

Dear Mr. La Flamboy:

This is with reference to the subject exploration contract between the Glacier Mining Company and the Government.

The final audit of the contract expenditures and the final reports of the Operator and the Field Team have been received and accepted by this Administration. Only $6,788.34 was expended of the total amount of $7,415.00 approved under the contract, 50 percent of which, or $3,394.17, represented the Government's share. There were no unused materials, supplies or equipment to be disposed of for the joint account of the Operator and the Government. The exploration work was completed in a satisfactory manner.

Because the results of the exploration were unfavorable, it is not our intention to make a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your attention is called, however, to Article 7 (d) of the contract which requires the Operator to "keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract".

Your interest in the exploration program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

Paul Mitchell

Administrator

FEKouse/db
6/25/53
cc to: Adm. Reading File
Docket
Messrs. C.H. Johnson, Rm. 3621
A.R. Kinkel, Rm. B-242A, GSA
Ellis

6-16-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

May 21, 1953

Certifying Officer
DMEA Field Team, Region II
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA 2335 (copper)
Contract No. Idm-E362
Glacier Mining Company
Whatcom County, Washington

Dear Sir:

Work under the subject contract has been completed to the satisfaction of the Government. The Operator has submitted a final report which has been accepted as satisfactory by the Executive Officer.

There are no items of equipment, materials or supplies in which the Government has an equity.

It is requested that the Operator's final invoices be processed for final payment since all contract requirements have been met.

Sincerely yours,

A. L. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
LSBM (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

May 21, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company
Whatcom County, Washington
Contract Idm-E362

Dear Mr. Selfridge:

Attached are the original and two copies of the Operator's final report on the subject property. This report was prepared by Mr. R. B. LaFlamboy and is dated May 5, 1953. We have retained one copy.

The report is considered inadequate but acceptable as it is believed this is the best we can expect to receive from the Operator.

By DMEA Field Team, Region II

M. E. Volin, Acting Exec. Officer
(U. S. Bureau of Mines)

Thor H. Kiilsgaard, Acting Member
(U. S. Geological Survey)

Enclosure
cc: USBM (2)
Puffett

PHONE MELROSE 2123

GLACIER MINING COMPANY

4039 EVANSTON AVE.
SEATTLE 3, WASHINGTON

May 5th 1953.

REFER TO	ACTION	NOTED	DATE
Al		Ack	5/6/53
Thor		4/61	
Ruffatto			
ANSWERED			

Executive Officer
Mr. W. E. Weissenborn
5157 Howard St.,
Spokane, Wash.

On contract given us June 30th 1952 IDM-E 362 Docket No DMEA 2335 at a total estimated cost of 74,530.00 on a 50% Government participation. We started work on the first phase of the program Tuesday AM July 22nd 52. The purpose of this work was to determine that our mineralized zone was definitely confined to the location as shown on the map. Nothing was found in the cuts we were asked to make that indicated any minerals outside of the zone as shown on the map. This work was completed in Aug and on Aug 14th 52 we were given approval for the next phase. In phase one of your program we accomplished the necessary work at a saving of a little over 30% from the estimated costs.

RECEIVED
MAY 6 1953
U. S. G. S.
SPOKANE, WASH.

OPERATOR'S FINAL REPORT.

PHONE MELROSE 2123

GLACIER MINING COMPANY

4039 EVANSTON AVE.
SEATTLE 3, WASHINGTON

Work on the Second Phase (which was crosscutting 150 ft of 5'x7' from our left hand crosscut from our main tunnel) was started in Sept. After the Sept work we were directed to cut more to the right in order to get deeper in the hill before trying to cross the mineralized zone. This exposed zone is so eroded or oxidized, that by going further into the hill, before trying to cross the zone we hoped to get below the oxidization. We continued this direction for 94 feet, before turning to the left, and that did not give us enough footage (our grant 150 ft.) to cross get out of the argillite. We completed this work in June 1953, and asked for an amendment to our contract allowing us 500 ft of diamond drilling. This has been denied and we ask for 50% of the June report which you are holding up pending the outcome of our application for additional aid. The last report was submitted to you in Jan. 1953 and its total is 315.00 or 16.57 per foot.

Thanking you and those in your dept who have so kindly assisted us. I am Yours sincerely

Glacier Mining Co

R. B. Gillespie

FL Knedel/FEJohnson/e[redacted]/esf
5/19
cc [redacted] Reading File
[redacted] Secy. for Mineral Resources
Admr. Read. File - R-4624
DMEA Region III (2)

FILE COPY
Surname:
DMEA
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

Messrs. Imhoff R-6648
Mittendorf R-4624
FEJohnson R-4624
Ellis R-4640
Knouse R-4640

Mr. S. in R.J.R. May 20, 1953

Re: Docket No. DMEA-2335 (Copper)
Contract No. Idm-E362
Glacier Mine
Whatcom County, Washington

My dear Mr. Bales:

Reference is made to your letter of May 6, 1953, concerning the recent denial by the Defense Minerals Exploration Administration, for additional Government aid to further explore the property of Glacier Mining Company in Whatcom County, Washington. (Docket No. DMEA-2335, Contract No. Idm-E362). Your comments with respect to the work conducted on your property under the exploration project contract have been noted with interest.

In response to your request, I have had a further review made of your application and other related data. You state that the three bulldozer cuts under Phase 1 of the project were unnecessary as they neither proved nor disproved that you had ore in depth. The review by the Defense Minerals Exploration Administration staff indicates that these cuts did, in its opinion, accomplish the purpose for which they were intended. This purpose was to determine the limits of the oxidized zone so that the direction of the work in the second phase under the contract could be established. This work confirmed the belief that the zone of oxidation apparently is limited to the trend disclosed in previous cuts.

Although the 150 feet of drifting performed under the contract deviated somewhat from a straight course, it does not appear that this deviation was sufficient to affect the results of the work. In a project of this nature, where the target is so indefinite and obscure, there is often a difference of opinion regarding the work to be done. However, in the opinion of most of the Government engineers and geologists who have reviewed the project, sufficient work has been performed on the property to indicate that further expenditure of Government funds is not warranted.

I regret that the conclusion reached as a result of our review of the case does not permit a change in the decision with respect to your request for additional financial assistance.

Sincerely yours,

(sgd) F. E. Wormser

Secretary of the Interior

Mr. James M. Bales
4039 Evanston Avenue
Seattle 3, Washington

May 6, 1953

INTERIOR DEPT.
RECEIVED
MAY 11
OFFICE OF
THE SECRETARY

The Honorable Douglas McKay
Secretary of the Interior
Washington, D.C.

Dear Mr. McKay:

Re: Docket No. DMEA-2335 (Copper)
Contract No. Idm-E362
Proposed Amendment
Glacier Mine
Whatcom County, Washington

This will inform you that we received your letter of April 18, 1953 regarding our contract with the DMEA. We are very grateful for your personal interest in our case and the prompt attention you gave our request. We did receive, within the week, an answer from the DMEA, even though the answer was very disappointing, especially under the circumstances. As you will notice in the enclosed copy of Mr. Mittendorf's letter, he refuses further assistance, the reason being that an insufficient quantity of ore was uncovered under the accomplished phases of the contract. These two phases were as follows and were under the direct supervision of the DMEA team:

Phase I; Three cuts by dozer on each side of the exposed mineralized zone, to prove that the zone was confined entirely to this exposed oxidized area. These cuts, being barren of minerals, proved that the mineralized zone was confined to the area already uncovered.

Comment: In my estimation, these cuts were unnecessary as they neither proved nor disproved that we had ore in depth.

Phase II; Authorization was given to drift 150 feet from our then present position from our left hand cross-cut off our main tunnel in an endeavor to cut the walls of this mineralized zone at some depth below surface, but the field engineer laid the line we were to follow too much to the right and more or less paralleling the mineralized zone.

OFFI( )F
THE SECRETARY OF THE INTERIOR

May 11, 1953

Assistant Secretary Wormser

W. H. McCrillis

Comment: When this error was discovered, we were directed by the engineer to turn back sharply to the left, but we ran out of the authorized footage before breaking through the wall of the mineralized zone.

These facts we tried to explain thoroughly in our request for an amendment. The reason the ore body was not contacted in either of the phases was no fault of the Company. Therefore, we feel that Mr. Mittendorf could not have studied our request thoroughly or he would have understood the reason for our not revealing an ore body. But we feel very strongly that after going along with us this far, the DMEA should match our money in the only really important step that was suggested by them and that is diamond drilling directly into the oxidized zone in depth, which we are now prepared to do at a moment's notice.

Mr. McKay, I am humbly grateful that a man in your position would show such personal concern as you have shown in our problem. I have appealed to you personally because we cannot afford the services of either lobbyists or five percenters. All we ask is that we are given a fair review of our case by the members of the Agency.

We are appealing to you again because we have called a meeting of the stockholders for May 23, 1953 and hope that we may have better news than is now evident to bring to them on that date.

Very respectfully yours,

James M. Bales

James M. Bales
4039 Evanston Ave.
Seattle 3, Washington

Enclosure

FILE COPY
SURNAME:

FLKnouse
Ellis

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

APR 30 1953

Hon. Russell V. C. Mack
House of Representatives
Washington, D. C.

Re: Docket No. DMEA-2335 (Copper)
Contract No. Ida-2362
Proposed Amendment
Glacier Mining Company
Whatcom County, Washington

My dear Mr. Mack:

This is in reply to your letter dated April 24, in which you requested a report on the status of the captioned application for additional Government aid to further explore the subject property.

An Exploration Project contract for a total amount of $7,415.00, was executed by the Government and Operator on June 30, 1952. The purpose of the exploration project was to explore the subject property for the source of some large copper-bearing boulders found on the property. The contract was for both surface trenching and underground work.

The work performed under the terms of the contract was completed with negative results. The Operator then applied for an additional $2,000.00 Government aid for diamond drilling to further explore the property. A careful study of the proposal was made by this Agency and it was determined that the proposed work did not have sufficient merit to justify the expenditure of additional funds. Accordingly, a letter dated April 23, 1953, was addressed to the Operator denying more Government aid for the Operator's proposed work.

We are returning Mr. Pond's letter which you forwarded to us.

I trust this information satisfactorily answers your inquiry.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure 1

FLKnouse/eaf 4/29/53

cc to: Adm. Reading Files
~~Operating Committee~~
Docket
Messrs. CHJohnson, Room 3621
ARKinkel, GSA Room B-242A
Ellis
Knouse
DMEA Field Team, Region II (2)

4-30-53

4/27/53 gla

RUSSELL V. MACK
3D DISTRICT, WASHINGTON

WASHINGTON ADDRESS:
1318 HOUSE OFFICE BUILDING

HOME ADDRESS:
HOQUIAM, WASHINGTON

Congress of the United States
House of Representatives
Washington, D. C.

COMMITTEE:
PUBLIC WORKS

CONSOLIDATION OF FORMER
COMMITTEES ON
RIVERS AND HARBORS
FLOOD CONTROL
ROADS
PUBLIC BUILDINGS AND GROUNDS
WATER POWER AND DAMS

April 24, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
APR 27 1953

Defense Minerals Exploration Administration
Department of the Interior
Washington, D. C.

Gentlemen:

I am enclosing a letter from Mr. Robert Boad of Belfair, Washington and would appreciate a report on the status of the loan mentioned in that letter.

Sincerely yours,

Russell V. Mack

RUSSELL V. MACK, M. C.

rvm/k

enc.

c
o
p
y

PUGET SOUNDERS, INC.
611 Fourth Street, Phone 226
Bremerton, Washington

Belfair, Wash.
April 16, 1953

Dear Russ:

Received your kind letter, and thanks a lot for keeping me informed on Government affairs.

I am now asking you to do me a special favor.

On February 9th, 1953, we applied for an extended loan from the D.M.E.A. Contract No. I.D.M.-E362 for Diamond drilling at the Glacier mine, at Glacier Wash., as yet we have had no word from them.

The Drilling Co. made us an offer of $6.00 per foot for the month of March, we are afraid that if we dont get started real soon, that they are likely to Boost the price on us as their busy season is just getting started, & we might not be able to get them, when we need them.

So will you be kind enough to use your Good Graces, to have them speed up on our application, hoping you & Mrs. Mack are in the Best of Health,

I remain respt. your's

/s/ Bob

700
FILE COPY
SURNAME:

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

Mr. A. D. La Flamboy, President
Glacier Mining Company
5039 Evanston Ave.
Seattle 3, Washington

APR 23 1953

BL

Re: Docket No. DMA-2335 (Copper)
Contract No. Ida-1362
Proposed Amendment
Glacier Mine
Whatcom County, Washington

Dear Mr. La Flamboy:

Reference is made to your application for additional Government aid on the captioned project to further explore the Glacier Mine for copper ore at an estimated cost of $4,000.

Exploration work approved by this agency must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will improve the mineral supply position for National Defense.

A careful study of your proposal and the results obtained from the work done under the captioned contract reveal that the probability of disclosing minable reserves is not believed to be sufficiently promising to justify additional Government participation. Under these circumstances, we regret to advise that your application for additional aid is denied.

If future work at your property reveals evidence which could materially alter this opinion, please be assured we will be glad to consider a new application.

Sincerely yours,

E. O. Eisenhart

Administrator

4/23/53

FLKnouse/jla
4-2-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. CHJohnson, Rm. 3621
ARKinkel, Jr. Rm. 4234 GSA
Ellis
Knouse
DMA Field Team, Region II (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

FILE COPY
Surname:
DMEA

PRS.No. 527

N. S. in R. & R.

My dear Mr. Bales:

This will acknowledge receipt of your letter dated March 19, 1953, concerning the application (DMEA-2335), of the Glacier Mining Company for an amendment to the current contract (Idm-R362) with the Defense Minerals Exploration Administration, to provide additional funds to further explore the mining property for copper ore.

I am informed by the Defense Minerals Exploration Administration that copies of your application for this amendment, and of the Field Team's report concerning it, were received by the Washington office on March 13, 1953, and that your proposal is being considered by the commodity engineers. When the review of these engineers is completed, which I am informed will be within the next few days, you will then be advised of their decision.

It is always a pleasure for me to hear from someone in the Northwest. Your interest in adding to the resources of that area by participating in the DMEA exploration program for strategic and critical minerals is very commendable.

Sincerely yours,
(Sgd) Douglas McKay

Secretary of the Interior

Mr. James M. Bales
Glacier Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Knouse/Ellis/FEJohnson/gla/bih
3/30/53
cc to: Mails & Files R-4539
Secy. Reading File
Asst. Secy. for Mineral Resources
Admr. Reading File R-4624
DMEA Region II (2)
Messrs. Imhoff R-6648
Mittendorf R-4624
Ellis R-4640
Johnson R-4624

Received - Fuels

March 19, 1953

INTERIOR DEPT.
RECEIVED
MAR 23 1953
OFFICE OF
THE SECRETARY

INTE. DEPT.
SECRETARY'S
MAIL CENTER
MAR 23 1953

The Honorable Douglas McKay
The Secretary of the Interior
Washington, D.C.

Dear Mr. McKay,

INTERIOR DEPARTMENT
RECEIVED
MAR 23 1953
DIVISION OF
MINERALS AND FUELS
SECRETARY'S
MAIL CENTER
MAR 23 1953
INTERIOR DEPT.
Def. Min

Some time ago I became interested in a mining property in the Mt. Baker district (the Glacier Mining Company). This property has been financed of late almost entirely by a group of employees of the Boeing Airplane Company, of which I am one.

We went about as far as we could in raising money for tunnel work and bulldozing. In the dozer work we made six cuts about 200 feet apart, exposing an oxidized zone extending from the Mr. Baker highway to the apex of the hill, as shown on the enclosed Government map.

At that time we asked for a Government engineer to examine the property with the hope we would receive some Government assistance. Mr. Magill, of the Spokane office, came over and after a carefull check, recommended a Government loan to be granted in two steps, the first step to bulldoze three cuts on each side of the exposed oxidized zone to prove it was confined to the area already uncovered.

This work was completed and bore out the Engineer's examination. We were then granted the next step which was to drive from our left hand cross cut 150 feet in an attempt to cross this zone far enough below the surface to determine if we had a vein of solid ore. In this step the engineer, Mr. Magill, recommended we drive the drift more to the right in order to get deeper in the hill before turning to the left to make more certain we were deep enough underground to be below the eroded mass. In doing this, we found we didn't have enough footage granted to cross the mineralized zone. Mr. Magill then recommended we diamond drill from the face of the drift 200 feet and also two other upraise holes.

We then made an application for an amendment to our present contract as the enclosed letter shows. The engineer, in the meantime, made another trip to the mine and changed his plans a little as to where we should drill.

This change was to drill one 200 foot core in the face of the drift but instead of the upraises, drill another hole below the highway. This way we would be more apt to prove the extension of the zone if these holes showed solid ore. These holes would be about 300 feet apart.

I am sending maps and letters so you will better understand what I have undertaken to explain in this letter.

I am one of a group of working men who are trying to develope a copper mine. Good engineers have examined the work and property and all agree we have the indications of an excellent mine. There are no real mines developed on this side of the Cascade mountains and with the work already accomplished, and the showing made here, it would mean a great deal to the people of north-western Washington if this particular property was given enough money to fully explore its possibilities. It would more or less prove the value of this area as a mining section.

We are on the lower end of an upraise and if this was fully explored, I believe it would determine the value of the whole Mt. Baker district. The amount necessary to prove this whole section would not be more than $10,000. or $15,000. and could be of great value to the nation for there are numerous out-crops and showings of copper in many of the old prospect holes made in the early days by those searching for gold.

The amount we asked for in an amendment to our loan was $2,000. which we will match. As of today we have not received this loan.

It is solely for this reason, Mr. McKay, that we decided to cut through all the red tape and appeal directly to you in the hope that you might be willing to help in expediting this matter. We further felt that because you are a native of the great Northwest you would be particularly interested in this.

May I add that I am also a native of Oregon, having lived nearly all my life until 1941 in and around Salem. My Mother was born at Oregon City and she and my father both are now buried in the old Clagget Cemetary on the North River road.

We wish to thank you for the help your department has already given us and want you to believe me when I say we are neither promoters nor are we opportunists but just a group of working men trying to develop a mine.

Very Respectfully Yours,

Glacier Mining Company
Seattle, Washington

James M. Bales

James M. Bales

Enclosures (4)

January 8, 1953

U.S. Department of the Interior
Defense Minerals Administration
1701 No. Division St.
Spokane 2, Washington

On July 2, 1950 we were granted a DMA loan to be taken in stages. Previous to this loan we had completed approximately 1300 feet of tunnel work and bulldozed six cuts on the surface. These cuts were spaced approximately 100 feet apart starting at the foot of the hill. In these cuts we uncovered an oxided mineralized zone or capping varying in width from 60 to 80 feet.

Mr. A. E. McGill examined the property at this time and as a first step had us make 3 cuts, on each side of this mineralized zone in order to determine if it was a true capping. These cuts proved that the mineralized zone was confined to the strip we had previously uncovered. The next stage was then authorized and we were directed to continue from our left hand cross cut 100 feet in order to cut through this mineralized zone a little way under the surface.

In order to make more certain that this cross cut would be deep enough under the zone to get away from the oxided zone, we went further in the hill with the tunnel work and at about 36 feet, turned the drift more to the left so we were running almost parallel with the mineralized zone. This left us with only 20 feet to drift in a direction considered necessary to cut through the zone. It was not enough footage to reach the zone.

In view of the consideration that the dip may be much more flat than originally anticipated, therefore crosscut was not long enough to cut the zone. There remains a very good possibility that with further development work in the direction we are now headed, a good ore body will be uncovered. We feel that it would be cheaper to diamond drill from the face of our present tunnel than to continue to drift.

1. Horizontal hole from the face of present ceiling on bearing of S. 80° E. 200 feet.

2. Up hole 45° zone bearing about 100 feet.

3. Up hole at 45° S. E. bearing for 100 feet.

The length of these holes to vary, depending on what is found, but total drilling not to exceed 500 feet.

FORM 5-A SHORT 5061

TACOMA SMELTER

AMERICAN SMELTING AND REFINING COMPANY
SETTLEMENT STATEMENT

TACOMA, WASHINGTON, AUGUST 10, 1951 19

SHIPPER GLACIER MINING COMPANY
4039 Evanston Avenue
Seattle, Washington

MATERIAL Bulk Ore

SMELTER LOT 1974 MINE LOT DATE RECEIVED July 26-51

CAR OR VESSEL Truck ENTRY NO. DATED

GOLD QUOT.	SILVER QUOT.	FOREIGN / DOMESTIC COPPER QUOT.	
DATE	DATE	DATE July 23-28.	DATE
$ PER OZ.	LESS	24.2 LESS 2.75 21.45	LESS

PB.	ZN.	AS.	SB.	NI.	BI.	SN.	FE.	SiO2.	CAO.	S.	CL.
	.80	-	-	-				14.9			

LOT NO.	NO. SACKS REC'D.	NET WGT. INCLUDING CLEAN UP	H2O	DRY WEIGHT	ASSAYS AU	ASSAYS AG	ASSAYS CU	CONTENTS GOLD OZS.	CONTENTS SILVER OZS.	CONTENTS COPPER LBS.
		8,822	1.00	8,734	.02	.89	4.59		3.89	401
					Less .50 Ag				2.18	
					Less 1 unit Cu					87
									1.71	314

Silver @ 90.16 $1.54
Copper @ 21.45¢ 67.35 $ 68.89

Base Charge $10.00 per ton 43.67
(Sampling $12.50 paid July 26) -

$ 25.22

Per ton not including sampling $5.72
" " including sampling $2.88

TACOMA SMELTER

No. 86322

AMERICAN SMELTING AND REFINING COMPANY

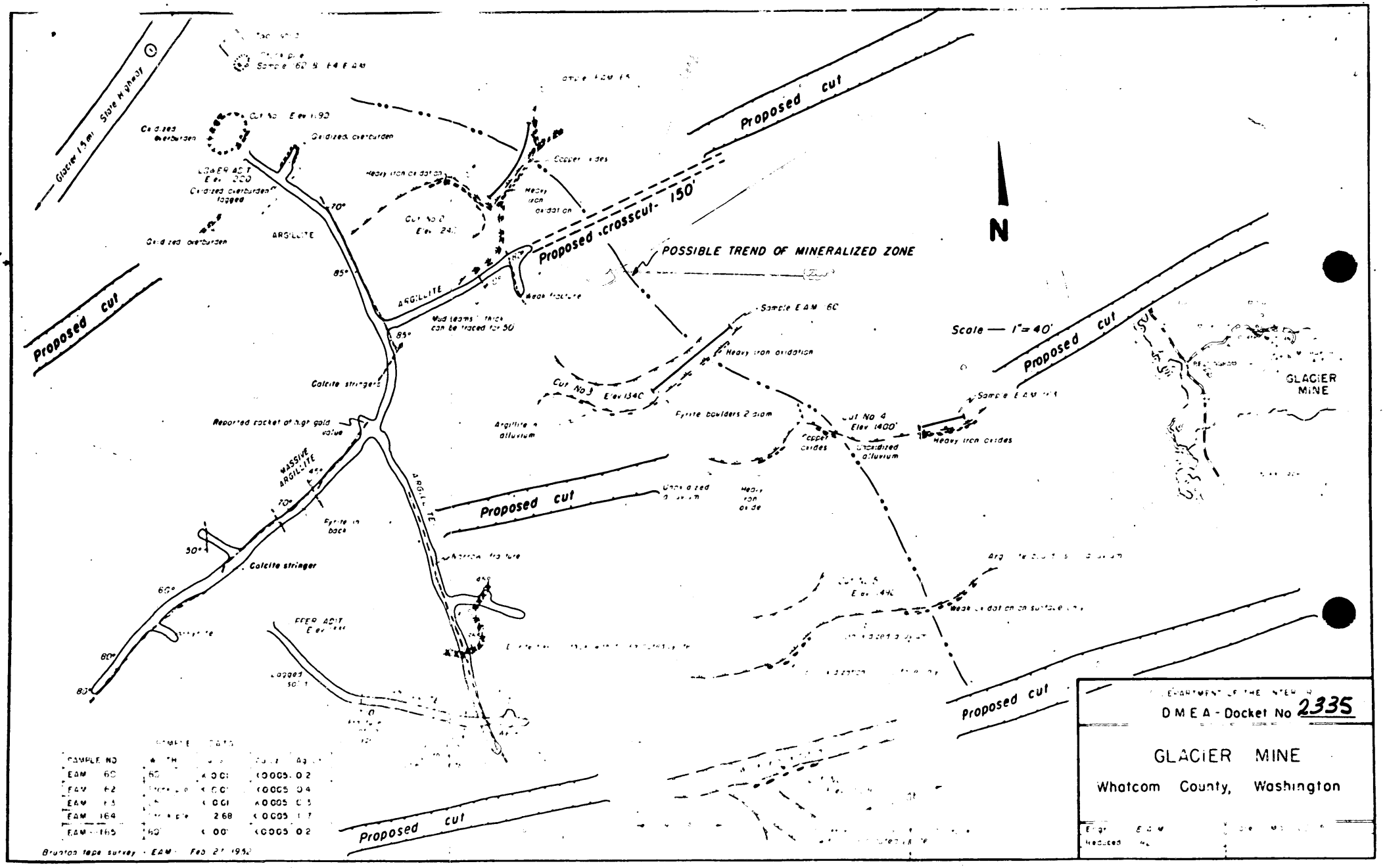
TACOMA, WASHINGTON AUGUST 10, 1951 34-1/1251

PAY TO THE ORDER OF GLACIER MINING COMPANY $25.22
4039 EVANSTON AVENUE
SEATTLE, WASHINGTON

A.S.&R.Co. $25 and 22 cts DOLLARS

TO NATIONAL BANK OF WASHINGTON
TACOMA, WASHINGTON

NOT VALID UNLESS COUNTERSIGNED BY


Glacier 1.5 mi State Highway
Proposed cut
Proposed crosscut - 150'
POSSIBLE TREND OF MINERALIZED ZONE
N
Scale — 1" = 40'
GLACIER MINE
ARGILLITE
MASSIVE ARGILLITE
Calcite stringers
Calcite stringer
Heavy iron oxidation
Copper oxides
Heavy iron oxides
Fyrite boulders 2 diam
Argillite in alluvium
Unoxidized alluvium
Cut No 3 Elev 1340
Cut No 4 Elev 1400'
Sample EAM 60
Mud seams 1" thick can be traced for 50'
Reported pocket of high gold value
Fyrite in back
Oxidized overburden
Heavy iron oxidation
Weak fracture
DMEA - Docket No 2335
GLACIER MINE
Whatcom County, Washington
Brunton tape survey - EAM - Feb 21 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

xxxxxxxxxxxxxxxxxxxx.
So. 157 Howard Street
Spokane 4, Washington

April 16, 1953

Mr. R. B. LaFlamboy
Glacier Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company
Whatcom County, Washington
Contract Idm-E362

Dear Mr. LaFlamboy:

This will acknowledge receipt of your letter of April 14 in which you request information on your application for additional funds to your contract.

Your application has been forwarded to Washington, D. C., for further consideration. We have as yet received no information as to the status of your request.

Sincerely yours,

Thor N. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Puffett

DMEA Field Team, Region II

April 10, 1953

R. J. Hindman, Certifying Officer

Glacier Mining Co., contract Idm-E362, 104A and narrative January 1953.

The above 104A and narrative are attached for forwarding to the Operating Committee at the instructions of Special Notice 192. We are holding all other copies of the 104A, narrative, maps, etc., until the Field Team and Operator come to a decision as to whether to continue the operation or terminate the exploration project.

The figures shown on the 104A are submitted as merely tentative as they have not been checked or verified for accuracy. The balance of the Washington copies with maps, etc., will be sent in at the time payment is actually made.

R. J. Hindman

cc:
USGS
AD
DF
RMH

Wash. ✓

3/24/53 gla

IN REPLY REFER TO:

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

March 24, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons

Subject: Recommendation for denial

Re: Docket DMEA-2335
Glacier Mining Company
Glacier mine, Whatcom County, Washington
Total cost: $4,100
Copper

The applicant has requested funds for additional work at the Glacier mine, Whatcom County, Washington. The original project was designed to discover the source of some pyrite-chalcopyrite boulders. Bulldozing delimited an oxidized zone on the surface, but underground work has uncovered no evidence of mineralized ground from which the boulders could have been derived. The additional funds are requested for diamond drilling from the face of the drift and from the surface.

The examining engineer recommends that the request be approved, but the field team believes that sufficient work has been done to test the area. The present reviewer concurs with the field team's recommendation for denial.

Erwin J. Lyons

Erwin J. Lyons
Geologist

3/24/53 gla

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

March 20, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 20 1953

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: Docket No. DMEA-2335 (Copper), Glacier Mining Company, Whatcom County, Washington, Contract Idm-E362

In response to Mr. Knause's request of March 17, I have reviewed the request for amendment of the above-named contract transmitted by the Region II Field Team March 2, 1953.

It is noted that although the examining engineer is in favor of the additional work described in the proposed amendment, the DMEA Field Team recommends denial.

The work accomplished to date, first by the operator above and then by the operator and Government together under this contract, seems to me to have indicated very strongly that the chalcopyrite boulders were not derived from the immediately underlying bedrock formations, but probably were brought in from some distance. It is almost incredible that if the orebody from which they came were close beneath the surface within the project area, no sign of sulphide mineralization or rock alteration would have been picked up in the many feet of underground working.

I am in accord with the recommendation of the Field Team that the amendment be denied.

Your copy of the amendment application is returned herewith.

C. H. Johnson
C. H. Johnson

Attachment

Copy to - Mr. Kinkel, Room 4234, GSA
Minerals Division
C. H. Johnson
Files

3/25/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

March 11, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 19 1953

Mr. George Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2335-(Copper)
Glacier Mining Company
Glacier Mine
Whatcom County, Washington
Contract Idm-E362

Dear Mr. Selfridge:

This will acknowledge your letter of March 4 with reference to the subject contract in which you state that the request of the Operator for an extension of this contract had not been received at your office. Our records show that there was a delay in transmitting this to you because of the fact that some of the engineers involved were not in Spokane, but the Operator's request with a Field Team recommendation has now been transmitted to you and should be in your possession.

Sincerely yours

A. E. Weissenborn

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

cc: USBM (2)
Puffett

FILE COPY
SURNAME:

F L Knouse
Chamberlain
Selfridge

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

MAR 4 1953

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

Re: Docket No. [illegible]-2335 (Copper)
Contract Idm-[illegible]362
Glacier Mining Company
Glacier Mine
Whatcom County, Washington

Dear Mr. Weissenborn:

This is with reference to your letter addressed to the captioned Operator dated February 16, 1953, in which you state "Your request for an extension of the present contract to provide additional funds for diamond drilling has been forwarded for consideration of the Washington, D. C. office."

As the applicant's request has not been received by this office possibly it was misplaced or lost en route. Therefore, please check your records and if this material has been sent, forward additional copies with your recommendation so that we may proceed to process the amendment.

Sincerely yours,

S.N. 3/4/53

George C. Selfridge (WB)

Chairman, Operating Committee
FLKnouse/jem 3/2/53
cc to: Adm. Reading File
Docket
Messrs. CHJohnson-3621
ARKinkel-4234 GW
Ellis Knouse Chambers
Opr. Com. Field Team, Reg. II

Concur:

J. H. Hedges (WB)
Member, Bureau of Mines

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

3/17/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1953

March 2, 1953

Memorandum

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: DMEA Field Team, Region II

Subject: Amendment to provide for additional work, Docket No. DMEA-2335 (Copper), Glacier Mining Company, Whatcom County, Washington, Contract Idm-E362.

Enclosed are four ozalid copies of a letter from the subject Operator requesting that his contract be amended to provide additional funds for future exploration work. There are also enclosed four copies of a memorandum to the Field Team from E. A. Magill, Mining Engineer, U. S. Bureau of Mines, commenting on the proposal.

The project as originally conceived has been completed without discovering the source of the pyrite-chalcopyrite boulders. Bulldozing on the surface apparently limited the heavy iron oxidation to a definite zone and this zone, if projected at a gentle dip, could overlay the lower mine workings in the area proposed for diamond drilling, as shown on Magill's map. However, it should be pointed out that in the several hundred feet of underground workings that have been driven no evidence has been found to indicate an overlying mineralized zone. If such a zone did occur it would seem that some workings, especially the DMEA crosscut, should have encountered copper or iron staining or some other leaching evidence indicative of the overlying oxidized zone.

The Operator had expended about $50,000 on the property before the present contract began but failed to find the source of the pyrite-chalcopyrite boulders. The present contract project has expended almost $7,000 and it too has failed to find the mineralized source. To thoroughly test the area would probably take more drilling than requested in the attached memorandum. Because the work to date has not been successful in developing information about the target, it is recommended that the request for additional funds be denied rather than continue to feed small amounts of funds toward an objective that cannot be better defined.

By DMEA Field Team, Region II

A. E. Weissenborn

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

M. E. Volin

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

Enclosures
cc: USBM (2)
Puffett

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

1201 N. Division St.
Spokane 2, Washington
February 10, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1953

MEMORANDUM

To: DMEA Field Team, Region II

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

Subject: Amendment for extension of exploration project, Glacier Mining Co., Whatcom County, Wash., Contract Idm-E362, Docket No. DMEA 2335 (copper)

The Glacier Mining Co. has submitted a request (copy attached) for an amendment allowing additional funds for further exploration work under the subject contract. Work allowed under the present contract has been completed with negative but inconclusive results.

The Operators would like to institute a 500-foot (three holes) diamond drilling program from the face of the crosscut driven under the exploration contract, to probe for the mineralized zone which was the target of the original work. After a discussion with the Operators this proposed program has been modified slightly to allow for drilling from the surface in the event the first underground hole is unsuccessful.

Attention was originally drawn to the property by a large number of pyrite-chalcopyrite boulders. An oxidized zone containing more of these boulders was subsequently outlined by bulldozing after some 1200 feet of underground work had been done in an attempt to find the origin of the boulders. A two stage exploration project contract was entered into on June 30, 1952 to do further work in an attempt to find the source of the boulders. Stage I called for extension of existing bulldozer trenches to make certain that the heavy iron oxidation was limited to a definite zone. This stage was successful in determining the limits of the zone. Stage II consisted of advancing an existing crosscut 150 feet further to explore for a mineralized contact zone between the argillite exposed underground and a diorite indicated by boulders on the surface. It is believed that such a zone is the source of the pyrite boulders and the heavy oxidation on the surface. Stage II was unsuccessful in locating such a zone. However, there remains the definite possibility that if such a zone exists, it has a much flatter dip than was originally anticipated. If this is the case, the work carried out so far would not have cut it.

To definitely prove or disprove that the source of the pyrite-chalcopyrite boulders is the hill upon which they lay, it will be necessary to do further work. It appears that the best method to determine if the oxidized zone originated from material in place would be to drill a diamond drill hole from the present heading of the exploration project crosscut. This hole should be drilled N. 10° W. horizontal for 200 feet or until it penetrates the overburden. The glacial overburden is deep in the area and there remains the possibility that the hole would enter overburden before it cut the zone. If this were the case it would give rather conclusive evidence that no pyrite-chalcopyrite remained in place above the adit level. If this diamond drill hole is unsuccessful, a surface hole is proposed. This hole should be drilled on a bearing of about S. 10° E. minus 60 degrees from the approximate location shown on the attached map. This hole will pass beneath the heaviest surface oxidation and will cut the zone if it should have a flat dip as is indicated by the evidence now available. If a section is drawn on a line of N. 20° W. the points of maximum oxidation line up almost perfectly with an indicated dip of 32 degrees. Of course, it is necessary to assume in this case that the mineralized zone has a constant strike, which is unlikely.

It would appear that a mineralized zone or contact zone such as we are exploring for would be relatively easy to locate. Unfortunately, the area is covered with a mantle of overburden 50 feet or more in thickness. Although deep bulldozer cuts were made it was impossible to penetrate to bedrock.

Recommendations

It is recommended that an amendment be prepared, similar to the one attached, to allow for additional work in the amount of $4100.00 (Government participation $2050.00). This additional work should rather definitely prove or disprove the property as the source of the pyrite-chalcopyrite boulders.

E. A. Magill

Orig & 3 cys - Wash.
USGS (2)
DMEA
M/D
EAM

GLACIER MINING COMPANY
Contract Idm-E362
Docket No. DMEA 2235 (copper)

Amendment No. 3

Description of the Work

Step 1. Drill a 200-foot horizontal diamond drill hole on a bearing of N. 10° W. from the face of the exploration project crosscut (Hole No. 1 on attached map).

Step 2 - Alternative A

If the work under paragraph 1 is successful in locating a mineralized zone, two more holes are to be drilled from the same location to determine the strike and dip of the zone. The first hole horizontal about N. 20° E. to determine the strike and the second hole N. 10° W. ∠ 45 degrees to determine the dip. The total footage of these two holes is not to exceed 300 feet.

Step 2 - Alternative B

If the work in paragraph 1 is unsuccessful in locating a mineralized zone, the work in paragraph 2 will not be undertaken. Instead, a surface diamond drill hole from the approximate location shown on the attached map (Hole No. 2) with a bearing of S. 10° E. and an inclination of minus 60° will be drilled.

Estimated Cost

All work is to be done on a unit cost basis in lieu of actual costs, except assaying.

Diamond drilling from underground 200 feet @ $7.50 per foot	$1,500.00	
Cutting diamond drill station underground	250.00*	
		1,750.00*

Alternative A

Diamond drilling from underground 300 feet @ $7.50 per foot	$2,250.00	

Alternative B

Diamond drilling from surface		
Overburden 125 feet @ $10/ft.	$1,250.00	
Bedrock 133 feet @ $7.50/ft.	1,000.00	
		2,250.00*
Assays		100.00
Total cost of Amendment No. 3		$4,100.00
Government's participation @ 50%		$2,050.00

PHONE MELROSE 2123

GLACIER MINING COMPANY

4039 EVANSTON AVE.
SEATTLE 3, WASHINGTON

January 8, 1953

U. S. BUREAU OF MINES
RECEIVED
JAN 12 1953
SPOKANE, WASHINGTON

U.S. Department of the Interior
Defense Minerals Administration
1301 No. Division St.
Spokane 2, Washington

On July 8, 1952 we were granted a DMEA loan to be taken in stages. Previous to this loan we had completed approximately 1300 feet of tunnel work and bulldozed six cuts on the surface. These cuts were spaced approximately 200 feet apart starting at the foot of the hill. In these cuts we uncovered an eroded mineralized zone or capping varying in width from 40 to 80 feet.

Mr. A. B. McGill examined the property at this time and as a first step had us make 3 cuts, on each side of this mineralized zone in order to determine if it was a true capping. These cuts showed that the mineralized zone was confined to the strip we had previously uncovered. The next stage was then authorized and we were directed to continue from our left hand cross cut 150 feet in order to cut through this mineralized zone a little way under the surface.

In order to make more certain that this cross cut would be deep enough under the zone to get away from the eroded mass, we went further in the hill with the tunnel work and at about 94 feet, turned the drift more to the left as we were running almost paralell with the mineralized zone. This left us with only 56 feet to drift in a direction considered necessary to cut through the zone. It was not enough footage to reach the zone.

In view of the consideration that the dip may be much more flat than originally anticipated, therefore crosscut was not long enough to cut the zone. There remains a very good possibility that with further development work in the direction we are now headed, a good ore body will be uncovered. We feel that it would be cheaper to diamond drill from the face of our present tunnel than to continue to drift.

1. Horizontal hole from the face of present working on bearing of N. 50° E. 200 feet.

2. Up hole 45° same bearing about 150 feet.

3. Up hole at 45° N. S. bearing for 150 feet.

The length of these holes to vary depending on what is found, but total drilling not to exceed 500 feet.

PHONE MELROSE 2123

GLACIER MINING COMPANY

4039 EVANSTON AVE.
SEATTLE 3, WASHINGTON

Attached is a summary of costs to cover this work. We ask that this be an amendment to our present contract, Docket No. DMEA 2335, Contract No. IDME362, which is now nearly completed.

Thanking you for prompt attention to this matter, inasmuch as we can get the work done much more cheaply if we can have it carried out March month, as the Diamond drilling people can work in our section at this time of the year and later will be busy elsewhere.

They have given us an excellent figure if work can be done in time period mentioned.

We greatly appreciate the very nice cooperation we have had from everyone in the department at Spokane and trust that this application will have favorable consideration promptly in order to save money for all concerned.

Yours very truly.

Glacier Mining Company

R. B. La Flamboy

R. B. La Flamboy, President

Costs

Lynch Brothers have given us a net figure as enclosed letter states of $6.00 a foot, 500 feet for $3,000.00. This includes furnishing the compressor and all necessary equipment.

500 ft.	$3,000.00
Cost of cutting station room for space for drillers to work	250.00
Miscellaneous supplies, etc.	100.00
Wages for foreman sampler	500.00
Bookkeeping	50.00
Assays	100.00
	$4,000.00

R. C. LYNCH

CHAS. D. SELLERS

LYNCH BROS.

DIAMOND DRILL CONTRACTORS

3425 STONE WAY • TELEPHONE MELROSE 5052

SEATTLE 3, WASHINGTON

December 7, 1953

Glacier Mining Co.,
4039 Evanston Ave.,
Seattle, Washington

Atten: Mr. F. B. La Flamboy

Gentlemen:

With reference to your request for cost of diamond drilling your properties 1-1/4 miles from Glacier, Washington, on the Mount Baker highway, we submit the following:

We will supply all labor and equipment and supplies, including compressed air and core boxes and drill 500 feet of AX size hole for $6.00 per lineal foot.

Stations large enough to make 10 foot pulls shall be cut by you.

Very truly yours

LYNCH BROS.

BY R. C. Lynch

RCL'AG

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Spokane, Washington
February 18, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

Glacier Mining Company
4039 Evanston Avenue
Seattle 3, Washington

Subject: Docket No. DMEA 2335 (copper)
Contract Idm-E362
January 1953 invoice

Gentlemen:

As indicated in the attached memorandum to the Field Team from R. J. Hindman, Certifying Officer, payment on the subject invoice has been withheld.

It is standard procedure, as a project nears completion, to withhold a portion of the Government's contribution to the cost pending receipt of your final report and accounting and completion of an audit by a representative of the Contract and Audit Division of the Defense Minerals Exploration Administration.

Your request for an extension of the present contract to provide additional funds for diamond drilling has been forwarded for the consideration of the Washington, D. C. office. If your request is approved and the amount of the contract is increased, payment on this invoice will be made upon receipt of the appropriate amendment from the Washington, D. C. office.

By Field Team, Region II

M. E. Volin, Acting Exec. Officer
U. S. Bureau of Mines
1201 N. Division St.

Thor H. Kiilsgaard, Acting Member
U. S. Geological Survey
157 South Howard Street

cc: DMEA, Wash. (2)
USGS (2)
DMEA
AD
EAM
DF

TEH/he

2/18/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 North Division St.
Spokane 2, Washington

February 4, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1 6 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. A. Magill, Mining Engineer

Subject: Progress examination Glacier Mining Co., Whatcom County, Wash., Contract Idm-E362, Docket No. DMEA 2335 (copper)

A progress examination was made of the subject property on January 6, 1953. Accompanying me on the examination was Willard Puffett, USGS, also at the property were Messrs. LaFlamboy, Bode, Johnson, and Farrel, the first two officers and the latter two employees of the Glacier Mining Company.

Since my last visit to the property on December 1, 1952, the crosscut had been advanced 56 feet, making a total advance of 150 feet and completion of Stage II of the contract. It has not been necessary to timber any of this ground. In order to facilitate measurements, a new marker tag, USBM 205, was placed in the back of the crosscut 86 feet eastward from USBM 117. A brunton tape survey was made of the new underground workings as well as the Stage I surface bulldozer trenches. A copy of a map showing this new work is attached.

The results of a spectrographic analysis by the USBM, Albany, Oregon on Sample EAM-230 have been received. This sample consisted of select pieces of argillite containing disseminated pyrite and pyrite nodules. It came from the fault 70 feet east of station USBM 117.

Spectrographic assay:

Al	over 10%
Be	0.001 to 0.01%
Ca	Over 10%
Cu	0.01 to 0.1%
Mg	1 to 5%
Co	0.01 to 0.1%
Fe	5 to 10%
Mn	0.01 to 0.1%
Ni	0.01 to 0.1%

Si	over 10%
Ti	0.01 to 0.1%
V	0.01 to 0.1%
Na	0.1 to 1%
Zr	0.01 to 0.1%
B	0.001 to 0.01%

Unfortunately no mineralized zone such as is exposed on the surface has been encountered underground. This failure may be due to the zone having a different strike than was originally anticipated along with a much flatter dip. An examination of the new (Stage I) surface cuts along with plotting of the exploration project contract crosscut appears to bear this out.

The operators discussed the possibility of requesting additional funds to diamond drill from the face of the crosscut to check the possibility that the crosscut has been stopped short of the target. They were advised to submit a letter requesting an amendment to the contract allowing additional funds for this work.

E. A. Magill

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

January 7, 1953

Memorandum:

To: DMEA Field Team, Region II

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

Subject: Docket DMEA-2335 (copper). Routine examination of Glacier Mine, Whatcom County, Washington, Contract Idm-E362

A routine examination was made of the Glacier mine on Tuesday, January 6, 1953. I was accompanied by E. A. Magill, U. S. Bureau of Mines, Messrs. LaFlamboy, Bode, Johnson, and Farrel, officers and employees of the Glacier Mining Company.

A tape and compass survey was made of workings completed under terms of the contract. A copy of the map of the new underground workings accompany this report.

At the time of the examination, the crosscut had been extended the 150 feet specified in the contract. Unfortunately no other type rock other than the fine-grained, dark gray, argillite was exposed. A few narrow faults were cut in which were narrow gouge zones with some associated calcite. Locally pyrite was found in the argillite, and along the bedding planes also was fine-grained pyrite generally associated with very thin layers of fine-grained calcite.

All work specified in the contract has been completed with the exception of the mapping and sampling by a mining engineer and geologist.

Although the inferred diorite-argillite contact toward which the crosscut was aimed was never intersected, the possibility exists that this contact dips much more flatly than originally supposed, and if so, the crosscut was not long enough to hit it. This possibility was discussed with Mr. LaFlamboy and he intimated that he may request additional funds to attempt to prove or disprove the existence of the contact. This added work would probably be diamond drilling. It is estimated that 500 feet of diamond drilling from a station in the present crosscut face would be sufficient to reach a conclusion as to the existence of an ore-bearing zone along the inferred contact.

Willard P. Puffett

Enclosure
Dist: Orig. & 3-DMEA
USBM (2)
Docket
Puffett

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

December 10, 1952

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare and Misc. Metals Division

Subject: Clearance on Amendments

Docket No. DMEA-2335, Contract No. Idm-E362
Glacier Mining Company

Mr. Knouse has reviewed Amendment No. 2, dated November 29, 1952, submitted by Region II, and approves it.

David Nieminen, etc. Docket No. DMEA-2419, Contract Idm-E299

Mr. Schmidt has reviewed and approved Amendment No. 1, dated in July of 1952, which was forwarded by Mr. Weissenborn with his letter to Mr. Johnson of December 3, 1952.

Grace L. Ault
Grace L. Ault

RECEIVED
DEC 15 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

2330

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

1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1952

December 5, 1952

MEMORANDUM

To: DMEA Field Team, Region II

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

Subject: Progress examination, Glacier Mining Co., Whatcom County, Washington, Contract Idm-E362, Docket No. DMEA 2335 (copper)

A progress examination was made of the subject property on December 1, 1952. Mr. R. B. LaFlamboy, president of the company, accompanied me on the trip to the property.

Since my last inspection on November 12, 1952, the Operators have advanced their crosscut 27 feet (see attached sketch). This makes a total distance to the face from USBM #117, of 110 feet of which 94 feet has been driven under the exploration contract. The crosscut has been turned so that it has a direction of about N. 60 E., as advised at the time of my last visit.

The crosscut is still in argillite. A weak fault is exposed in the face, the fault contains a seam 1/2 inch thick of calcite. Pyrite up to 1/2 inch in diameter was observed in the argillite; this same feature has been found in other sections of the workings. No samples were taken.

A compass tape traverse was run from the face of the crosscut, out the portal and up on the hill in order to locate the crosscut in relationship to the surface features. This traverse indicated that the 56 feet remaining in the contract will crosscut beneath the oxidized zone as exposed on the surface. However, this may not cut (assuming there is one) the mineralized zone underground. Unfortunately we do not know the dip or strike of the zone. The oxidized zone on the surface appears (assuming no variation in strike or dip) that it might have under the worst conditions (from the standpoint of its being intersected by the crosscut) a strike of east-west with a dip of 40 degrees north. If this is true, there is insufficient footage in the contract to cut the zone. It is recommended that the present crosscut be continued inasmuch as there still remains the chance that the strike may curve or the dip might not be as flat as 40 degrees in which event the crosscut should intersect the zone.

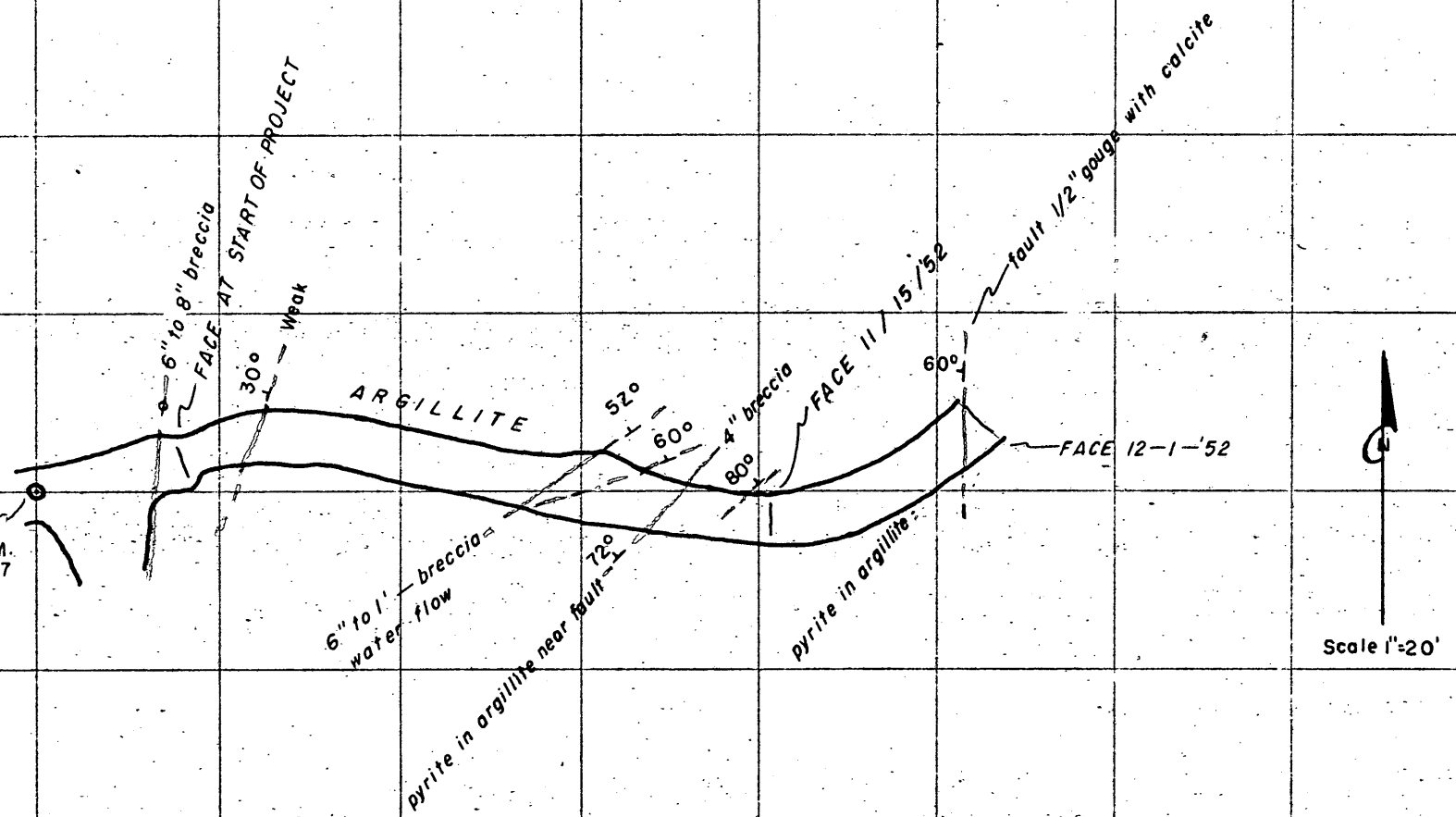
The subcontractors (Farrow and Eaton) who are driving the cross-cut have made rather slow progress due to the compressor having been broken down for 5 days. However, they hope to complete Stage II of the project by Christmas.

E. A. Magill

E. A. Magill

Enclosure

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EAM/vf



GLACIER MINE

WHATCOM COUNTY,

WASHINGTON.

D. M. E. A. CONTRACT Idm— E 362 DOCKET NUMBER 2335 —— E.A.M. 12-'52

"ALBANENE" No. 196M K&E CO., N. REG. U.S. PAT. OFF.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Docket copy

[redacted]
So. 157 Howard Street
Spokane 4, Washington

December 3, 1952

Defense Minerals Administration
DEC 3 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2335 (Copper)
Glacier Mining Company
Whatcom County, Washington
Contract Idm-E362

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. 2 to the subject contract, with attached justification.

Copies of this amendment have been retained by the Operator, the Finance Officer, and the Field Team.

Sincerely yours,

Thor H. Kiilsgaard
Thor H. Kiilsgaard
Acting Executive Officer
DMEA Field Team, Region II

Enclosure

cc: USBM (2)
Puffett

cc 12-8

RECEIVED
DEC 15 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 24 1952

1201 N. Division St.
Spokane 2, Washington
November 20, 1952

MEMORANDUM

To: DMEA Field Team, Region II

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

Subject: Progress examination, Glacier Mining Co., Whatcom County, Wash., Contract Idm-E362, Docket No. DMEA 2335 (copper)

A progress examination was made of the subject property on November 12, 1952. Mr. R. B. LaFlamboy, president of the company, was on the property at the time of my visit.

Since my last inspection on August 4, 1952, the operators have advanced their crosscut a total of 67 feet (see attached sketch), making a total distance to the face from station USBM #117 of 83 feet. At the time the project was started, the face was 16 feet east of USBM #117. The untimbered crosscut has a width of about 5.5 feet and an average height of 7 feet. It is being hand mucked and drilling is with a mounted jackhammer.

The crosscut is all in argillite. A fault with from 6 inches to 1 foot of gouge and breccia was encountered 57 feet east of USBM #117. This fault has a strike of N. 58° E. and a dip of 52° W. A few nodules of pyrite were encountered in the fault zone. No samples were taken.

At the time of our visit on August 4, Mr. Puffett (USGS) and I advised the operators to extend the crosscut due eastward. Unfortunately, the Operators swung the crosscut about 13 degrees south of due east. This tends to give the crosscut a strike paralleling the possible mineralized zone; consequently, the operators were advised to turn the crosscut and follow a course of N. 60° E. Two markers were driven in the back for their guidance. It is hoped that the 83 feet of crosscutting remaining in the contract will be sufficient to cut the mineralized zone if it should have a flatter dip than was originally anticipated.

Progress of the contract has been slow. One of the reasons is that the operators did not have sufficient money to immediately commence work on Stage II after the completion of Stage I. To improve

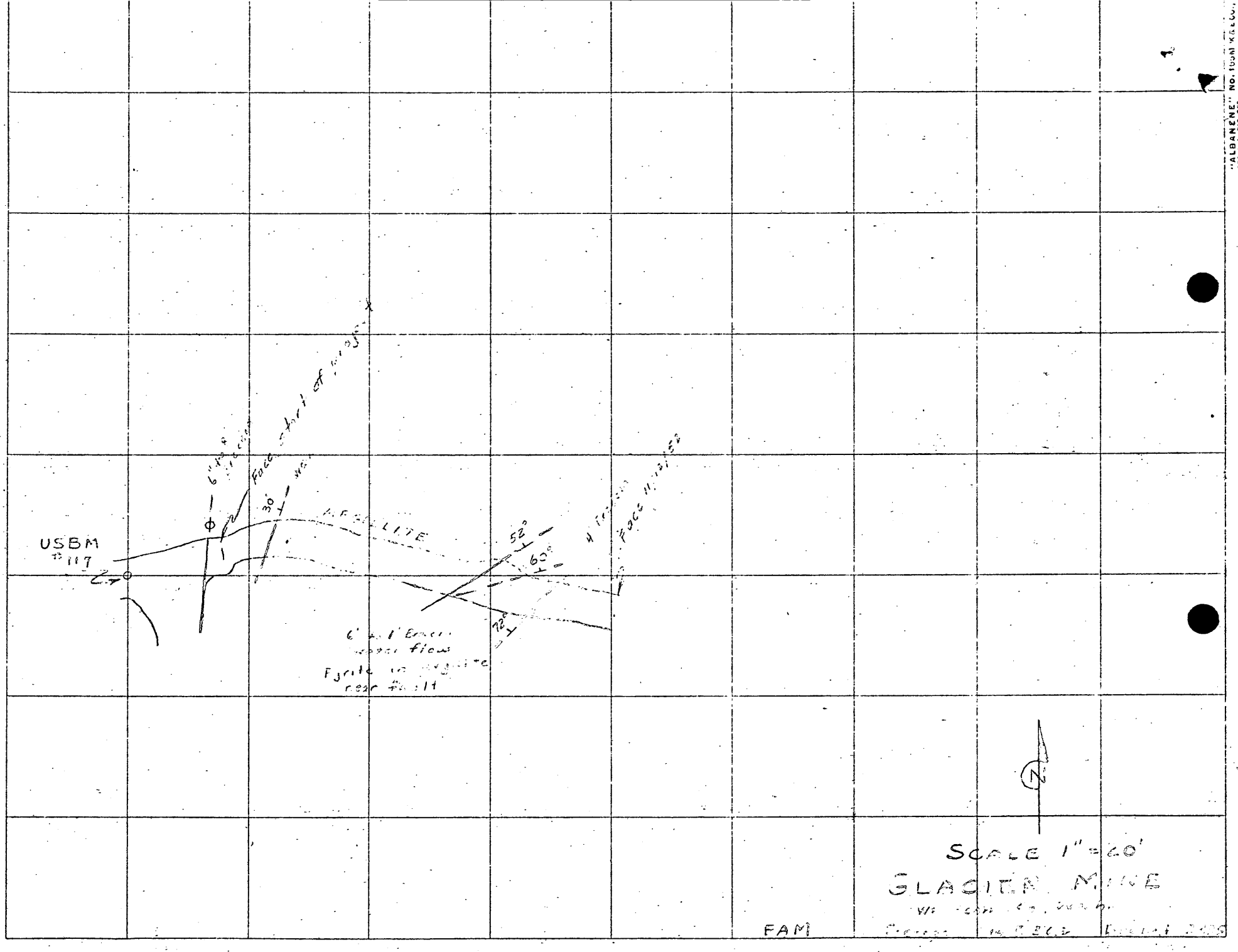
progress they have now subcontracted the crosscutting to Farrow and Eaton, and it is anticipated that the project will be completed by the middle of December.

An amendment (No. 2) has been prepared, extending the completion date of the project from 4 to 8 months. This extension should give the operators ample time to complete the project.

E A Magill

E. A. Magill

Orig. & 3--Wash.
USGS (2)
DMEA
M/D
EAM


USBM
#117
30°
52°
60°
72°
SCALE 1" = 60'
GLACIER MINE
FAM

FILE COPY
SURNAME:

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

Rewritten by
11/10/52

A.E.Kane
FLKnouse
Talbut
Mullendy

NOV 13 1952

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Glacier Mining Co., Inc.
Docket No. DMEA-2335 (Copper)

Dear Mr. Weissenborn:

Reference is made to your letter to me of October 24 enclosing Amendment No. 1 to the subject contract. This amendment adds $45 under the heading "Miscellaneous," for the cost of (1) moving a bulldozer, and (2) traveling for supplies.

This amendment is improper for the following reason: Under Stage I, in Item (1) "Independent Contracts," provision is made for a bulldozer, including its operator, supplies, and repairs for 80 hours at $15 per hour, a total of $1200. This item is starred, is an "allowable maximum", and includes both the cost of moving the bulldozer to the work, and the cost of obtaining the supplies, if they are intended for the bulldozer or its operator.

If the supplies are intended for the supervisor or other laborers not operating the tractor, then the cost of their procurement may properly be attributed to "Contingencies" (Article 6 (8)) or come out of Item (3) "Operating Materials and Supplies," and no amendment is necessary for this purpose. As this latter item is not starred, if the $140 specified for supplies has already been spent, money allocated for other items whose cost has been lower than estimated may be utilized for this purpose.

Sincerely yours,

Frank E. Johnson (JHS)

Chairman, Operating Committee

AEKane/ema

cc: Mails & Files
Adm. R. File
Op. Comm.
Mr. Thayer
Mr. Hedges
Mr. Ellis
Mr. Kane
Mr. Hofflund
Chron.
Pending

APPROVED:

H. M. Hedges (HB)
Member, Bureau of Mines

E. L. McKnight (HB)
Member, Geological Survey

1201 North Division Street
Spokane 2, Washington
October 31, 1952

Glacier Mining Company,
4039 Evanston Avenue,
Seattle 3, Washington.

Subject: July-August supplemental invoice,
contract Idm-E362

Gentlemen:

When checking the subject invoice we found we did not have sufficiently detailed data to permit us to properly check the payroll tax computation. We did not disallow this item of $39.21, but ask that you send us a schedule showing how you arrived at the figure. Please do this promptly. It will be necessary for us to deduct this tax item from your next invoice unless we have received the information requested by the time it is ready to be certified for payment.

Yours very truly,

M. E. Volin, Member
DMEA Field Team, Region II

cc: Wash. (2)
DF
DMEA-AD

700

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

October 29, 1952

MEMORANDUM

To: Hazel Berry
Operating Committee

From: Grace L. Ault
Rare and Misc. Metals Division

Subject: Docket DMEA-2335 (Copper)
Contract Idm-E362
Amendment No. 1

Mr. Knouse has reviewed Amendment No. 1 dated October 15, 1952, on the above-captioned contract and has approved it.

Grace L. Ault
Grace L. Ault

RECEIVED
OCT 31 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cee 11-13-52

Posted 10/29/52. (HB)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
[redacted]
No. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

October 24, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Docket DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Whatcom County, Washington
Contract Idm-E362

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. 1 to the subject contract to which is attached the justification, which is self-explanatory.

A copy of the amendment has been retained by the Operator, a copy is being retained for the files of this office, and by a carbon copy of this letter a copy is being sent to the Regional Finance Officer, Albany, Oregon.

Sincerely yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure
cc: USBM (2)
Reg. Finance Officer w/encl.
Puffett

10/31/52 gla

DOCKET COPY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

October 22, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2335 (Copper)
Glacier Mine
Whatcom County, Washington
Contract Idm-E362

Dear Mr. Johnson:

We are attaching two copies of a memorandum by Willard P. Puffett in reply to your letter of September 25, 1952, from the Operating Committee. We had hoped that the company would hire a geologist to get the information that had been requested, but we will obtain this on the next inspection trip.

Sincerely,

A. E. Weissenborn

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

Enclosure

cc: USBM (2)
Puffett

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
[redacted]
So. 157 Howard Street
Spokane 4, Washington

October 16, 1952

Memorandum

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

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

Subject: Docket DMEA-2335 (Copper), Glacier Mine, Whatcom County, Washington, Contract Idm-E362.

A letter dated September 25, 1952, addressed to you from Mr. E. W. Ellis, Acting Chairman, Operating Committee, has been referred to me. In this letter it is stated that it would be of interest to the office of the Operating Committee to obtain a sketch of trenches showing geology, mineralization and sample data justifying Stage II of the above-captioned contract.

An inspection by Mr. Magill of the Bureau of Mines and myself was made of the property August 5, 1952, to determine if sufficient information had been obtained for the justification of the initiation of Stage II. According to the original report by Mr. Magill recommending approval of a project at this property, Stage II was to be initiated "If Stage I indicates that the gossan is limited to the present apparent trend now disclosed in the cuts". The completed trenches were inspected to determine if the iron-stained zone had been completely intersected in a manner to indicate the zone was limited in lateral extent. As noted in my memorandum of August 12, 1952, this had been done and thus it was deemed that insofar as the recommending report and contract states, Stage I had been successful. No sketch was made of the trenches and no samples were taken.

The contract does allow $1 [illegible] in Stage I for a mining engineer and geologist to map, sample and prepare technical progress reports for the Government. Although this is allowed, it is not stipulated to be a prerequisite undertaking for the initiation of Stage II. The Operators did not take advantage of this allowance and have not submitted any technical report on the work done under Stage I. It may be that this is that to which Mr. Ellis refers in his letter.

We have received reports that work has been progressing as part of Stage II of the contract. A field inspection of this work will be required in the near future. At that time, I will make a sketch of trenches completed under Stage I of the contract and attempt to show on these sketches the information Mr. Ellis requests.

Willard P. Puffett
Geologist

cc: DMRA (2)
USBM (2)
Puffett

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

1301 N. Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

October 19, 1952

Glacier Mining Co.
4039 Evanston Ave.
Seattle 3, Washington

Attention R. B. LaFlamboy

Subject: July-August, 1952, invoice, Glacier Mining Co., Whatcom County, Wash. Contract Idm-E362, Docket DMEA 2335 (copper)

Dear Mr. LaFlamboy:

This is in reply to your letter of October 10, 1952, regarding deletions on the subject invoice. Please find enclosed 8 copies of Amendment No. 1 to your exploration project contract which will allow you to reclaim the amounts deleted. Please sign all copies and return to this office.

After amendment No. 1 has been approved a supplementary invoice for July and August reclaiming the items which were deleted may be submitted by you. It will be necessary that you furnish a supporting payroll as requested by Mr. Lee, Finance Officer, in his letter of October 10, 1952.

Very truly yours,

F. E. Howard
Chief, DMEA Section
Bureau of Mines, Region II

Enclosure

CC: 2-Amb.
2-IECS
DMEA
IAM
N/D
D/F

EAM:kt

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

October 10, 1952

MEMORANDUM

To: DMEA Field Team, Region II

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

Subject: Glacier Mining Company, Whatcom County, Washington, Contract Idm-E362, Docket 2335 DMEA (copper)

Mr. R. B. LaFlamboy, president of the Glacier Mining Company, was contacted by phone in Seattle on October 4, 1952. He stated that they had driven the crosscut at the Glacier Mine under Stage No. 2 of the exploration contract a total distance of 25 feet. The crosscut, according to him, was still in argillite but it was becoming more broken and slightly altered.

E. A. Magill

Orig. & 3 - Wash.
USGS (2)
DMEA
M/D
EAM/vf

10/14/52 gla

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

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 13 1952

September 30, 1952

Mr. Ernest William Ellis
Acting Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company
Contract Idm-E362
Whatcom County, Washington

Dear Mr. Ellis:

This will acknowledge your letter of September 25, 1952, asking us to furnish a sketch of the trenches showing the geology, mineralogy, and sample data justifying Stage II. This will be prepared and forwarded to you as soon as Mr. Puffett, who is now on another inspection trip, returns from the field.

Sincerely yours,

A. E. Weissenborn

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

FILE COPY
SURNAME:

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

SEP 25 1952

Mr. [illegible] Eisenborn
Executive Officer, Region II
[illegible] Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. [illegible]-2335 (Copper)
Glacier Mining Company
Contract [illegible]-362
[illegible] County, Washington
Inspection Report Dated
August 12, 1952

Dear Mr. Eisenborn:

Reference is made to the inspection of the captioned contract progress report dated August 12, 1952, by Mr. Gilford J. Suffett, [illegible] Field Team, Spokane.

[illegible] would be of interest to this office to have a sketch of these trenches if available, showing the geology, mineralization, and sample [illegible].

Sincerely yours,

Ernest Wm. Ellis

ACTING

Chairman, Operating Committee

FLKnouse/jem 9/24/52
cc to: Adm. Reading File
Docket
Messrs. C.H.Johnson-3621
Ned Nelson-4210
Ellis Knouse
Opr. Committee
Field Team, Region II

Concurred:
C. H. Johnson (B.H.)
Member, Bureau of Mines
A. R. Kunkel, Jr. (B.H.)
Member, Geological Survey

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

1201 N. Division St.
Spokane 2, Wash.

September 17, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: E. A. Magill, Mining Engineer

Subject: Glacier Mining Co., Whatcom County, Wash., Contract Idm-E362, Docket 2335 (copper).

Mr. J. R. Atkison, Secretary of the Glacier Mining Company, was contacted in Seattle on August 29, 1952, in regard to the voucher which the company had submitted to cover the funds expended in stage No. 1 of the subject contract. A number of suggestions were made as to the proper method of preparing it and the operator was asked to resubmit it.

A progress examination of the property was postponed inasmuch as the operators had not started stage No. 2 of the contract. They hoped to begin operations under stage No. 2 on September 2. Apparently the operators are experiencing a little difficulty in raising their share of the funds necessary to carry out the contract.

E. A. Magill

E. A. Magill

CC: 3-Wash.
2-USGS
DMEA
M/D
EAM

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

So. 157 Howard Street
Spokane 4, Washington

September 17, 1952

Mr. Henry T. Born, President
Spokane Mining Syndicate, Inc.
730 Peyton Building
Spokane 8, Washington

Dear Mr. Born:

Enclosed are six copies of Amendment No. 1 to the exploration project contract concerning the project at the Talisman Mine. This amendment changes the total time for execution of the project from twelve to twenty-two months as per your request in a letter dated September 11, 1952. Please sign all copies, retain one to attach to your copy of the contract and return the other five copies to this office.

Sincerely,

Willard P. Puffett
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: DMEA (2) ✓
USBM (2)
Puffett

M. E. Volin, Member, DMEA Field Team, Region II August 14, 1952

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

Progress examination, Glacier Mine, Whatcom County, Washington
Contract Idm-E362, Docket 2335 (copper)

A routine progess examination was made of the subject property on August 4th in company with Willard Puffett and Gerald Fuller of the U.S.G.S.

At the time of the visit the operators had practically completed Stage No. 1 of the contract. The bulldozer trenches as called for in the contract had been completed excepting the one west of the adit portal; they were in the process of cutting this one at the time of the visit.

The trenching, carried out in a very satisfactory manner, has disclosed that the oxidized zone is limited to the area exposed by the previous bulldozing. This would indicate that the zone is definitely localized.

Inasmuch as Stage No. 1 of the contract has been successfully completed and the oxidation zone appears to be definitely localized, it is recommended that the operators be allowed to enter into Stage No. 2 of the contract, which calls for the extension of an existing crosscut 150 feet to explore the area under the oxidized zone.

A marker tag, USBM 117, was placed in the crosscut 16 feet from the face where the proposed crosscut is to begin.

E. A. Magill

cc: Wash. - 2
USGS - 2
EAM

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

August 12, 1952

Memorandum

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

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

Subject: Routine inspection of progress at Glacier Mining Company's claims in Whatcom County, Washington, under DMEA Exploration Project contract Idm-E362. Docket DMEA 2335 (Copper)

A routine examination of the Glacier Mining Company property was made Monday, August 5, 1952. I was accompanied on this inspection by E. A. Magill, U. S. Bureau of Mines, and G. W. Fuller, U. S. Geological Survey. Mr. LaFlamboy of the Glacier Mining Company was at the property as was also a crew engaged in constructing bulldozer trenches that are part of the exploration project.

The objective of the exploration project at this property is to discover the source of p yrite-chalcopyrite boulders that have been found in the area. The first stage of the project is to do surface trenching in an effort to delineate a surface-iron stained zone which may represent the surface expression of the explored for target.

A number of deep bulldozer trenches had been made at the time of the inspection. Evidences exposed in these trenches indicate the iron-stained zone had been completely intersected thus supporting the theory that this zone is limited in lateral extent. It is believed that sufficient evidence had been obtained at the time of the inspection to justify the initiation of Stage II of the contract.

Mr. William Farrow, foreman of the operation, was shown where to begin his underground tunnel and markers were set up to give him the correct bearing on which to drive his heading. A marker, USBM #117, was implaced in the back of the existing tunnel from which to measure advance inasmuch as the underground work is to be paid for on a unit cost basis.

Willard P. Puffett

cc: DMEA (2)
USBM (2)
USGS(SRO)
Puffett

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

So. 157 Howard Street
Spokane 4, Washington

fa
wnc

July 30, 1952

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

Re: Glacier Mining Company, Inc.
Docket No. DMEA-2335
Contract Idm-E362, Copper

Dear Mr. Johnson:

Enclosed are the original and two copies of referenced contract. In accordance with previous instructions, the Finance office copy has been transmitted to the Bureau of Mines at Albany, Oregon. We have retained the Field Team copy.

Sincerely yours,

S. Warren Hobbs

S. Warren Hobbs
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM, Spokane
USBM, Albany (with 1 encl.)

700 FILE COPY
SURNAME:

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

JUL 17 1952

Hon. Russell V. Mack
House of Representatives
Washington 25, D. C.

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Whatcomb County, Washington

My dear Mr. Mack:

Your letter of July 8 addressed to the Defense Minerals Procurement Agency, with the attached undated letter to you from Mr. Robert Bead, Vice President, Glacier Mining Company, Belfair, Washington, has been referred to this office for attention.

The application (dated December 31, 1951) of the Glacier Mining Company referred to by Mr. Bead, was transmitted through our Spokane office to Washington and was received on January 21, 1952. An acknowledgment was sent the Applicant at Seattle on January 22, 1952. After a review of the application it was determined that an examination of the property by the DMEA Field Team engineers was required. The field engineers have a heavy backlog of work and they schedule the examinations as the requests are made. The Field Team report was received on May 19, 1952.

A contract was prepared by this office and mailed to Region II on June 30, 1952, which included a program of exploration agreed upon by the Operator and the Field Team.

If we can be of further service to you in connection with this case, kindly advise us.

Mr. Bead's letter is returned herewith.

Sincerely yours,

7/17/52

(signed) FRANK E. JOHNSON

Acting Administrator

Enclosure

FLKnouse/gla 7-16-52
cc to: Adm.Reading File
Docket
Messrs. C.H.Johnson-3621
Ned Nelson-4216 GSA
Ellis
Knouse
DMEA Field Team, Region II (2)

7/15/52 gla

RUSSELL V. MACK
3D DISTRICT, WASHINGTON

WASHINGTON ADDRESS:
1318 HOUSE OFFICE BUILDING

HOME ADDRESS:
HOQUIAM, WASHINGTON

Congress of the United States
House of Representatives
Washington, D. C.

COMMITTEE:
PUBLIC WORKS

CONSOLIDATION OF FORMER
COMMITTEES ON
RIVERS AND HARBORS
FLOOD CONTROL
ROADS
PUBLIC BUILDINGS AND GROUNDS
WATER POWER AND DAMS

July 8, 1952

Young

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 14 1952

Defense Minerals Procurement Agency
~~National Production Administration~~
Washington, D. C.

Gentlemen:

The enclosed letter from Mr. Robert Boad of Belfair, Washington, inquires regarding a loan application. I would appreciate your advising me of the present status of this application.

Sincerely yours,

Russell V. Mack

RUSSELL V. MACK, M. C.

rvm/n

Enc.

ROUTING SLIP OFFICE OF THE ADMINISTRATOR	DATE 7-11-52

TO

Mr. Young - Donald

FROM

JESS LARSON

PLEASE TAKE THE ACTION INDICATED BELOW:

1 [ ] PREPARE REPLY FOR MY SIGNATURE
2 [ ] SEE ME ABOUT ATTACHED
3 [ ] FOR CORRECTION AND RETURN
4 [ ] RETURN WITH YOUR COMMENTS
5 [ ] INVESTIGATE AND REPORT
6 [✓] ANSWER AND FURNISH ME COPY OF YOUR REPLY
7 [ ] NECESSARY ACTION
8 [ ] NOTE AND RETURN
9 [ ] FOR CONCURRENCE AND RETURN
10 [ ] APPROVAL
11 [ ] YOUR INFORMATION
12 [ ] FILING
13 [ ] SIGNATURE
14 [✓] IMMEDIATE ACTION

COMMENT

GSA FORM 8
April 1951

GSA-WASH DC 51-4861

RECEIVED
JUL 14 8 52 AM '52
DEFENSE MATERIALS
PROCUREMENT AGENCY

RECEIVED
JUL 11 10 59 AM '52
G.S.A.
OFFICE OF ADMINISTRATOR

4619 JUL 11 '52

COPY

Mr. Robert Boad, Vice Pres.
Glacier Mining Company
Belfair, Washington

Hon. Russell V. Mack
Houseof Representatives
Washington, D. C.

Dear Friend Russ:

I just received another one of your pamphlets of what is doing in Washington. Sure was pleased to get them, as it keeps a person up to date of what is going on.

I suppose by the time you receive this letter, you will be heading for Chicago, or home, so I thought I would ask a favor of you before you leave.

A few month's ago, we made application for a Loan from the Defense Minerals Procurement Agency. Our file No. is D.M.E.A. 2335. As of yet, we have received no word from them. We are at a stand-still, patiently waiting from day to day for a reply. We would sure appreciate any help we can get to get us a speedy reply, as we are most anxious to start working.

We haven't forgotten the favor you did for us with the Federal Power Commission two years ago. Thanks to you and the rest of the people who worked on our behalf. As we got our claims reverted back to us, we were sunk without them.

Any assistance you can give us on this matter will be greatly appreciated. On behalf of the Glacier Mining Company, it's stockholders, and myself, I would like to take this opportunity to thank you for all you have done for us, and for what you will be able to do for us in the future.

I remain Sincerely yours, a true "Mack Booster".

/s/ Robert Boad.

Mr. Robert Boad
Vice President,
Glacier Mining Company

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON

June 30, 1952

Memorandum

To: Executive Officer, Region II

From: DMEA Operating Committee

It will be necessary to insert in the contract in the space provided under Article 3 the number of days from the date of the contract in which work shall commence.

FILE COPY
FOR NAME:

J L Knouse
Ellis

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

JUN 30 1952

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

Re: Docket No. DMEA-2335 (Copper)
Glacier Mining Company, Inc.
Whatcom County, Washington

Dear Mr. Weissenborn:

Enclosed are the original and five copies of the captioned contract signed by the Government, with attachments.

This contract is subject to the following insertions prior to execution: (a) the name of the state where the Operator is incorporated and (b) the number of days within which work will be commenced on the project. Then if the terms and conditions of the contract meets with the approval of the Operator, the original and all copies are to be signed by a company official authorized to sign the contract. When the contract is signed the copy marked "Operator's Copy" is to be given to the Operator and the copy marked "Field Team's Copy" is to be retained by your office, and the original and three copies are to be returned to this office.

If any part of the contract does not meet with the approval of the Operator, the original and all copies are to be returned to this office with the proposed changes.

The original application was for a total amount of $57,150.00. This contract is for a total amount of $7,415.00, and the Field Team recommended a total amount of $6,990.00. The difference in the amount of the contract and that recommended by the Field Team is due to costs of engineering and sample analysis that was agreed necessary in a telephone conversation between you and Mr. Knouse of this office.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB) 6/30

Chairman, Operating Committee

Enclosures
APPROVED:

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

T. P. Thayer (JHB)
Member, Geology Survey

FLKnouse/jem
6/25/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson-3621
Ned Nelson-4216 GS
Ellis Knouse Opr. Committee
Field Team, Region II

140

FILE COPY
SURNAME:

AEKane

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

June 24, 1952

Memorandum

To: Acting Administrator
Through: E. W. Ellis

From: Chief Counsel

Subject: Glacier Mining Company, Inc.
Docket No. DMEA-2335

There is attached in satisfactory legal form for execution a contract covering the subject project, subject to the following insertions in the contract:

(a) The name of the State where the Operator is incorporated;

(b) The number of days within which work will be commenced on the project; and

(c) The number of days or months within which the project will be completed.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

NS
R&R

Attachments

AEKane/em

Copy to: Mails and Files
J. L. Hofflund
E. W. Ellis
A. E. Kane
chron.

5/26/52 gla

IN REPLY REFER TO:

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

May 23, 1952

Memorandum

To: Mr. E. W. Ellis

From: N. E. Nelson

Subject: DMEA-2335, Glacier Mining Company, Whatcom County, Washington.

As pointed out in the memorandum of Mr. C. H. Johnson, dated May 20, 1952, the report of Mr. Magill was given serious consideration. Mr. Johnson's suggestions as to the drilling of several holes from the underground workings, in case trenching revealed an area which might be orebearing seemed to be better than good. Mr. Knouse conferred with "Spokane" and learned the plan is not feasible because of a shortage of compressed air when the compressor at hand is used.

Such being the case, the two-stage plan outlined by Mr. Magill is accepted.

N. E. Nelson

N. E. Nelson
Geologist

DEPA[illegible]
Deter[illegible]
MAY 26 1952

FILE COPY
SURNAME:

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

D.M.E.A.

FLKnouse/EWEllis
4640

1420137 Salaries and Expenses, DPA, Interior, 1952 5296
May 20, 1952
3:10 p.m.

Mr. A. E. Weissenborn, Executive Officer, Region II, DMEA
South 157 Howard Street, Spokane 8, Washington
DMEA No. 2335 Glacier Mining Co. Inc.

MAY 21ST 10:00 AM PCT KNOUSE OF THIS OFFICE WILL TELEPHONE

REGARDING DOCKET DMEA-2335 GLACIER MINING.

C. O. Mittendorf (for)

C. O. MITTENDORF

FLKnouse/gla 5-20-52

cc to: Adm. Reading File
Docket
Ellis
Knouse

2071

5/21/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1952

May 20, 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Base Metals Branch

Subject: DMEA 2335, Glacier Mining Co., Glacier Mine (copper), Whatcom County, Washington

I have reviewed the memorandum report by E. A. Magill, dated May 1, 1952, which was concurred in and transmitted by the Field Team to the Operating Committee May 6. The application was for $57,150 for trenching, crosscutting and diamond drilling. The examining engineer recommends a $6,990 program of trenching and crosscutting. It is not stated that applicant agreed to the revised program.

After lengthy discussion with Mr. Knouse and Mr. Nelson, it was agreed that some questions might be put to the Field Team before approving the proposed project, in order to anticipate possible developments.

1. Actually, no "zone" of mineralization or alteration has been disclosed as yet; the trenching was not carried outside the area of overburden oxidation and occasional sulphide boulder occurrence, in any direction. Presumably, the purpose of the proposed bulldozer trenching is to delimit the area of mineralized overburden. The question is, then, if such trenching fails to localize the occurrence, within fairly narrow limits, what is to be the next step?

2. The proposed expenditure of $5,250 on a single 150-foot crosscut will explore only a small area. Would it not be better to diamond drill, covering several times the area for the same cost?

C. H. Johnson
C. H. Johnson

Copy to Mr. Nelson, USGS
Base Metals Branch
Minerals Division
C. H. Johnson (with report)
Files

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Wash.
May 6, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 12 1952

ON-SITE Report.

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Docket No. DMEA 2335, Glacier Mine, Whatcom County, Wash. - copper

A recommendation report by E. A. Magill, mining engineer, Bureau of Mines, concerning the captioned docket is enclosed herewith for consideration. The Field Team, in full agreement with the examining engineer's recommendation report, believes that additional exploration along the lines proposed therein is justified.

The fact that bulldozer trenching accomplished on the prospect to date has disclosed a zone of intense alteration and scattered massive copper-bearing float leads the Field Team to conclude that a reasonable geologic probability exists for the finding of one or more ore shoots of economic significance.

Although the operating company lacks experience in exploration technique, it is believed that the organization is competent to direct the relatively simple program outlined to a satisfactory conclusion.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

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

Enclosures

cc: USGS, Spokane

Wash.

1201 N. Division St.
Spokane 2, Wash.
May 1, 1952

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: E. A. Magill, mining engineer, Bureau of Mines

Subject: Glacier Mine, Whatcom County, Wash.
Docket No. DMEA 2335
Commodity: Copper

RECOMMENDATIONS

It is recommended that the proposed exploration program of the Glacier Mining Co. in the amount of $57,150 be denied. A modified, two-stage exploration project in the amount of $6,990 is recommended for consideration.

APPLICANT

The applicant is the Glacier Mining Co., Inc., 4039 Evanston Ave., Seattle 3, Wash. Company officers are R. B. LaFlamboy, Lakebay, Wash., president; J. R. Atkeson, Seattle, Wash., secretary-treasurer.

LOCATION OF DEPOSIT

The Glacier mine is 1-1/2 miles north of the town of Glacier, Wash., in sec. 4, T. 39 N., R. 7 E., W.M., Mt. Baker mining district, Whatcom County, Wash.

The property adjoins paved Washington State Highway 1. It is 1-1/2 miles to the rail facilities of the Chicago, Milwaukee and St. Paul Railroad at Glacier. Bellingham is 34 miles by paved highway and Seattle is 125 miles.

OWNERSHIP

The property, consisting of 14 unpatented mining claims, is held by right of location by the Glacier Mining Co., Inc. No check, however, was made of the county records.

Reviewed by
DMEA OPERATING COMMITTEE

(Date)

MINE WORKINGS

Mine workings (see attached map) consist of a Lower Adit at an altitude of 1200 feet with 1100 feet of workings and an Upper Adit, elevation 1335 feet, with 200 feet of workings. There are six bulldozer cuts on the hill to the east of the underground workings.

EQUIPMENT AND FACILITIES

Installed

Equipment on the property consists of a 105 cfm LeRoi gasoline-driven compressor, jackhammer, ore car, and necessary small tools to carry on limited exploration work.

There is a 12x16-foot tool shed and compressor house.

Required

No additional equipment would be required for the modified exploration program.

HISTORY AND PAST PRODUCTION

The property apparently was prospected in the early 1900's. Workings at the Glacier mine consist of a shallow shaft, a caved adit presumably several hundred feet long, and a number of prospect pits.

Interest in the property was revived in 1947 by the discovery of several large boulders containing pyrite and chalcopyrite, near the road in the vicinity of what is now called Cut No. 2 (see map).

The Upper and Lower adits were driven in unsuccessful attempts to find the source of the boulders. The last underground work on the property was done in the Lower adit in 1950.

In 1951 six bulldozer trenches were cut on the hill above the Lower adit in a further attempt to discover the source of the boulders. Although none of these cuts penetrated to bedrock, an intensely oxidized zone marked by boulders containing pyrite and chalcopyrite was found.

The only recorded production from the property is a single shipment weighing 2.36 tons, made in 1951, consisting of the pyrite-chalcopyrite boulders uncovered by the bulldozing. Smelter returns from this shipment were as follows: Gold .02 oz. per ton, silver 0.89 oz. per ton, copper 4.59 percent, zinc .80 percent, and SiO_2 14.9 percent.

GEOLOGIC SETTING

The Glacier mine is in the deeply incised valley of the Nooksack River. Glacial alluvium covers the surface in the vicinity of the mine, limiting the number of bedrock outcrops.

The country rock as exposed in the underground workings is a dense, black, fine-grained argillite. The only variation of rock type in these workings is a narrow, irregular dioritic dike exposed in one of the crosscuts (see map). Surface float suggests a possibility of a contact between the argillite and a diorite a few hundred feet to the east of the underground workings. Bulldozer cuts in this area have exposed oxidized and heavily iron-stained alluvium. These cuts have not penetrated to bedrock although some of the banks are up to 50 feet in height.

The alluvium within this gossan consists of argillite and diorite which is in some cases quite bleached and altered. Apparently the cuts have roughly delimited the mineralization, although additional trenching is required to positively define a zone. The combination of diorite and argillite within the gossan suggests the possibility that it represents a surface expression of mineralization along a contact between the argillite and a diorite.

Samples from the heavily oxidized material within the cuts were disappointingly low in copper content. Possibly this may be explained by the fact that the deposit is in a region which receives up to a hundred inches of rain annually. This water, in conjunction with the pyrite, could easily leach out any copper which may have been in the surface material. The sulfide boulders accompanying the gossan contain an appreciable amount of copper as indicated both by the shipment and Sample EAM-164.

Most of the underground workings have been driven in argillites along narrow, jointlike fractures ranging from a seam up to 6 inches wide. In some places the brecciated altered material in these fractures is reported to contain high gold values. Pyrite and chalcopyrite occur sparsely disseminated in the fractures. Concentrations of sulfides up to several inches in diameter have been found in the argillite. These concentrations apparently bear no relationship to the fractures.

To date, the source of the sulfide boulders has not been determined. A number of theories concerning this source have been proposed among which are:

1. Glacial deposition.

   The boulders appear to be concentrated in a restricted area. Prospecting up and down the river valley reportedly has failed to disclose additional similar material.

2. From Church Mountain.

Church Mountain is across the river and a mile or so northeast from the prospect. There is a pyritic zone disclosed in a road cut on the mountain's east flank. Reportedly this zone continues up the mountain. However, prospecting has not disclosed boulders on the lower slopes of the mountain similar to those found at the Glacier mine.

3. From hill above present workings.

In my opinion the boulders are directly connected with the gossan zone indicated by the bulldozer cuts. However, the bulldozer cuts have not reached bedrock nor have the underground workings explored the country rock beneath the gossan.

RESERVES

There are no ore reserves in the Glacier mine. The only shipment made consisted of float material, the source of which has not been located.

DESCRIPTION OF PROPOSAL

The applicant's proposal is as follows:

Crosscut 300 feet to probe the mineralization exposed in 5th Cut.

Crosscut 150 feet from Lower adit to probe mineralization in 4th Cut at a depth of 200 feet.

Hold in reserve $20,000 for diamond drilling.

Bulldozer trenching - $10,000.

Breakdown of applicant's costs

450 feet drifting and crosscutting @ $30/ft	$13,500.
Equipment to be purchased	4,550.
Engineering, accounting, and assays	5,600.
Clearing and burning	2,000.
Miscellaneous expense, supplies, etc.	1,000.
Repairs	500.
Bulldozing	10,000.
Diamond drilling (reserve)	20,000.
Total cost of project	$57,150.

A two-stage modified program in the amount of $6,990 is recommended:

Stage I

A maximum of 80 hours of bulldozing to determine the extent of the gossan exposed in present open cuts.

Stage II

If Stage I indicates that the gossan is limited to the present apparent trend now disclosed in the cuts, a maximum of 150 feet of crosscutting as shown on the attached map.

Estimated cost of project

Stage I

Bulldozing 80 hours @ $15/hr. (all operating expenses including operator)	$1,200.
Labor and supervision	400.
Miscellaneous supplies and expenses	140.
Total cost of Stage I	$1,740.

Stage II

150 feet of drifting at $35/ft. (per foot costs are to include all costs chargeable to the project)	$5,250.
Estimated cost of Stage II	$5,250.

Total cost of project

Stage I	$1,740.
Stage II	5,250.
Total	$6,990.

Fixtures and Improvements: none

Operating equipment: All costs are included in per foot cost.

Labor and Supervision: All costs included in per foot or per hour costs unless specifically stated in Exhibit "A".

Rehabilitation and Repairs: none

COMPETENCE OF APPLICANT

The exploration work carried out to date has not been well directed. The actual work has been accomplished in a satisfactory manner by William Farrow, whom the company plans to retain in future exploration work. Mr. Farrow is capable of carrying out the proposed modified exploration program.

DISCUSSION OF PROPOSAL

The proposal of the Glacier Mining Co. is indefinite and incomplete. An expenditure of $57,150 is not warranted by the present showings.

The problem at the Glacier mine is to discover the source of the pyrite-chalcopyrite boulders which occur on the surface and in the alluvium. All efforts so far to determine their source have been unsuccessful. Bulldozing during the summer of 1951 did not uncover bedrock. However, it did appear to delineate a strong oxidization zone. A relatively small amount of bulldozer work should determine the limits of this gossan. If this gossan is limited as it appears to be, a short crosscut will reveal the nature of the underlying bedrock and possibly the source of the boulders.

The applicant has expended about $50,000 to date in exploration. An additional expenditure of $6,990 should determine if the pyrite-chalcopyrite boulders had their source on the property. It is believed that this expenditure is warranted although it is emphasized that the single shipment made showed a gross value of only about $24.00 per ton.

2/20/52 glc

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D.C.
FEB 19 3 39 AM '52

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

February 15, 1952

Mr. C. O. Mittendorf,
Acting Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of Interior
Washington 25, D. C.

Re: Docket No. DMEA ~~2235~~ 2335,
Glacier Mining Company,
Whatcom County, Montana.

Dear Sir:

This will acknowledge receipt of your letter of February 12 with enclosed memorandum from Mr. C. H. Johnson, dated January 24, 1952, which outlines important questions on the Glacier Mining Company property.

Mr. E. A. Magill of the U. S. Bureau of Mines will examine the Glacier Mining Company property during the week following February 22. Mr. Johnson's memorandum has been given to Mr. Magill who will obtain the necessary answers and who will submit a report on the subject property.

Sincerely,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

c.c. USBM - Spokane

FILE COPY
SURNAME:

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

FEB 1 2 1952

FL Knouse
Ellis
Johnson
Nelson

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

Re: Docket No. [illegible]-2335, (Copper)
Glacier Mining Company
Glacier Mine-Whatcom Co., Washington

Dear Mr. Weissenborn:

The captioned application is being referred to you for a field examination as in your letter of January 17, 1952, it is not clear if you planned to make the field examination or await instructions from this office.

The enclosed copy of a memorandum from Mr. C. H. Johnson, dated January 24, 1952, outlines the important questions to be considered by the field team. If however the proposal submitted by the applicant or an alternate program is recommended by the field team, maps or pencil sketches showing the proposed work in relation to the mining claim lines, with detailed costs of the recommended work should accompany the report.

In as much as you retained a copy of the application in your office no copies are being sent to you.

Sincerely yours,

C. O. Mittendorf (fw) E.P.L. 2/12/52

ACTING Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosure

FLKnouse/jem
2/5/52
cc to: Adm. Reading File
Docket
Messrs: Johnson; CH Rm. 3621
Nelson; Ned Rm. 4216 GS
Ellis
Knouse
Field Team; Region II

Concurred:
J. H. Hedges (fw)
Member, Bureau of Mines
L. P. Thayer (fw)
Member, Geological Survey

1/28/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

WASHINGTON 25, D.C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 25 1952

January 24, 1952

Memorandum

To: E. W. Ellis, Acting Chief, Rare and Miscellaneous Metals Division, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA-2335 Glacier Mining Company, Inc., $57,150 (Copper)

I have reviewed the above-named application. Inasmuch as the Field Team, according to Weissenborn's memorandum of January 17, apparently intends to make an examination in any event, it may or may not be necessary for DMEA to request such examination. If you do so, it might be suggested that it would be well to make prior arrangement with the applicant to assure that the underground workings are open for inspection. It appears from one of the photographs that bulldozing around the portals may have blocked access to the underground workings. Inasmuch as the surface is overgrown and the overburden apparently deep, it is particularly important that the examining engineer should have access to underground exposures.

It might also be suggested to the Field Team that some attention be paid to competence of the applicant and information obtained as to the past experience of the supervisor to be employed on the project.

The so-called engineer's report submitted by the applicant is practically worthless. The only information of much significance is contained in the analyses of samples 1 through 5, which appear to be taken from rounds blasted in underground workings. These show copper ranging from 0.37 percent to a high of 1.06 percent and, with one exception, gold and silver values too low to make the ore profitable.

From the pictures one might gather that bulldozing was not very successful in exposing bedrock, and applicant submits no samples to substantiate his claim that the bulldozing uncovered good surface values.

Applicant proposes drifting and crosscutting first, diamond drilling later. The reason for this reversal of the usual procedure may be inquired into. Also, some $10,000 is set up for bulldozer operation, without describing location or purpose of the work.

On the strength of information submitted by the applicant alone, I should recommend denial of the application. However, it is possible that field study by an engineer or geologist will bring to light a worthwhile opportunity for exploration and for that reason I should be glad to concur in referral to the field team if you wish to make such referral.

The Bureau of Mines has no report here on this prospect or others in the immediate vicinity.

C. H. Johnson

C. H. Johnson

CHJohnson/ht

Copy to: Mr. Nelson - Rm.4216 GSA Bldg.
Minerals Division
Base Metals Branch
Files

IN REPLY REFER TO:

1/25/52 glw

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

January 24, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Mr. N. E. Nelson

Subject: DMEA-2335, Glacier Mining Company, Whatcom County, Washington

Summary

A. E. Weissenborn says a field examination is planned. The field report will be awaited.

Comment

The picture showing a boulder of ore and the Tacoma Smelter assay certificate give reality to this application, and justify the field examination which is planned.

N. E. Nelson

Ned E. Nelson
Geologist

EXPLORATION

Subject: DMEA-2335
Re: Exploration Loan
January 22, 1952

Mr. E. B. LaFlamboy, President
Glacier Mining Co.
4039 Evanston Avenue
Seattle 3, Washington

My dear Mr. LaFlamboy:

This will acknowledge receipt of your application dated December 31, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2335 and referred to the Rare & Miscellaneous Metals Division.

Kindly refer to DMEA-2335 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

DMEA-2335

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

January 17, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 21 1952

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

Dear Sir:

Enclosed are three copies of an application for exploration assistance submitted by the Glacier Mining Company, Inc., Whatcom County, Washington.

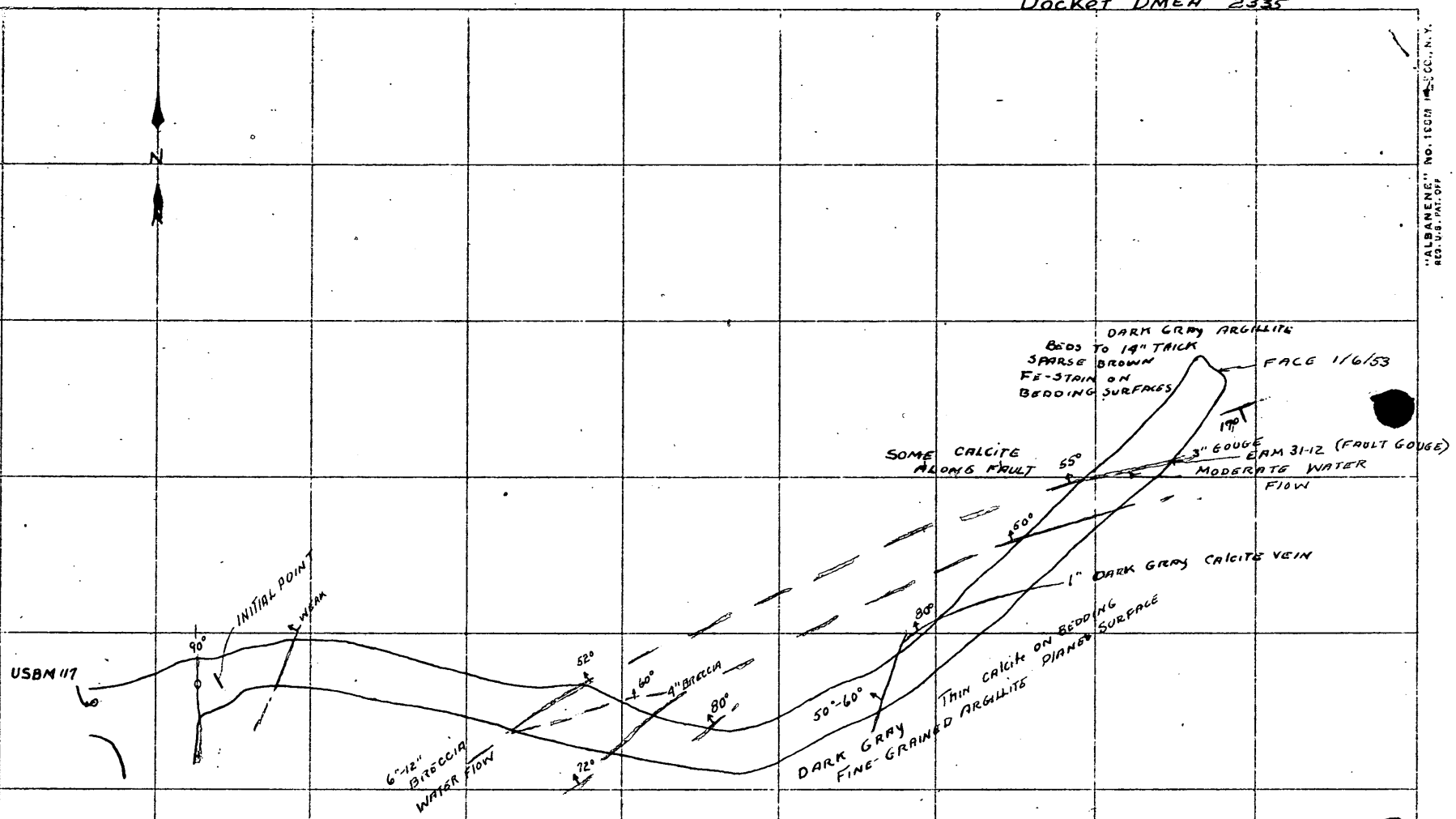
One copy of the application will be retained by this office until a field examination has been completed.

Sincerely yours,

A. E. Weissenborn

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

Docket DMEA 2335



Exploration Crosscut

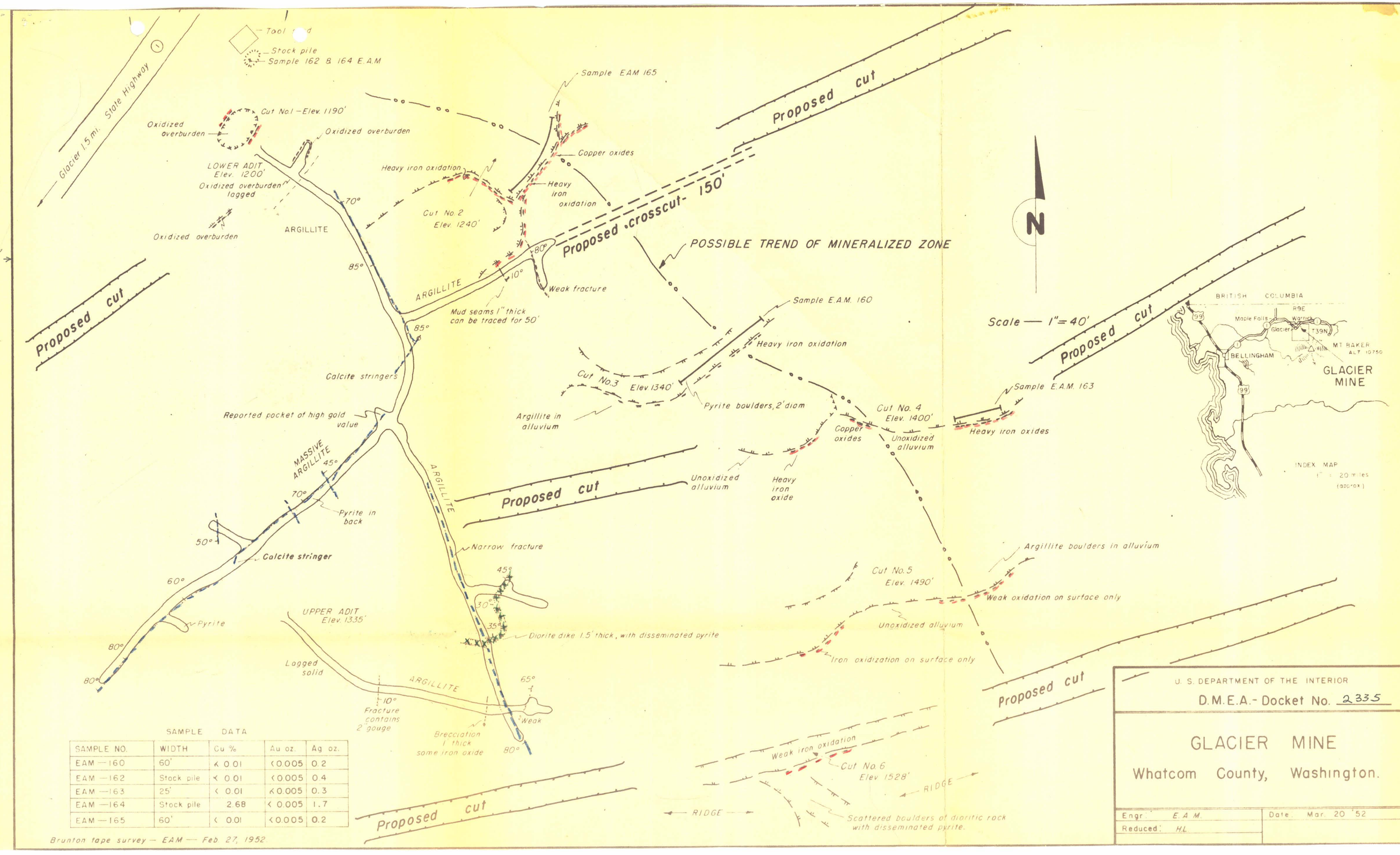
GLACIER MINE

WHATCOM COUNTY, WASHINGTON

1" = 20'

Tape and Brunton Survey 1/6/53
E.R. Mag, II - USBM
W.P. Puffett - USGS

"ALBANENE" No. 1500M 1-53 CC., N.Y.
REG. U.S. PAT. OFF.



SAMPLE DATA

SAMPLE NO.	WIDTH	Cu %	Au oz.	Ag oz.
EAM — 160	60'	< 0.01	< 0.005	0.2
EAM — 162	Stock pile	< 0.01	< 0.005	0.4
EAM — 163	25'	< 0.01	< 0.005	0.3
EAM — 164	Stock pile	2.68	< 0.005	1.7
EAM — 165	60'	< 0.01	< 0.005	0.2

Brunton tape survey — EAM — Feb. 27, 1952

U. S. DEPARTMENT OF THE INTERIOR

D.M.E.A.- Docket No. 2335

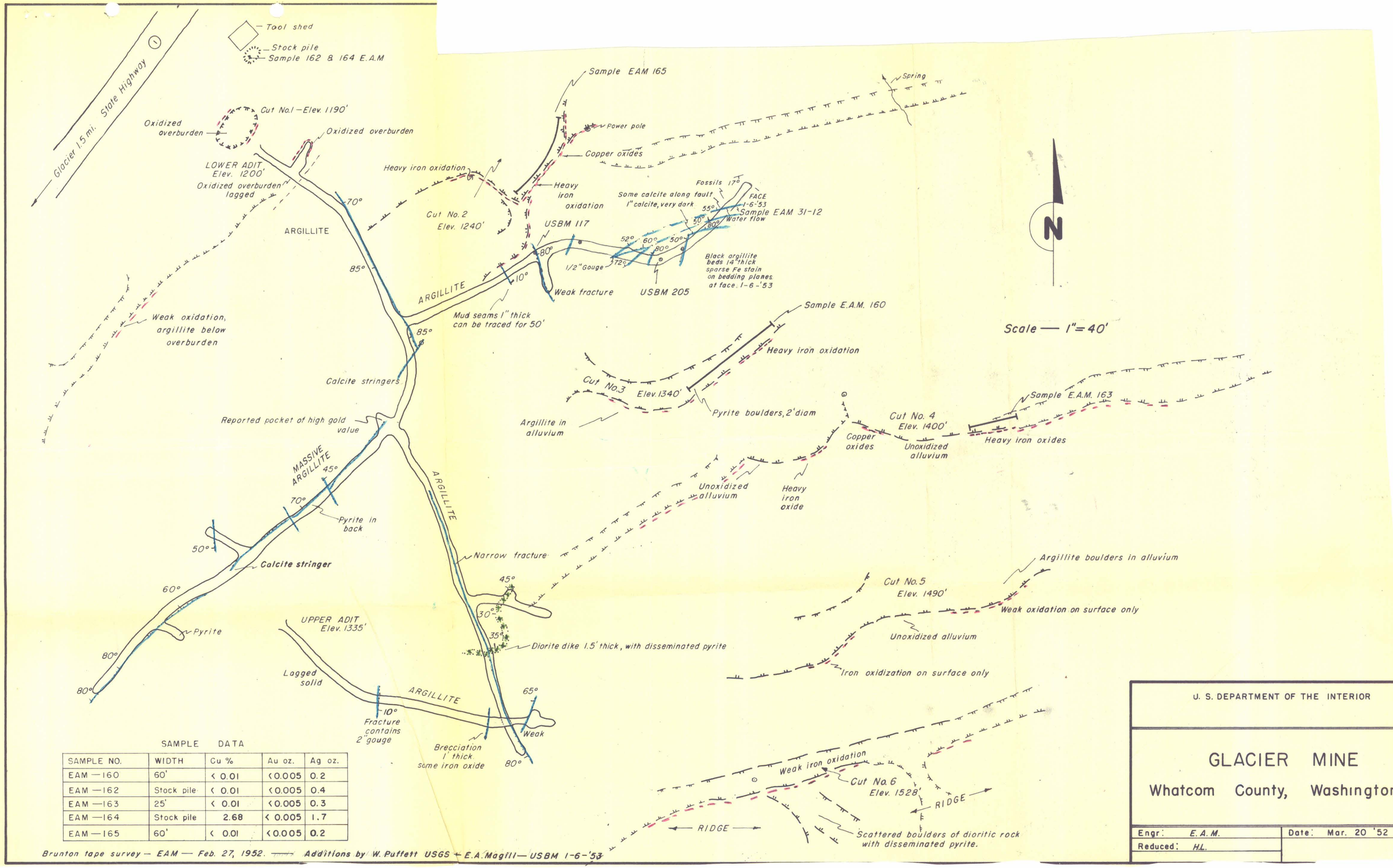
GLACIER MINE

Whatcom County, Washington.

Engr: E. A. M.

Reduced: HL

Date: Mar. 20 '52



SAMPLE DATA

SAMPLE NO.	WIDTH	Cu %	Au oz.	Ag oz.
EAM — 160	60'	< 0.01	< 0.005	0.2
EAM — 162	Stock pile	< 0.01	< 0.005	0.4
EAM — 163	25'	< 0.01	< 0.005	0.3
EAM — 164	Stock pile	2.68	< 0.005	1.7
EAM — 165	60'	< 0.01	< 0.005	0.2

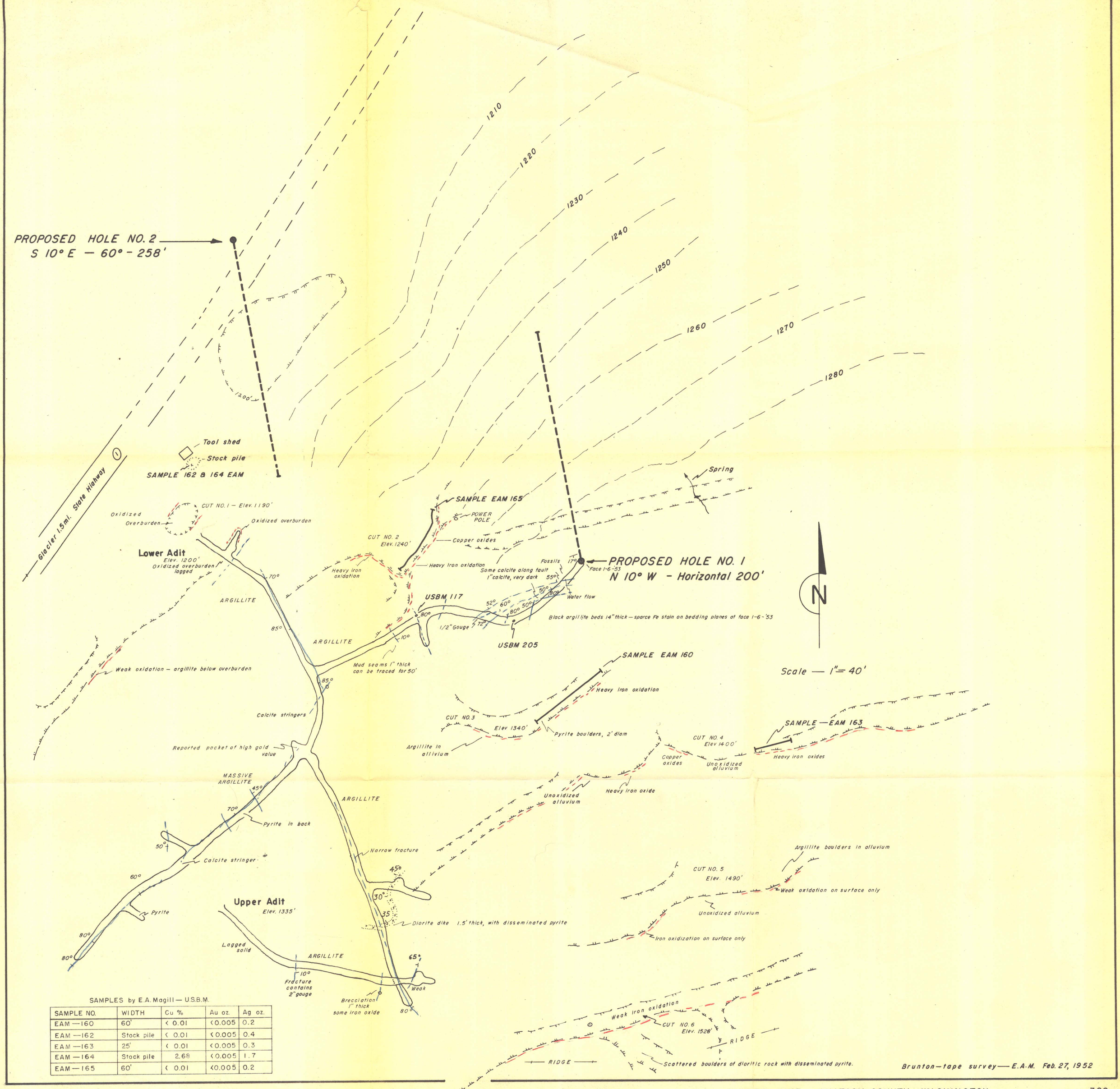
Brunton tape survey — EAM — Feb. 27, 1952. —— Additions by W. Puffett USGS + E.A. Magill — USBM 1-6-'53

U. S. DEPARTMENT OF THE INTERIOR

GLACIER MINE

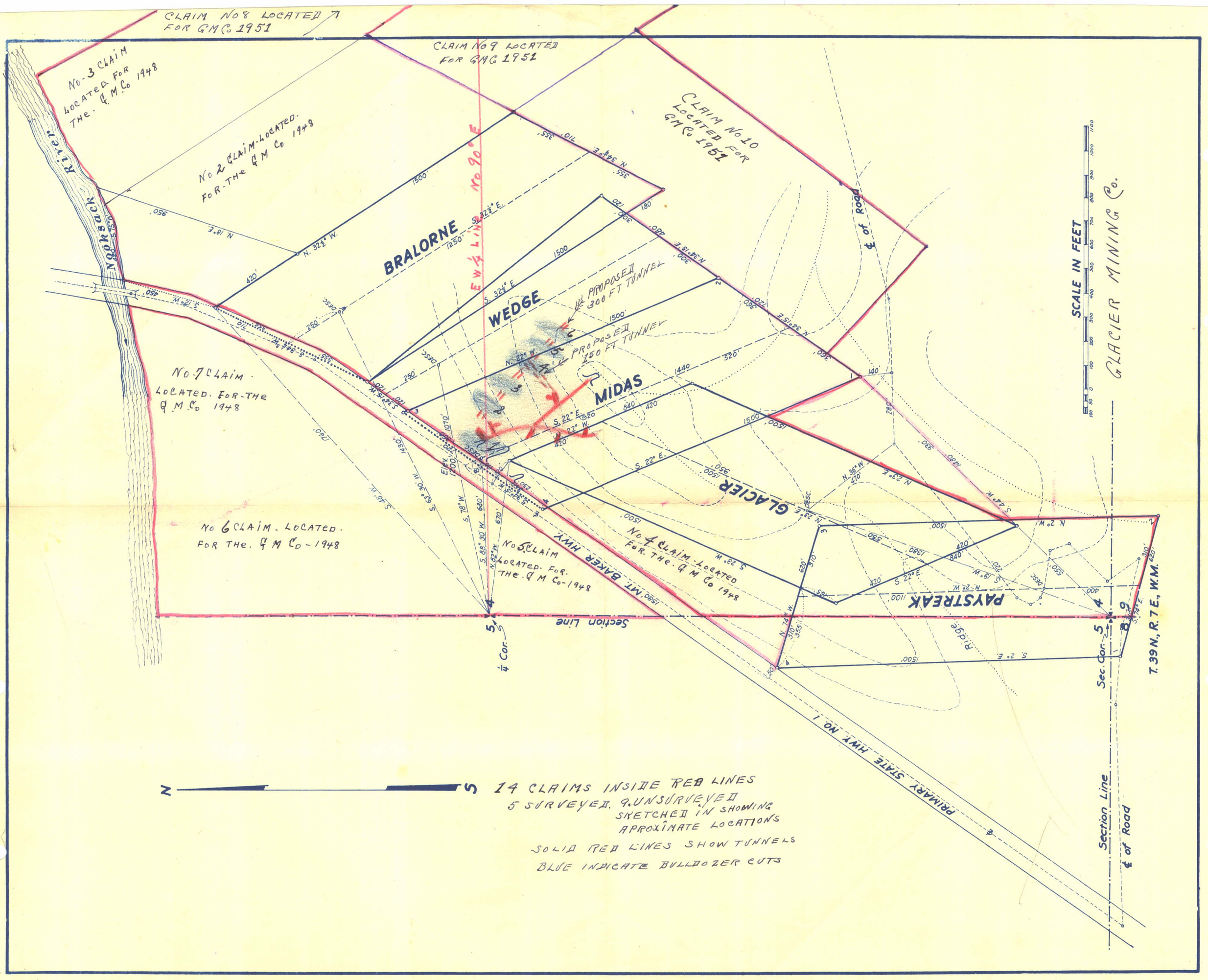
Whatcom County, Washington.

Engr: E.A.M.	Date: Mar. 20 '52
Reduced: H.L.	

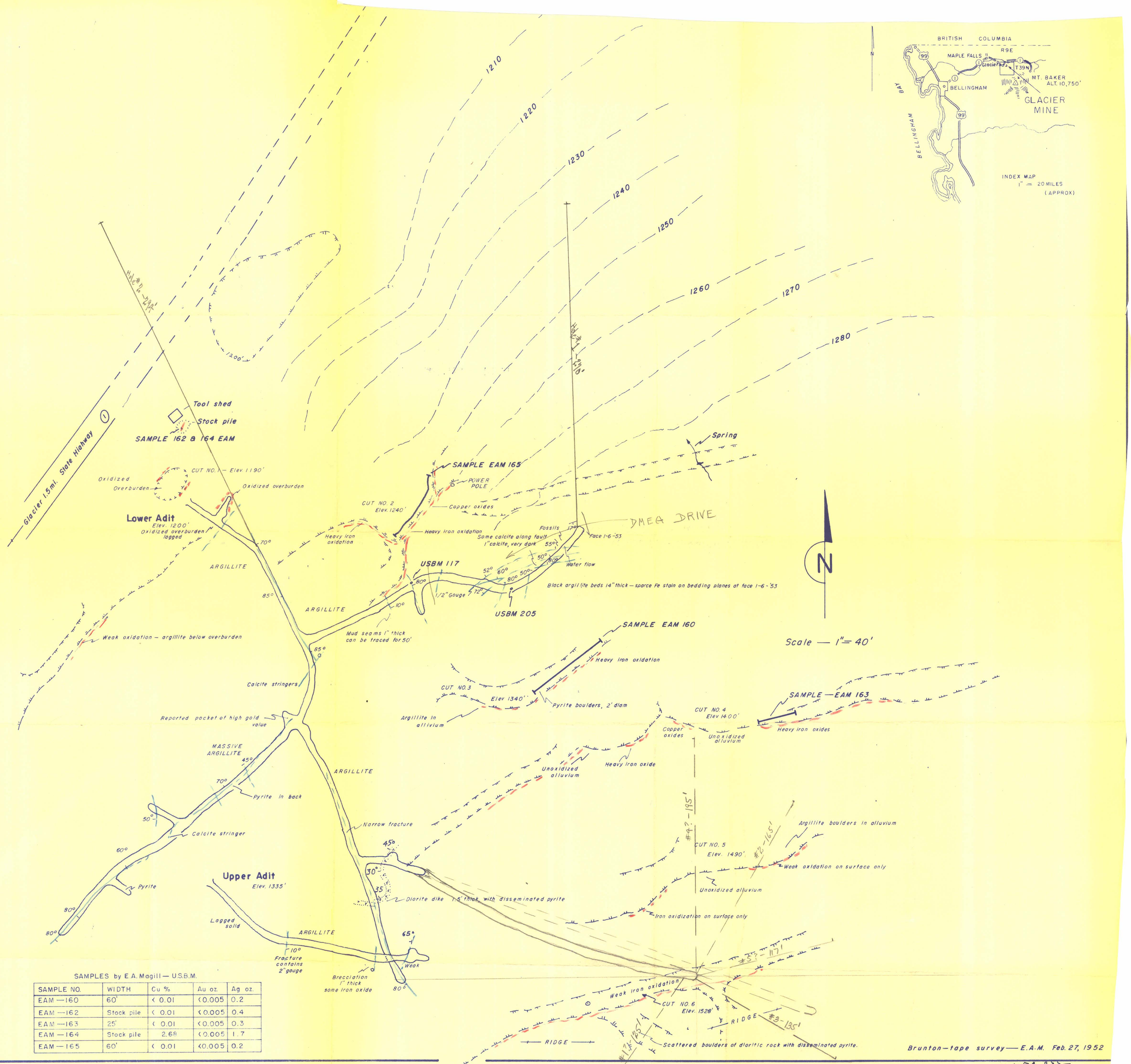


SAMPLES by E.A. Magill — U.S.B.M.

SAMPLE NO.	WIDTH	Cu %	Au oz.	Ag oz.
EAM — 160	60'	< 0.01	<0.005	0.2
EAM — 162	Stock pile	< 0.01	<0.005	0.4
EAM — 163	25'	< 0.01	<0.005	0.3
EAM — 164	Stock pile	2.68	<0.005	1.7
EAM — 165	60'	< 0.01	<0.005	0.2


CLAIM No 8 LOCATED FOR GMC 1951
CLAIM No 9 LOCATED FOR GMC 1951
CLAIM No 10 LOCATED FOR GMC 1951
No-3 CLAIM LOCATED FOR THE G M Co 1948
No 2 CLAIM LOCATED FOR THE G M Co 1948
No 7 CLAIM LOCATED FOR THE G M Co 1948
No 6 CLAIM LOCATED FOR THE G M Co - 1948
No 5 CLAIM LOCATED FOR THE G M Co - 1948
No 4 CLAIM LOCATED FOR THE G M Co 1948
Nooksack River
BRALORNE
WEDGE
MIDAS
GLACIER
PAYSTREAK
E-W ¼ LINE No 90°E
PROPOSED 300 FT TUNNEL
PROPOSED 150 FT TUNNEL
MT. BAKER HWY
PRIMARY STATE HWY NO 1
Section Line
¼ Cor.
Sec. Cor.
Ridge
℄ of Road
T. 39 N., R. 7 E., W.M.
SCALE IN FEET
GLACIER MINING Co.
N
S
14 CLAIMS INSIDE RED LINES
5 SURVEYED. 9 UNSURVEYED
SKETCHED IN SHOWING
APPROXIMATE LOCATIONS
SOLID RED LINES SHOW TUNNELS
BLUE INDICATE BULLDOZER CUTS

Department of the Interior

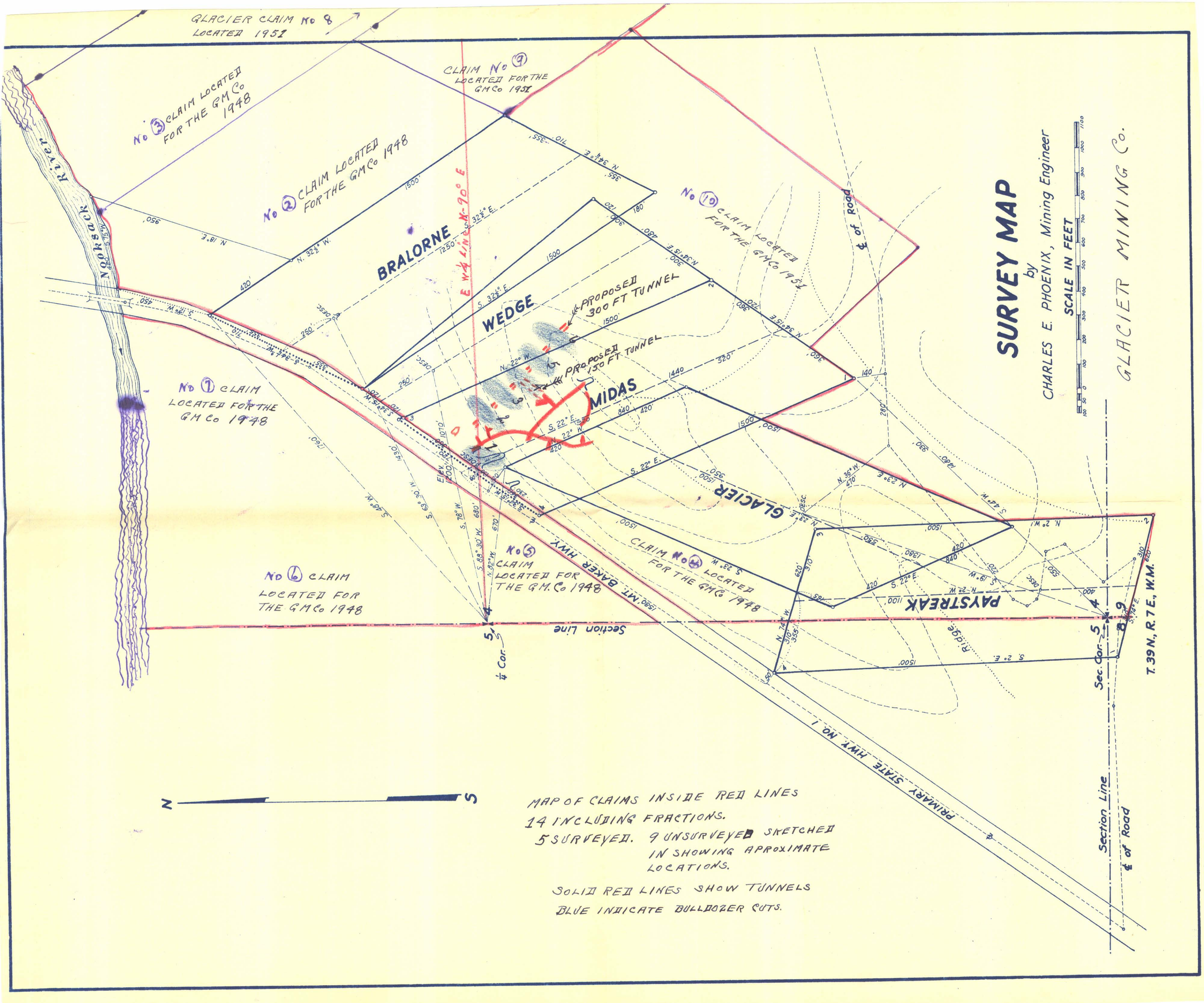


SAMPLES by E.A. Magill — U.S.B.M.

SAMPLE NO.	WIDTH	Cu %	Au oz.	Ag oz.
EAM — 160	60'	< 0.01	<0.005	0.2
EAM — 162	Stock pile	< 0.01	<0.005	0.4
EAM — 163	25'	< 0.01	<0.005	0.3
EAM — 164	Stock pile	2.68	<0.005	1.7
EAM — 165	60'	< 0.01	<0.005	0.2

Brunton — tape survey — E.A.M. Feb. 27, 1952

GLACIER MINE, WHATCOM COUNTY, WASHINGTON. DMEA-2335, IdM-E-36


SURVEY MAP
by
CHARLES E. PHOENIX, Mining Engineer
SCALE IN FEET
GLACIER MINING Co.
GLACIER CLAIM No 8 LOCATED 1951
No 3 CLAIM LOCATED FOR THE GM Co 1948
No 2 CLAIM LOCATED FOR THE GM Co 1948
CLAIM No 9 LOCATED FOR THE GM Co 1951
No 10 CLAIM LOCATED FOR THE GM Co 1951
No 1 CLAIM LOCATED FOR THE GM Co 1948
No 6 CLAIM LOCATED FOR THE GM Co 1948
No 5 CLAIM LOCATED FOR THE GM. Co 1948
CLAIM No 4 LOCATED FOR THE GM Co 1948
Nooksack River
BRALORNE
WEDGE
MIDAS
GLACIER
PAYSTREAK
PROPOSED 300 FT TUNNEL
PROPOSED 150 FT TUNNEL
E W ¼ Line N-90° E
ELEV. 1500'
MT. BAKER HWY
PRIMARY STATE HWY NO 1
Section Line
¼ Cor.
Sec. Cor.
T. 39 N., R. 7 E., W.M.
℄ of Road
Ridge
N
S
MAP OF CLAIMS INSIDE RED LINES
14 INCLUDING FRACTIONS.
5 SURVEYED. 9 UNSURVEYED SKETCHED
IN SHOWING APROXIMATE
LOCATIONS.
SOLID RED LINES SHOW TUNNELS
BLUE INDICATE BULLDOZER CUTS.