DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 588

DMEA NO. 2973

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [x] Royalty Audits
- [ ] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [ ] Application and attachments

Right Side

- [x] Project summary (final)
- [x] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [ ] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. _____: Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty material

Reported Inactive 12/28/59

17963

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-R588, Docket [redacted]-2973 (tungsten), dated August 24, 1953, with

Florian L. Glimski
511 North Rodney
Helena, Montana
and his assignee
Boulder Gres, Inc.
of the same address

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Arnold Copper Mine and Snowshoe Gulch Tungsten Deposits located in Powell County, Montana, during the period September 9, 1959, through September 18, 1962.

In accordance with Amendment No. 3 and Annex III of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 11 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated August 9, 1956, indicated accepted costs under the exploration contract amounting to $8,579.47 with the Government's contribution on a 75 percent basis being $6,434.60.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through September 8, 1959. Accordingly, as of September 18, 1962, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

E. D. Talbert

E. D. Talbert, OME Auditor

September 24, 1962

Idm-8588 Boulder Ores, Inc., Assignee DMEA-2973

STATUS OF PROJECT, SCOPE OF REVIEW AND REASONS THEREFOR

This contract, as amended, provides that the Operator, As principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced from the land thereunder. The land under the contract consists of six patented and nine unpatented claims in sets. 21, 22, 27, and 28, T. 11 N., R. 7 W., W.M.M. At the time the contract was executed the Operator was in possession by virtue of (a) ownership of one patented and two unpatented claims, (b) an October 8, 1952, lease and option from Gayle Burleson, Grand Rapids, Michigan, Ernest Ecklesdafer, Missoula, Montana, and Ed C. Hughes, Boulder, Montana, of five patented claims, and (c) a January 14, 1953, Option and July 25, 1953, amendment thereto from Claude N. Bielenberg, Deer Lodge, Montana, of seven unpatented claims.

In consideration of the contract the grantors of the options executed Owner's Consents to Lien. All of the liens, however, are restricted to 10 years from the date of the contract and two specifically provide for non-recognition of any amendment altering the provisions for repayment. Amendment No. 3 to the exploration project contract changed the repayment period to 11 years, otherwise revised the repayment provisions, and deleted the so-called "abandonment" provision of the contract.

On August 26, 1953, the Operator transferred all his interests in the claims under the contract to Boulder Ores, Inc. On October 12, 1953, the Government consented to assignment of the contract without releasing the assignor from any of the provisions thereof.

Exploration work under the contract was suspended in August 1954 and formally terminated effective October 31, 1954, for failure to resume work by June 15, 1955. No ores were produced during the exploration period. Subsequent examinations of the property and inquiries by DMEA and OMS regional representatives disclosed no activity on the property through September 8, 1959, other than the performance of annual assessment work by the Operator and rehabilitation and exploratory drilling by a lessee, Carl A. Coon, Avon, Montana, during 1956.

A MMS Form 63 inquiry addressed to the Operator-Assignee resulted in a September 18, 1962, reply from the Operator-Assignor under the title of "Owner of the ground". Mr. Glinski, who was the Operator-Assignee's president, stated in his reply that (1) there had been neither change in status of the property nor production since

September 8, 1959, and (2) "Boulder Oreo, Inc. non-active and non existant for several years, all of its officers having resigned".

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The files contain no evidence of any production from the property since the date of the contract; and

(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

Mr. Hall
225

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E588, Docket No. DMEA-2973 (Tungsten), dated August 24, 1953, with

Boulder Ores, Inc.
511 North Rodney Street
Helena, Montana
Assignee of Florian L. Glineski

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Arnold Copper Mine located in Powell County, Montana, during the period August 24, 1953, through September 8, 1959.

In accordance with Amendment No. 3 of the contract royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 11 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final cost audit dated August 9, 1956, indicated accepted costs under the exploration contract amounting to $8,579.47 with the Government's contribution, on a 75 percent basis, being $6,434.60.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) Exploration work under the contract was not resumed during the recess period provided by Amendment No. 3 resulting in termination of the contract as of October 31, 1954, and making "pseudo" certification effective from the date of the contract;
(2) Semi-annual reports by representatives of the Field Team, Region I, and other documents in the files do not disclose any production or sales of minerals from the property subject to Government royalty during the exploration period or subsequent thereto; and
(3) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

The review indicated that there has not been any production or sales of minerals from the land described in Article 2 of the contract since August 24, 1953, and no royalty is due the Government.

C. E. Fisher
C. E. Fisher, OME Auditor

October 21, 1959

22
11 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Boulder Ores, Inc.

Address 511 North Rodney Street

Helena, Montana

Exploration Contract No. Idm-E588 Docket No. DMEA-2973

		Check One Yes	Check One No.
1.	(a) Does the Operator stockpile ore subject to royalty repayment?		X
	(b) If so, is segregation and identification procedure adequate?		
2.	(a) Does Operator commingle production subject to DMEA or OME royalties with exempt production?		X
	(b) If so, do you consider the allocation of the commingled production equitable?		
3.	(a) Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
	(b) If so, are adequate records maintained on such material to protect the Government's interest?		
4.	Do you consider the assay controls in effect are adequate?	X	
5.	Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	X	
6.	Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA or OME royalties?	X	
7.	Does the Operator buy from or sell to other Operators?		X
8.	Comment on any item 2 (b) to 6 if answer is No.		

Property inactive.

September 8, 1959
Date

S. W. Zoldok
Mining Engineer
S. W. Zoldok

53362

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/13	Fisher	800
	Selfridge	120
12/13	Johnson	110
		100
		220

OCT 13 1964

Mr. F. L. Olinski
511 North Rodney Street
Helena, Montana

Re: DMRA-2973 (Tungsten)
Boulder Oreo, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Ida-2568

Dear Mr. Olinski:

By the terms of the subject Exploration Project Contract and the royalty agreement in Item 3(a) of Amendment No. 3, all minerals mined or produced from August 24, 1953, to August 24, 1964, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

Acting Director

MMerrithew/mm (10/13/64)
cc: Claude N. Bielenberg, Deer Lodge, Mont.
Ernest Ecklesdafer, Missoula, Mont.
Ed C. Hughes, Boulder, Mont.
Gayle Burleson, Grand Rapids, Michigan
Director's Reading File
CA&A Division
Region I
Docket
Code 120M

23263

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

400

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Boulder Ores, Inc., Assignee
511 North Rodney Street
Helena, Montana
and
Florian L. Glineski, Assignor
511 North Rodney Street
Helena, Montana

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2973

WSM

pertaining to Exploration Project Contract No. Idm-E588, Docket No. DMEA-2973, dated August 24, 1953, including Amendments Nos. 1 to 3, inclusive, and assignment of contract dated September 19, 1953, covering a project for the exploration of tungsten, for the period of August 24, 1953 to August 31, 1954, on property known as the Arnold Copper Mine, located in Powell County, State of Montana.

My review included an examination of the Monthly Reports (Forms 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:

(a) the administrative cost to the Government of an audit would be excessive in relation to estimated amount of possible disallowance thereunder;
(b) the Monthly Reports were supported by documentary proof of the costs incurred under the contract's provision for contribution by the Government on the basis of actual costs incurred; and
(c) a major portion ($6,090.00) of the costs incurred were under a contract provision for payment by the Government on the basis of agreed unit costs of units of work actually performed.

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

Total Cost as billed by Contractor	$8,579.47
Exceptions	None
Total Accepted Cost	$8,579.47

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Six thousand four hundred thirty four and 60/100 Dollars

--$6,434.60--

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

August 9, 1956

C. A. Turner, Auditor

Docket copy

EXPLORATION PROJECT CONTRACT
BOULDER ORES, INC.
DOCKET NO. DMEA-2973

RECEIVED
JUN 20 1955

AMENDMENT NO. 3

It is agreed this 28th day of April, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Boulder Ores, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Ida-E588 (Docket No. DMEA-2973), dated August 24, 1953, as amended, hereinafter called the "Contract," that:

1.(a) Work under the Contract shall be suspended during the period beginning October 31, 1954, and ending not later than June 15, 1955.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. The time fixed for the completion of the work is further extended to November 24, 1955.

3. Annex II to the Contract is cancelled, and Annex III, attached hereto and made a part hereof, is substituted for the provisions of Article 9 of the Contract form.

4. In Article 10 that part of the second sentence beginning with the word "Provided" is deleted.

5. It is of the essence of this Contract that the work be resumed before the termination of the period here fixed for suspension; and if it is not so resumed in the manner required by the Contract, the following provisions shall thereupon become effective:

(a) Effective October 31, 1954, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

(b) Any work or operations prosecuted or costs incurred by the Operator beginning with said effective date shall

be for the sole account of the Operator without contribution by the Government.

(c) The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land referred to in Article 2 of the Contract, in the manner and amount provided in Annex III to this Amendment, for the period of eleven years from the date of the Contract or until the total net amount contributed by the Government is repaid, a certification of discovery or development being hereby waived.

(d) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided in this Amendment No. 3.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, the amount of any item designated as "allowable maximum," nor the agreed unit cost of any item of work.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By C. W. Mettendorf
Administrator, Defense Minerals
Exploration Administration
Pmbw

BOULDER ORES, INC.

By Florian B. Sliwecki
President

Rutledge
Chapman
Selfridge
Johnson

RECEIVED
JUN 20 1955

ANNEX III

The following provisions are in lieu of Article 9 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land*, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years# from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

* The word "land" refers to the land described in Article 2 of the Contract.

The period "eleven years" is substituted for the period "ten years."

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is 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.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

58694

al
Jack

HELENA, MONTANA.
511 N. Rodney

RECEIVED
JUN 20 1955

June 14th, 1955.

Mr. A. E. Weissenborn
Defense Minerals Exploration Administration,
So. 157 Howard St.,
Spokane 4, Washington.

Re: Docket No. DMEA-2973 (Tungsten)
Contract No. Idm-E588
Arnold Copper Mine
Powell County, Montana

Dear Mr. Weissenborn:

With regard to your letters of May 5 and June 3, 1955 pertaining to the copies of revised Amendment No. 3 sent to me for approval and signature. I have signed and am returning these copies enclosed.

I wish to apologize for not taking care of this matter sooner, but due to the area, until only recently being covered with snow, the inclement weather and being forced to make a change in selection of contractors due to the unexpected demise of one I had chosen, I could not definitely give you any certain date of starting to work.

I have entered into a contract with a Mr. Carl A. Coon to drive the drift to the size and distance specified. He is to make a start on the work June 14th, to move his equipment, cutting timber for posts, caps, lagging and spiling etc. He contemplated completion long before the required date of Nov. 24, 1955.

Mr. Coon has had ample experience as a mine operator to qualify as Supervisor on the Project.

I appreciate your help ~~&~~ AND co-operation in this development.

Very truly yours,

Florian L. Glinski,

air mail - Spec. del.
JUN 14 1955

P.S. - Mr. Apell and Mr. Pattee of the Bureau of Mines stopped at the Placer Hotel overnight on their way to Nichart. I called them this a.m. and advised them that Mr. Coon was moving onto the job today.

Docket No. DMEA 2973
(tungsten)

Minerals Mission
MAILED
SEP 20 1954

AMENDMENT NO. 2

DOCKET COPY

Baldwin 10/27/54
Hofflund 10/27/54

It is agreed this 8th day of September 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Boulder Oreo, Inc., assignee of Florian L. Olinski

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 506 of August 24 1953 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 15 1954.

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.

BOULDER OREO, INC.
(Operator)

By Florian L. Olinski
Pres.

THE UNITED STATES OF AMERICA

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

(As authorized in teletype from Oper. Comm. 9/7/54)

BOULDER ORES, INC.
Exploration Project Contract No. Idm-E588
Docket No. DMEA 2973 (tungsten)

AMENDMENT NO. 2

Exhibit "F"

Changes and modifications

In Exhibit "A" of the contract under Estimated Costs of the Project, Actual Costs, (2) Labor, Supervision, consultants, Stage II, delete

1 Engineer and/or geologist plus assistant @ $250.00/wk.* 4 weeks*	1,000.00*

and substitute

1 Engineer and/or geologist plus assistant @ $250.00/wk.*	1,000.00*

*Indicates allowable maximum

BOULDER ORES, INC.
Exploration Project Contract No. Idm-X588
Docket No. DMEA 2973 (tungsten)

Justification for Amendment No. 2

The Government will benefit by removal of the limitation on time as the services of an engineer are being obtained for a longer period without exceeding the maximum amount authorized under the contract.

S. W. Zoldok

Docket Copy

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 30 1954

Rubin 9/10/54

(Amendment to Change Starting and/or Completion Dates)

AMENDMENT NO. 1

It is agreed this 15th day of July 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Boulder Ores, Inc., Assignee of Florian L. Glineski (Docket No. DMEA-2973) each acting in consideration of the agreement to the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E588 dated August 24, 1953 between the parties hereto be modified and amended to change the starting date from -- (No. of days) to within -- (No. of days) of the date of the contract and the completion period from 9 (No. of months) to 15 (No of months) from the date of the contract. The effective date of this amendment shall be May 24, 1954.

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.

BOULDER ORES, INC.
(Operator)

By Florian L. Glineski

THE UNITED STATES OF AMERICA

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

Defense Minerals Administration
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DEC 30 1951

Exploration Project Contract Idm-2588
Boulder Ores, Inc. (Assignee of Florian L. Olinski)
Powell County, Montana
Docket No. DMA-2973 (tungsten)

Justification for Amendment No. 1

Because of extremely heavy snowfall this winter and late spring, access to this property has been impossible, and therefore it is believed that an extension of the completion date of this contract is justified.

John S. Vhay

Docket Copy

Suggested Form for Assignment and Acceptance of DMEA Contract:

ASSIGNMENT OF EXPLORATION PROJECT CONTRACT

I, Florian L. Glineski (Assignor) for and in consideraton of One ($1.00) Dollar now paid, and other valuable consideration, do hereby grant and assign, subject to Government approval, to Boulder Ores Inc. (Name of Company), all of my interest in a certain Exploration Project Contract, No. 2973, dated 8-24-53 195__, between the United States of America, acting thru the Department of the Interior, Defense Minerals Administration, hereinafter called the Government, and myself, as Operator.

By acceptance of this Assignment, the assignee agrees to assume and perform all of the reservations, terms, conditions, agreements and covenants in said contract contained.

The post office address of the grantee and assignee herein is as follows:

511 North Rodney Helena Montana

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of September 1953.

Florian L. Glineski
(Grantor and Assignor)

STATE OF Montana :

COUNTY OF Lewis & Clark

I, the undersigned, a notary public in and for the State of Montana, hereby certify that on this 21st day of September 1953, personally appeared before me Florian L. Glineski (Assignor), to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes herein mentioned.

WITNESS my hand and official seal this 21st day of September 1953.

R. Purell Campbell
(Notary Public) NOTARY PUBLIC for the State of Montana
Residing at Helena, Montana.
My commission expires September 29th 195

In consideration of the foregoing Assignment, the undersigned hereby accepts the same and agrees to assume and perform all of the reservations, terms, agreements, and covenants contained in the contract above described.

Dated this 19th day of Sept. 1953.

NAME OF COMPANY
Boulder Ores Inc.
By John S. Stohr - President
(Title of Person Authorized to Sign)

Without releasing the Operator from any of the terms, provisions, and conditions of the said Exploration Project Contract, consent to the above assignment and Approval by the Government is given.

Signed [illegible] Date OCT 12 1953
Title ~~Acting~~ Administrator, Defense Minerals Explorations Administration

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

DOCKET NO. DMEA 2973

COMMODITY Tungsten

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Government's Copy
IDM-E 588

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 24th day of August, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Florian L. Glineski
511 North Rodney
Helena, Montana

hereinafter called the "Operator," as follows: and as set forth in Annexes I, and II, attached hereto and made a part hereof.

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 Montana, County of Powell, described as follows: Six (6) patented and nine (9) unpatented lode mining claims in Secs. 21, 22, 27, and 28, T. 11 N., R. 7 W., WMM, as set forth in Annex I, and as indicated on the map entitled "Fig. 1 - Claims Snowshoe Gulch, Powell County Montana F.L. Glineski," attached hereto and made a part hereof

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, of those claims listed in Annex I as owned 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:

(*b*) That the Operator is a lessee, in possession and entitled to possession, of those claims listed in Annex I as leased, and the Owner's Consent~~s~~ to Lien~~s~~ are 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 60 days from the date of this contract shall commence work on a project of exploration for[5] Tungsten

in or upon the described land; and shall bring the project to completion within a period of nine (9) 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 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 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $25,200.00, which is 75 percent of $33,600.00, 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: See Annex II, substituted for that part of 9(a) preceding the colon.

(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.* To the extent that costs are set forth in Exhibit "A" as "agreed unit costs," they are in lieu of the actual costs set forth in Article 6(a) of the contract form.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteadorf
Administrator, Defense Minerals Exploration Administration

~~XXXXX~~ (Operator)

By Florian L. Glineski
Florian L. Glineski - Operator

I, , certify that I am the secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then 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.

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
FLORIAN L. GLINESKI
DOCKET NO. DMEA-2973

ANNEX I

The land referred to in Article 2 of the contract form consists of the claims listed below. All unpatented claims are recorded in the Office of the County Recorder of Powell County, Deer Lodge, Montana.

(a) Owned by Operator

Patented Snow Bird claim (U.S. Survey No. 8526); unpatented Arnold Fraction (Book 9, Page 1); and unpatented Portal (Book 9, Page 3).

(b) Leased by Operator

Patented mining claims owned by Gayle Burleson of Grand Rapids, Michigan, Ernest Ecklesdafer of Missoula, Montana, and Ed C. Hughes of Boulder, Montana, leased to Operator under an instrument dated October 8, 1952:

Arnold (U.S. Survey No. 941); Flagstaff (U.S. Survey No. 10025); Copper Queen (U.S. Survey No. 10025); Montana (U.S. Survey No. 10026); and Shamrock (U.S. Survey No. 10027).

Unpatented mining claims owned by C. N. Bielenberg, Deer Lodge, Montana, leased to Operator under an instrument dated January 17, 1953, as amended July 25, 1953:

Friday No. 1 Lode	(Book 8, Page 100)
Strategic Lode	(Book 8, Page 146)
Tungstate Lode	(Book 8, Page 147)
Copper Tung Lode	(Book 8, Page 151)
Molly Tung Lode	(Book 8, Page 159)
Harmony Lode	(Book 8, Page 191)
Dozer Lode	(Book 8, Page 634)

EXPLORATION PROJECT CONTRACT
FLORIAN L. GLINESKI
DOCKET NO. DMEA-2973

ANNEX II

The following provisions are in lieu of all of paragraph (a) of Article 9 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

EXPLORATION PROJECT CONTRACT
FLORIAN L. GLINESKI
DOCKET NO. DMEA-2973

EXHIBIT "A"

Description of the Work

The exploration work on this project shall be done in two stages. Stage I is indicated on the map attached hereto entitled "Stage I, Arnold Mine Area, Snowshoe Gulch Tungsten-Copper Deposits, Powell County, Montana", and Stage II is indicated on the map entitled "Stage II, Arnold Mine Area -- (F. L. Glineski), Powell County, Montana."

All underground workings shall be timbered where necessary and shall be not less than 4 feet by 6 feet in the clear. Diamond drilling shall be not less than AX in size.

The sampling required under the contract shall be carried out in a manner approved by the Government. Each sample shall be divided into at least two parts, one of which shall be furnished to the Government.

Stage I

Time Schedule: 0 - 2 months

1. Trench with bulldozer at the sites indicated on the attached map provided for Stage I, not to exceed 150 hours. The trenching shall be done on the Arnold, Arnold Fraction, Montana, and Snow Bird claims.

2. Rehabilitate the Arnold mine workings and the South Arnold winze only to the extent necessary to make these workings safely accessible for sampling and mapping.

3. Map the geology and sample the mineralized occurrences of the fifteen claims covered by the subject contract.

4. Construct a combination bunkhouse and tool shed.

(The bulldozer specified in this Stage and in Stage II shall be not less than D-6, or equivalent, in size.)

Stage II

Time Schedule: 2 - 5 months

If, in the opinion of the Government, the results of Stage I warrant it, and the Government so indicates, in writing, in advance, Stage II shall be undertaken.

The tentative locations of all of the exploration work under Stage II, are indicated on the attached map provided for Stage II. These locations may be changed if the Government approves it in advance. This work shall consist of additional exploration necessary to further test mineralized zones previously tested, as follows:

1. Trench and prepare drill sites with bulldozer; and bulldoze as necessary preliminary to underground work at Arnold mine, not in excess of an aggregate of 300 hours.

2. Diamond drill not to exceed 1,000 feet.

3. Drift, crosscut, and/or raise at the Arnold mine, an aggregate distance not to exceed 400 feet.

Estimated Costs of the Project

Agreed Unit Costs

Stage I

Bulldoze 150 hours @ $14.00/hr.		$2,100.00

Stage II

Bulldoze 300 hours @ $14.00/hr.	$ 4,200.00	
Diamond drill 1,000 feet @ $8.00/ft.	8,000.00	
Drift, crosscut, and/or raise 400 feet @ $37.50/ft.	15,000.00	27,200.00

The Government will contribute to the costs of the bulldozing, diamond drilling, drifting, crosscutting, and raising on the basis of the above agreed unit costs, as they accrue, for units of work actually performed, in lieu of actual costs. These agreed unit costs include all costs of

the work except those costs scheduled below to which the Government will contribute on the basis of actual costs as set forth in Article 6(a) of the contract. Work to the costs of which the Government will contribute on the basis of agreed unit costs may be performed by independent contractor without reference to the provisions relating to independent contracts and contractors in Articles 4(a) and (b), and 6(a)(1) of the contract form.

Actual Costs
(*Indicates allowable maximum)

(2) Labor, supervision, consultants

Stage I

2 Miners	$ 300.00	
1 Engineer and/or geologist plus assistant @ $250.00/wk.* 4 weeks*	1,000.00*	$ 1,300.00

Stage II

1 Engineer and/or geologist plus assistant @ $250.00/wk.* 4 weeks*	1,000.00*

(6) New Buildings, improvements, installations

Stage I

Combination bunkhouse and toolhouse	500.00*

(7) Miscellaneous

Stage I

Analyses	400.00

Stage II

Analyses	800.00

(8) Contingencies

Stage I

(not applicable to "agreed unit cost" and "allowable maximum" items)	300.00

Estimated total cost Stage I	$ 4,600.00*	
Estimated total cost Stage II	29,000.00*	
Total estimated cost of the Project		$33,600.00*
Government Participation @ 75%		$25,200.00*

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of MONTANA County of POWELL, described ~~as follows:~~ 1/

IN AN OPTION CONTRACT TO PURCHASE DATED JANUARY 14, 1953, AND RECORDED IN BOOK 9, PAGE 415, OFFICIAL RECORDS OF SAID COUNTY

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ FLORIAN L. GLINESKI OF 511 NORTH RODNEY ST., HELENA, MONTANA

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 75,000.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 20th day of FEBRUARY, 1953.

Claude N Bielenberg [Seal]

_____ [Seal]

_____ [Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

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 six 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) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent 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) per cent 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) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(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, 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.

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.

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Montana, County of Powell, described ~~as follows:~~ 1/

In an Option Contract to Purchase Dated October 8th, 1952 and Recorded in Book 9, (Page 421) Miscellaneous, Official of said County.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Florian L. Glineski, of 511 N. Rodney St., Helena, Montana.

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production 3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 75,000.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 18 74 day of March, 195 3.

[signature] [Seal]

Ed C Hughes [Seal]

[Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____; and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

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 six 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) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent 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) per cent 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) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(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, 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.

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.

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG - 3 1953

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Montana, County of Powell, described as ~~follows:~~

In an Option Contract to Purchase, date d October 8th, 1952 and Recorded in Book 9, Miscellaneous Page 421, Official Records of said County.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Florian L. Glinoski, of 511 N. Rodney St., Helena, Montana.

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

Dated this 25th day of July, 1953.

Hedge B. Burleson [Seal]
By E. C. Eckleschafer [Seal]
attorney in fact.
[Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of 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, as follows:

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

(b) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent 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) per cent 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) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

c. Definitions.--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.

d. Lien for Payment.--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.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--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.

1. MOLLYTUNG LODE
2. DOZER LODE
3. FRIDAY #1 LODE
4. TUNGSTATE LODE
5. PORTAL FRACTION LODE
6. HARMONY LODE
7. STRATEGIC LODE
8. SHAMROCK LODE
9. SNOWBIRD LODE
10. ARNOLD COPPER LODE
11. MONTANA LODE
12. ARNOLD FRACTION LODE
13. COPPERTUNG LODE
14. FLAGSTAFF LODE
15. COPPER QUEEN LODE

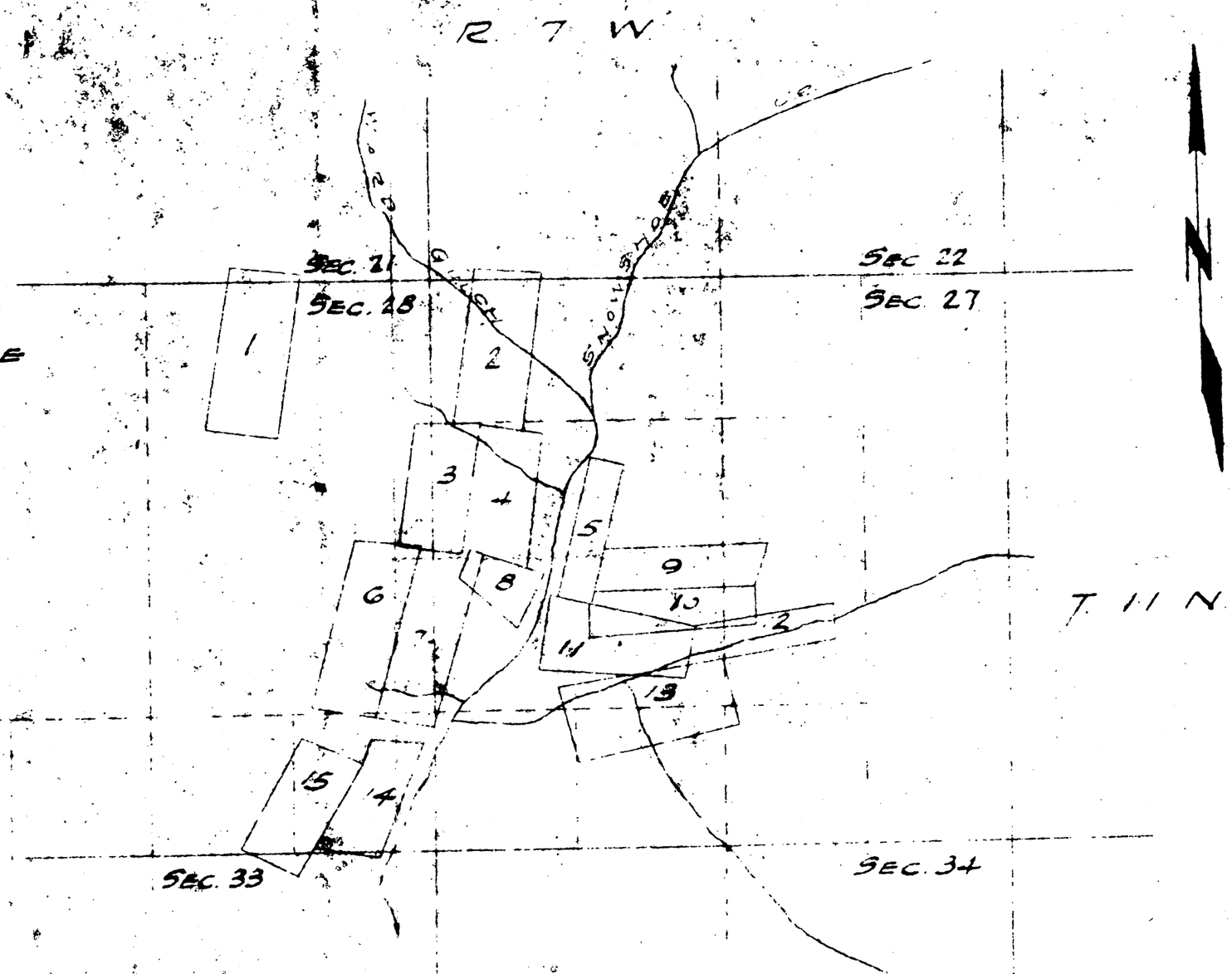

FIG. 1 – CLAIMS

SNOWSHOE GULCH

POWELL COUNTY – MONTANA

F. L. GLINESKI

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
MAR 23 1953
U. S. G. S.
SPOKANE, WASH.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. dmea 2973
Metal or Mineral
Date Received 4-6-53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Florian L. Glineski
511 N. Rodney
Helena, Montana

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

See accompanying paper for all unanswered questions.

(*b*) State any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
16-36551-1
APR 6 1953

5. *The exploration project.*—(*a*) State mineral or minerals for which you wish to ore .....

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 30 days and be completed within 9 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of 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.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—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 the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated March 20, 1953

Florian R. Glinski
(Applicant)

By .....

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—66551-1

ANSWERS TO MF-103
(DMEA application, Docket Number 2973)

SNOWSHOE AREA TUNGSTEN-COPPER PROSPECTS.
POWELL COUNTY, MONTANA.

Applicant: Florian L. Glineski
511 N. Rodney St.
Helena, Montana

3 (a) (Legal description of land to be explored for mineral)

Patented mining claims owned by Ernest C. Ecklesdafer of Missoula Montana, and Ed. C. Hughes of Butte, Montana, and located within sections 27 & 28, T-11-N, R-7-W, Powell County, Montana.

Flagstaff Lode, Sur. No. 10025
Copper Quieen Lode, Sur. No. 10025
Montana Lode, Sur. No. 10026
Shamrock Lode, Sur. No. 10027
Arnold Copper Lode, Sur. No. 941

Patented mining claim owned by Donald D. Bielenberg of Deer Lodge, Montana, and located within sections 27, T-11-N, R-7-W, Powell County, Montana.

Snowbird Lode, Sur. No. 8526

Unpatented mining claims owned by Claude N. Bielenberg of Deer Lodge, Montana, and located within sections 27 & 28, T-11N, R-7-W, Powell County, Montana.

Friday #1 Lode, book 8, page 100.
Strategic Lode, book 8, page 146
Tungstate Lode, book 8, page 147
Coppertung Lode, book 8, page 151
Mollytung Lode, book 8, page 159
Harmony Lode, book 8, page 191
Dozer Lode, book 8, page 634

Unpatented mining claims owned by applicant, F. L. Glineski, and located within section 27, T-11-N, R-7-W, Powell County, Montana.

Portal Lode, book 9, page 3.
Arnold Fraction Lode, book 9, page 1.

3 (b) (Mine names used during past production)

The past mining production has been carried out under the names of the Arnold Copper mine, Flagstaff mine, and Old Lady Smith mine. Other small shipments of copper ore credited to the Snowshoe district, Powell County, Montana, all had their origin in the ground covered by the above listed claims.

3 (c) (Applicant's interest in properties)

Except for two unpatented claims owned by applicant, all others are under lease with option purchase by applicant.

Answers to MF-103 (cont.)
Snowshoe Area Tungsten-Copper Prospects,
Powell County, Montana.

3(d) (Copies of leases and options to purchase)

Copies of the following leases and options are attached to these papers.

(1) Lease and option from E. C. Ecklesdager and E. C. Hughes.
(2) Option from Claude H. Bielenberg.
(3) Lease and option from Claude N. Bielenberg.

4 (Geology and technical considerations)

See accompanying report and geological map.

5(a) (Minerals for which exploration is to be conducted)

Exploration is to be conducted mainly for tungsten ore (scheelite). Copper content of the ore discovered will be arefully noted, but past experience has shown that the ores will have to be marketed for either their tungsten or copper values alone. Unless important reserves are developed by this exploration program, the building of a mill to recover both the scheelite and the mixed sulfide and oxide copper ores, would not be feasible. In view of this fact, this application requests the full 75% Government participation in an exploration loan.

5(b) (Proposed exploration program)

The proposed program is fully detailed upon the accompanying geological map of the area, and fully described in the report.

5(d) (Operating experience of applicant and supervisor)

The applicant has had experience in placer and hard rock mining operations over the past 30 years. Work was mianly in development of placer dredging properties in the vicinity of Helena, Montana.

The work will be done almost entirely by contract, the bulldozing, diamond drilling and drifting being contracted to experienced mining men. The superintendent will be Jack Parks, who is a competent mining man with experience in mining and milling of tungsten ores.

Answers to M[illegible]03 (cont.)
Snowshoe Area Tungsten-Copper Prospects.
Powell County, Montana.

6 (Estimate of Costs)

StageI.

Preparatory underground work. (Making lower level of Arnold mine accessible, and cleaning out incline on South Arnold vein outcrop.)
2 men, 10 days each @ $15.00 per day.
(Includes insurance and taxes $ 300.00

Consulting Engineering. (Preliminary surveys for South Arnold drift, and for diamond drilling.) (Includes survey helper.)
1 week consultant's work @ $250.00 per week. 250.00

Bulldozer trenching. (6,090 feet of trenching and 950 feet of roadway building to diamond drill sites. By contract.)
208 hours @ $12.50 per hr. 2,600.00

South Arnold Drifting. (150 feet of drift. By contract covering all costs.)
150 feet drifting @ $40.00 per foot 6,000.00

Set-up and dismantling charge for diamond drill. (To be paid to diamond drill contractor. Must be included due to the small footage of the contract.)
Set-up and dismantling charge for diamond drill. 500.00

Diamond drilling. (350 feet of diamond drilling. By contract covering all costs, including hauling of water for drilling to drill site.)
350 feet diamond drilling @ $10.00 per foot. 3,500.00

Supervision. (Supervisor to furnish his own transportation and living expenses. Supervisor to also handle the accounting. Cost estimate per month includes insurance, social security, etc. In addition to supervisor's salary.)
Supervisor, 2 months @ $600.00 per month 1,200.00

Assaying. (Assays to be run for tungsten, copper, silver, and gold.)
40 assays @ $10.00 (Twining laboratories 400.00

Consulting Engineering. (Final surveys of drift and diamond drilling, sampling, detailed mapping, and estimation of ore developed.) (Includes survey helper)
1 week consultant's work @ $250.00 250.00

Total Cost, Stage I ---------- $ 15,000.00

Answers to MF-203 (cont.)
Snowshoe Area Tungsten-Copper Prospects.
Powell County, Montana

6 (Estimate of costs.)

STAGE II

Stage II would be carried out only upon the successful completion of Stage I, and the work listed below would be done only in those locations approved by the Government DMEA field team, those locations to be determined at the close of Stage I.

Additional bulldozer trenching. (Maximum of 1,500 feet, including building roadway to new diamond drill sites. By contract covering all costs.)
48 hours @ $12.50 per hour. $ 600.00

Sinking winze at Main Arnold mine. (Winze to be sunk a msximum of 50 feet below the lower level of the main Arnold mine. Work to be done by contract covering all costs.)
50 feet exploratory shaft sinking @ $60.00 per foot. 3,000.00

Sinking winze at South Arnold drift. (Winze to be sunk a maximum of 50 feet from the drift driven in Stage I. Work to be done by contract covering all costs.)
50 feet exploratory shaft sinking @ $60.00 per foot. 3,000.00

Additional diamond drilling. (Maximum of 1,500 feet of diamond drilling on eastern quartz veins in vicinity of drilling done in Stage I. By contract covering all costs, including hauling of water to drill sites.)
1,500 feet diamond drilling @ $8.00 per foot. 12,000.00

Supervisor. (Supervisor to furnish his own transportation and living expenses. Supervisor to also handle the accounting. Cost estimate per month includes insurance, social security, etc. in addition to supervisor's salary.)
Supervisor, 3 months @ $600.00 per month. 1,800.00

Consulting Engineering. (includes survey helper)
(1 week preliminary surveys for diamond drilling.)
(2 1/2 months sampling, surveying, and geological mapping of Friday, Tungstate, Shamrock, Strategic, Flagstaff, and Old Lady Smith areas for an extended exploration program.)
(1 week final surveys of winze sinking and diamond drilling, with sampling, detailed mapping, and estimation of ore reserves.)
3 months consultant's work @ $1,000.00 3,000.00

Assaying. (Assays to be run for tungsten, copper, silver, and gold.)
60 assays @ $10.00 (Twining Laboratories, Fresno, Calif.) 600.00

Total Cost, Stage II ---------- $ 24,000.00

Stage I---------- $15,000.00
Stage II---------- 24,000.00

Maximum total cost of project ---------- $ 39,000.00

Answers to MF-103 (cont.)
Snowshoe Area Tungsten-Copper Prospects.
Powell County, Montana.

7 (Applicant's method of furnishing his share of the costs.)

The applicant is prepared to furnish his share of the costs in the following manner. He will pay all bills and obligations incurred during the exploration program, mailing in all receipts monthly to the Government DMEA office for reimbursement to the extent of the Governments participation in the loan. For this purpose, the applicant agrees to have sufficient money available to carry the expenses for any two-month period of operation.

Dated March 20, 1953 Signed Florian L. Glineski

Florian L. Glineski
511 N. Rodney St.
Helena, Montana

Use this report for DMEA [illegible]

dmea 2973 1

PRELIMINARY REPORT
ARNOLD MINE AREA
SNOWSHOE GULCH TUNGSTEN-COPPER DEPOSITS
POWELL COUNTY, MONTANA.
(with accompanying map)

Summary:

This report is being written to give a summation of present knowledge regarding the Snowshoe Gulch tungsten-copper deposits, and to provide a basis upon which a well-organized program of exploration can be outlined.

Widespread but small ore-deposits are scattered throughout the Snowshoe Gulch area and in the past, have been mined for their copper content alone. Recently, it has been discovered that the scheelite present in these deposits often equals and even exceeds the value of the copper present in the ore. Milling operations would be required to recover both the tungsten and the copper in a marketable form, and no single deposit appears able to develop sufficient ore reserves to warrant the building of a mill. To develop such reserves, exploration must be planned to cover the entire area in the hope of developing at least five commercial ore-bodies.

This report will deal specifically with the Arnold Mine area, preparatory surveys and mapping not having been done elsewhere in this district.

History and Ownership:

The copper mining activity in this area began in about 1880 and continued intermittantly to 1920. The main producers were the Flagstaff, Old Lady Smith, and the Arnold mines, none of which could be considered other than very small mines. Small shipments of copper ore were also produced from many of the prospects scattered throughout the area.

In 1940, the presence of scheelite was recognised in the Friday prospect, and further investigation showed this tungsten mineral to be present in commercial quantities in many of the other copper mines and prospects. Fred Tampke, the original discoverer, and Claude Bielenberg located a number of mining claims which were optioned and examined by several mining companies, notably by the Homestake Mining Co. in 1942. No production, however, resulted.

The Flagstaff, Arnold, and Shamrock properties, consisting of patented mining claims, were purchased by Ernest C. Ecklesdafer, and leased to the Porter Bros. Corp. of Helena, Montana in 1943. Their activity was confined to the Arnold and Old Lady Smith mines, four carloads of tungsten ore being shipped before the lease was dropped. No payment was received for the copper content of the ore, though the ore contained good values in copper. The tungsten mill to which the ore was shipped was not equipped for the recovery of the copper.

At present, the ownership of the mining properties of this area is divided between Ernest C. Ecklesdafer and Claude Bielenberg. These properties are now under lease and option to Florian L. Glineski of Helena, Montana, who has located several other unpatented claims during the past year.

Location and Accessibility:

The Snowshoe Gulch tungsten-copper deposits are located along Snowshoe Gulch and at the head of Basin Gulch in the west one-half of section 27 and the east one-half of section 28, T-11-N, R-7-W, Powell County, Montana. Copper deposits of similar geological origin are known to extend northwestward two miles beyond this area, but tungsten mineralization appears lacking.

The deposits are 13 miles distant from Avon, a small town on U.S. Highway 10-N, and on the Northern Pacific railroad. Three miles of this distance are on the highway, five miles are on gravelled road, and the last five miles are on unimproved road of moderate grade. Avon is 30 miles west of Helena, Montana.

Topography and Climate:

The tungsten-copper deposits occur in the lower ridges and gulches of the mountains which rise abruptly from the north side of the Little Blackfoot valley. The ridges are rounded and seldom show rock outcrops. The area is unglaciated, and for the most part, the soil cover is thin. The area is well-timbered, though many south-facing slopes have only scattered trees.

The deposits are found at elevations ranging between 5,500 and 6,500 feet above sea level.

During an average winter, the snow will probably not exceed 4 feet in depth at the deposits, and snow will remain on the ground from November through April. The temperature in winter will occasionally drop to -30°F, and during severe winters, as much as 30 days of subzero weather can be expected.

Mining and Milling Facilities:

Experienced mine labor is available, as this district is within an area of steady mining activity. Mining supplies are available from Helena, which is a mining center.

As the individual deposits will probably prove small, electric power would probably be uneconomic and diesel power would be used. Trucks would probably be used to haul the ore to a centrally-located mill. However, unless the proposed exploration program is highly successful, these ores will have to be shipped without milling, payment being received for the tungsten content alone.

Should the deposits warrant the building of a mill, an excellent millsite is present two miles below the main deposits, and if electric power were to be used, the building of six miles of transmission line will be required.

General Geology:

The tungsten-copper deposits are of the contact-metamorphic type, being closely associated with batholitic intrusions into the limestone of the area.

The only sedimentary formation observed is the Jefferson Limestone. It is a white, dolomitic limestone of high purity, and rarely shows shaley or impure beds. In this area, the limestone has developed a sugary texture from metamorphic action. The bedding is generally indistinguishable.

The granite intrusive, which has been described as quartz monzonite, has been uncovered by erosion to form the surface rock in an area of about a square mile centering at the head of Basin Gulch. Presumably, this was the highest point of the batholitic dome, and very likely, erosion has cut down more than 500 feet into the granite. No ore deposits have yet been found on the margin of the main granite area, and instead, the

deposits are closely associated with minor batholitic domes on the margin of the main granite mass, and which have been barely uncovered by erosion.

This conforms to what is known about other contact-metamorphic tungsten-copper deposits. Such deposits are grouped about the highest points of the batholitic domes, have relatively slight depth, and are removed completely when deep erosion of the dome occurs.

Geology of the Deposits:

Observations in the area mapped indicate that the intrusive contact of the granite with the limestone seldom has produced wide zones of metasomatic alteration. Very likely, exploration will show this tactite zone to be entirely absent throughout the major part of this contact, and where present, the tactite zone will generally have a thickness of less than five feet. The greatest thickness of tactites was observed in the close vicinity of the ore deposits, and in the Arnold mine, may reach a maximum thickness of 30 feet.

At the Arnold mine, the upper section of the granite contains alternating bands of dark tactite and granite. This is followed by a dark tactite zone charactorized by dark red garnet, epidote, and calcite. This in turn is followed by a light tactite zone charactorized by light-colored garnet and other silicates, and in turn is followed by the massive limestone. At the Arnold, the contacts are gradational, but in thinner tactite zones, the contacts are generally sharp.

The thin tactite zones are generally entirely barren of mineralization. The wider tactite zones generally show a scattering mineralization, and seldom constitute commercial ore. While good ore is found in the tactites of the Arnold mine, it does not appear to be confined to a definite horizon, and the ore-bearing tactite appears to be the root of a quartz vein extending upward into the limestone. This upper portion of the vein has been removed by erosion.

It is my present theory, not yet fully confirmed, that wide tactite zones were formed locally along the granite-limestone contact near the summits of the batholitic domes. These tactite bodies formed centers for the concentration of the volatile mineral-bearing solutions. These solutions, instead of dispersing through the tactite, ascended upward into the overlying limestone forming quartz veins there. The roots of these veins are mineralized tactites such as are found in the Arnold mine.

In the lower level of the Arnold mine, the tungsten-copper ore occurs within the dark tactite zone, close to the granite. In the upper stopes of the Arnold, the tungsten-copper ore occurs within the light tactite zone next to the limestone. At greater distance above the granite, the veins lose their garnetiferous charactor, quartz becoming the predominant gangue mineral. This is shown in the quartz-garnet vein enclosed in limestone walls 300 feet directly south of the main Arnold portal. Good scheelite and copper ore can be observed here. At a further distance above the granite batholith, the veins become simple quartz veins, gradually losing first their scheelite and then their copper values. This can be observed in the old prospects and workings near the eastern end of the Arnold Copper patent. Granite is not exposed in this vicinity, but the easternmost granite exposure indicates that a batholitic dome is present below these prospects. One of these veins carried sufficient

copper values to warrant stoping. The remainder of the veins show uncommercial copper ore or barren quartz. The proposed exploratory program outlined at the end of this report will be primarily for the purpose of determining whether in depth, closer to the batholitic dome, these veins will carry tungsten-copper ore similar to that of the known deposits of the area. If so, these uneroded deposits should furnish considerable tonnage reserves.

In most contact-metamorphic tungsten-copper deposits, the ore is confined to a certain horizon in the tactite zone, and quartz veins are not found in the overlying limestone. This may be because the calcite within the tactite zone forms the host rock most suitable for mineral deposition. However, the purity of the limestone in the Arnold area may account for the mineral solutions passing through the tactite to be deposited in veins in the limestone. In most contact-metamorphic deposits, certain beds of limestone are more suited to metasomatic alteration and the mineral deposits are confined to these beds. The uniform nature of the limestone in the Snowshoe district, and the absence of distinguishable bedding, eliminates bedding as a factor in the formation of these deposits.

Minerology and Grade of Ore:

The ores of the district vary considerably in their copper-tungsten ratio. One prospect, the Friday, has pockets of high-grade tungsten ore with no copper. At the other extreme, the Montana prospect appears to have very little scheelite accompanying its copper ore.

The gangue minerals are generally typical of contact-metamorphic deposits, being mainly quartz, garnet, epidote, and calcite.

The tungsten occurs in the form of scheelite. A slight amount of molybdenite is present in the primary ore, and upon oxidation, has formed a minor amount of powellite. The primary copper mineral is chalcopyrite, much of which is altered to malachite and tenorite.

My work in this area was done for the Porter Bros. Corp. and began after they had completed their sampling. I have no definite knowledge of the sampling results. During the Porter operations in 1943, 223 tons of ore were shipped to Salt Lake City, payment being received for the tungsten alone, the average grade being 0.533% WO_3. The copper content was not recorded.

The grade of the copper in ore from the Arnold mine is indicated by six shipments made to the Anaconda smelter in 1916-17. These shipments had an average grade of 4.76% Cu, 1.7 oz. Ag, and 0.028 oz Au. Four shipments from the Flagstaff mine in 1910 averaged 9.79% Cu, 3.35 oz Ag, and 0.07 oz Au. Scheelite was unquestionably present in these shipments but there is no knowledge of its grade.

This figure is correct. Only figure in previous report is wrong.

Reserves:

The only ore reserve in the Arnold mine area is a very minor reserve below the main level of the Arnold mine. Further reserves in the district may be found by reopening the caved Flagstaff workings.

Mining Methods:

The ore deposits are suited to shrinkage stoping, as the veins are of proper shrinkage width, dip steeply, and have good walls. Glory-holing from the surface is to be recommended where applicable, as it requires a minimum of underground development

and the underground development would follow complete surface exploration.

Milling Methods:
Should the proposed exploration program prove highly successful in developing reserves, extensive milling tests will be required before a flow sheet for this complex ore can be determined.

Exploration Recommendations: (See accompanying map)
The first stage of a proposed exploration program will have to be confined to the Arnold mine area, which is the only part of the district geologically mapped. This work would be confined to the Arnold Copper, Montana, and Snowbird patents, and the Arnold Fraction, Portal, and Coppertung unpatented claims. Successful exploration in this area would then be followed by thorough exploration of the entire Snowshoe tungsten-copper area.

The accompanying map shows the work to be done in Stage I of the proposed exploration program. This program is as follows:
(a) The lower level of the Arnold mine will be made accessible, and will be surveyed, sampled, and mapped.
(b) The incline from the surface at the South Arnold vein will be cleaned out, surveyed, and sampled, and its projection on the adit level will be determined. Then 150 feet of drifting on the vein is to be done from this adit level, 100 feet below the outcrop. Timbering of the drift should not prove necessary.
(c) Drill sites for diamond drilling the Arnold Fraction vein at a depth of 100 feet and 200 feet below the lower adit level will be surveyed. A roadway to these sites will be bulldozed, as water for drilling will have to be hauled to these locations. 350 feet of diamond drilling will be required. 950 feet of roadway will have to be built. These diamond drill holes will test the theory that these low-grade copper-bearing quartz veins will carry good tungsten-copper ore in depth where they are closer to the batholitic dome.
(d) Bulldozer trenching totalling 6,090 feet will be carried out for the purpose of discovering new veins, and cleaning off the surface and extending the known veins.
(e) Sampling, surveying, and mapping will be carried out at the end of Stage I, and estimates of the ore reserves will be made.

Stage II, not shown on the map, would be carried out only upon the successful conclusion of Stage I. If approved, this would carry out the following program:
(a) 1,500 feet of additional bulldozer trenching in approved locations.
(b) 1,500 feet of additional diamond drilling on eastern quartz veins.
(c) Sinking 50 feet of winze from the lower level of the Arnold mine, and sinking 150 feet of winze from the new drift on the South Arnold vein.
(d) Surveying and geological mapping of the Friday, Tungstate, Shamrock, Strategic, Flagstaff, and Old Lady Smith areas, with which maps, an extended exploration program can be planned.

Drummond, Montana
March 17, 1953

Peter H. Toepfer
Peter H. Toepfer
Mining Engineer.

A. V. TRENT,
Owner-Manager

GOODALL BROTHERS

ASSAYERS AND METALLURGICAL CHEMISTS

46 SO. MAIN ST., HELENA, MONTANA

TEL. 628
P. O. BOX 537

Date OCT 14 1952

UMPIRE ASSAY..... CONTROL ASSAY..... HAND SAMPLE.....

ASSAYED FOR: [illegible] MARKS: [illegible]

Sample No.	DESCRIPTION	GOLD Ozs. Per Ton	SILVER Ozs. Per Ton	WET LEAD Per Cent	COPPER Per Cent	ZINC Per Cent	IRON Per Cent	INSOL. Per Cent	[illegible] Per Cent	Total Value Per Ton
[illegible]	[illegible]	Trace	0.3	[illegible]	[illegible]				63	

Gold not deducted: .....

Charges $ [illegible]

GOODALL BROS.

By [illegible]

NPCo. B-8912—Form 1

Deer Lodge

Jan - 10 - 53

Rec'd from T. L. Glinski
$50.00 as down payment
on sale of the Lulu
Bird Pat Claim on
Snow Shoe Cr
Powell Co Mont
Bal of $450.00 to be
paid on or before
June 1st 1953.

C M Bellinberg

Sur # 3526

Return to

J. L. Glinski
511 N. Rodney St
Helena, Mont.

Amea 2973

dmea 2973

STATE OF MONTANA,
County of Powell } ss.

On this 14th day of January in the year nineteen hundred and 1953 before me R. RUSSELL CAMPBELL a Notary Public for the State of Montana, personally appeared CLAUDE N. BIELENBERG OF DEER LODGE, MONTANA and FLORIAN L. GLINESKI OF HELENA, MONTANA

known to me

(or proved to me on oath of)

to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal, the day and year first above written.

R. Russell Campbell
Notary Public for the State of Montana.
Residing at Helena, Montana
My Commission expires Sept. 29 1955

57611
INDEXED
RECORDED

OPTION CONTRACT

CLAUDE N. BIELENBERG
-TO-
FLORIAN L. GLINESKI
TO

STATE OF MONTANA, } ss.
County of Powell,
I hereby certify that the within instrument was filed in my office on the 20th day of February A.D. 1953 at 1:30 o'clock P. M. and is recorded on page 415 of Book 9 of Miscellaneous Records of Powell County, State of Montana.
Attest my Hand and the Seal of said County.
County Recorder
By Deputy.
Fees $1.50
Claude N. Bielenberg

No. 7-C OPTION CONTRACT

STATE PUBLISHING CO., HELENA, MONT.

KNOW ALL MEN BY THESE PRESENTS:

That, Claude E. Bielenberg

of the City *of* Deer Lodge

County of Powell *and State of* Montana *for and*

in consideration of the sum of Fifty *DOLLARS,*

in hand paid, at or before the ensealing and delivery of these presents by

Florian L. Gliniski

of the City *of* Helena, Montana

County of Lewis & Clarke *and State of* Montana *have*

agreed, and do hereby agree to hold until the 14th. *day of* January *A. D.*

19 54., *at 12 o'clock M., time being the essence and important part of this option, subject to the order*

of the said Florian L. Gliniski

or assigns, the following described property, to-wit: Seven unpatented lode mining claims to-wit

Stratagic Lode Recorded Book 8 Page 146

Harmony Lode Recorded Book 8 Page 191

Tungstate Lode Recorded Book 8 Page 147

Friday #1 Lode Recorded Book 8 Page 100

Dozer Lode Recorded Book 8 Page 634

Copper Tung Lode Recorded Book 8 Page 151

Molly Tung Lode Recorded Book 8 Page 159

All located in Secs. 27-28-21 T. 11N R. 7W Co. of Powell, State of Montana

or to transfer the said property at any time within the time above prescribed, to the said

or such person or persons as he or they may direct at and for the price of Fifty thousand dollars

($50,000.00) *DOLLARS,*

good and lawful money of the United States of America, payable on the following terms: $1200.00 to be paid January 10, 1954 and each year there after for life of contract which is ten years. With ten per cent royalty on net smelter return on all mineral taken from property. Also the right of two options to purchase, 1st. on or before January 10, 1954 $11,150.00 or, on or before January 10, 1958 $25,000.00. Any and all payments to be applied on the purchase price. Florian L. Gline ski, or his assigns, agrees to do all necessary representing on these claims.

In event that the holder or holders of the option shall decide to purchase the said property at the above price and terms within the said time, then and in that case, the said amount paid for this option shall be credited upon the said purchase price, but in the event the holder or holders hereof do not conclude the purchase above named within the time prescribed, then and in that case, the said amount paid for this option shall be retained by the undersigned in full satisfaction for holding the property subject to said order for the said time.

It is provided, however, that in case there should be any delay on the part of the undersigned in perfecting the title to the above property for more than thirty *days after the notice of the election of the holder or holders hereof to purchase the said property, then and in that case, the holder or holders hereof reserves the right to cancel this option and receive back the consideration therefor, or to extend the time until the said title is perfected.*

Dated at Helena, Montana *this* 14th *day of*

January *A. D.* 1953

Claude E. Bielenberg

Florian L. Gliniski (SEAL)

Return to
F. L. Glineski
511 N. Rodney St
Helena, Montana

Amed 2973

MINING LEASE AND OPTION

THIS AGREEMENT, Made and entered into in triplicate this 8th day of October, 1952, by and between Gayle Burleson of Grand Rapids, Michigan and Ernest Ecklesdafer of Missoula, Montana and Ed C. Hughes of Boulder, Montana, parties of the first part and Florian L. Glineski of Helena, Montana, party of the second part,

WITNESSETH: That the said parties of the first part for and in consideration of the sum of One Dollar ($1.00) and other valuable considerations to them in hand paid, and the covenants and agreements hereinafter contained to be kept and performed by the party of the second part, do demise, lease and let unto the party of the second part for the term of ten years from the date first above written, the following described mining claims:

All of the first parties' undivided interests in and to the following mining claims:

The FLAGSTAFF Quartz Lode Mining Claim (patented), Survey No. 10025; the MONTANA Quartz Lode Mining Claim (patented), Survey No. 10026; the SHAMROCK Quartz Lode Mining Claim (patented), Survey No. 10027; all located in Sections Twenty-seven (27) and Twenty-eight (28) of Township Eleven (11) North and Range Seven (7) West of the Montana Meridian; and The ARNOLD Quartz Mining Claim, Survey, No. 941, situated in Section Twenty-seven (27), Township Eleven (11) North, Range Seven (7) West of the Montana Meridian.

Party of the second part agrees to pay to the parties of first part, as a royalty, ten per cent of the net smelter returns on all ore shipped from the above described property, ~~xxxxxxxxxxxx~~,

Said party of the second part shall furnish to said parties of the first part a copy of the smelter statement on each and every shipment of ore immediately upon the issuance of the same by the smelter treating such ore, and shall cause such smelter to pay directly to the parties of the first part five per cent each to E. C. Ecklesdafer and Ed C. Hughes of the net smelter returns as royalty, as above set forth.

Party of the second part agrees that he will protect all of the above described property from the filing of any labor, liens or attachments as the result of any operation or expenditures made or caused to be made by the party of the second part under this lease; and that he will procure on behalf of his employees upon said property, industrial accident insurance, as required under the laws of the State of Montana, and that he will keep and obey all state and federal rules and regulations relating to labor and to safety.

It is understood and agreed by and between the parties hereto that all building and improvements placed upon the above described claims by the party of the second part are to become part of the realty and to remain on said property, providing however that party of the second part in case he does not exercise the option given under the terms of this lease, shall at any time when he ceases operation on said premises have the right to remove all machinery, rails, pipes and tools of whatsoever nature and kind installed by him on said premises. It is specifically understood and agreed that party of the second part is to have the use of all improvements, equipment ect., that may now be located on the above described mining premises and that upon his quitting possession of said premises he shall leave such equipment, improvements etc., in as good a condition as he found them, reasonable wear and tear and damage by the elements alone excepted.

Parties of the first part hereby agree to pay all taxes levied upon the above described property during the time this lease is in effect except that party of the second part shall pay all net proceeds tax on the ores extracted from said mining premises.

Party of the second part shall have the right to use any timber located upon the above described mining premises for use in mining operations thereon or in connection therewith, ~~except that none of said timber shall be used for the construction of buildings on said premises~~.

Party of the second part agrees to pay to parties of the first part, in advance, an annual minimum royalty of $2500.00 which said minimum royalty shall be due as follows; the sum of $1000.00 the receipt of which is hereby acknowledged and $1500.00 to be paid on or before January 8th, 1953 and $2500.00 to be paid annually on or before the 8th day of each year thereafter during the term of this lease.

After the payment of said minimum annual royalty second party shall not be required to pay any further royalty to the parties of the first part during the year for which the royalty was paid in advance, until the royalty at the rate of ten percent of the net smelter returns shall have reached the total of $2500.00 at which time party of the second part shall resume payments of said ten per cent royalty to the parties of the first part.

OPTION TO PURCHASE. Parties of the first part hereby give and grant to the party of the second part an option to purchase all of their right, title and inserest in and to the above described property for the sum of $60,000.00, which option shall continue throughout the term of this lease. All payments of royalty made by second party to first parties shall be credited on said purchase price. Upon payment of the unpaid balance of said purchase price to the parties of the first part, at any time during the term of this lease, they will deliver a good and sufficient waranty

deed of all of their right, title and interest in and to the above described property to the party of the second part.

It is further understood and agreed by and between the parties hereto that should the party of the second part be in default under the terms and conditions of this lease and option or should he fail to perform any of the covenants hereof by him to be performed, this lease and option shall be cancelled by the parties of the first part, at their option, by giving thirty days notice to second party of his failure to perform the conditions of this lease and requiring performance within said time. It is further understood and agreed by and between the parties hereto that any such notice to be given by first parties to second parties shall be deemed to have been legally served upon second party if made in writing and mailed to him through United States registered mail addressed to him at Rt. No. Rodney St., Helena, Montana, at the date of the mailing of such notice to be the date of the service thereof upon said party of the second part.

It is further understood and agreed by and between the parties hereto that all the terms and conditions hereinabove set forth shall be obligatory and binding upon the heirs, administrators, executors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names the day and year first above written.

WITNESSES:

By

Her attorney in fact

Parties of the first part

Party of the second part.

Return to
F. L. Glineski
511 N. Rodney St
Helena, Montana

dmll 2973

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It is further understood and agreed by and between the parties hereto that all the terms and conditions hereinabove set forth shall be obligatory and binding upon the heirs, administrators, executors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names the day and year first above written.

MOTION OF ASSIGNMENT FILED

STATE OF MONTANA
County of Lewis & Clark
Filed for record the 20th day of Feb. A.D. 1947 at 11:45 A.M.
Recorded at Request of Mr. Ed C. Gudhus
Fee $1.00
Helen E. Rodgers
Recorder

STATE OF MONTANA
County of Lewis & Clark
Filed for record the 20th day of Feb. A.D. 1947 at 11:45 A.M.
Recorded at Request of Mr. Ed C. Gudhus
Fee $1.00
Helen E. Rodgers
Recorder

-4-

GILINSKI

JA EL BERKOWITZ

WITNESSES:

By [signature]
Her attorney in fact
Ed C. Gudhus
Parties of the first part

Florian L. Gilinski
Party of the second part.

AMENDMENT TO OPTION CONTRACT

Deer Lodge, Montana.
July 25, 1953.

In regard to the Claude N. Bielenberg Option Contract executed January 14th, 1952, I hereby grant Florian L. Glineski the right to prospect, to mine and to develop any and all minerals that are contained on and in the mining claims of the above mentioned contract, until January 14th, 1962.

Claude N Bielenberg
Claude N. Bielenberg

STATE OF MONTANA)
: ss.
COUNTY OF POWELL)

On this the 27th day of July, 1953 before me, S. P. Wilson, a Notary Public for the State of Montana, residing at Deer Lodge, Powell County, Montana personally appeared Claude N. Bielenberg known to me to be the person whose name is subscribed to the within and foregoing instrument entitled Amendment to Option Contract and acknowledged to me that he executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my Notarial Seal the day and year herein before written.

S P Wilson
Notary Public for the State of Montana.
Residing at Deer Lodge, Montana.
My commission expires December 10, 1954.

No. 14—QUIT CLAIM DEED STATE PUBLISHING CO., HELENA, MONT.

THIS INDENTURE, Made the 17th *day of* January *in the year of our Lord one thousand nine hundred and* fifty-three *between* Donald Dean Bielenberg a single man, of Deer Lodge, Montana, party of the first part, and F. L. Glineski, Helena, Montana

the part Y *of the SECOND PART,*

WITNESSETH: That the said part Y *of the FIRST PART for and in consideration of the sum of* One and no/100 ---------- *Dollars,* ($1.00) *to* him *in hand paid by the said part* Y *of the SECOND PART, the receipt of which is hereby acknowledged; do hereby convey, remise, release and forever quitclaim unto the said part* Y *of the second part, and to* his *heirs, and assigns, the following described real estate, situated in the County of* Powell *and State of Montana, to-wit:*

The Snow Bird Lode Patented Mining Claim, Survey Number 8526 located in Township Eleven (11) North, Range Seven (7) West Montana Meridian, containing eleven(11), acres, more or less.

together with all the tenements, hereditaments, and appurtenances thereto belonging, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and also all the estate, right, title, interest property, possession, claim and demand whatsoever as well in law as in equity, of the said part Y *of the first part, of, in or to the said premises and every part and parcel thereof*

TO HAVE AND TO HOLD, all and singular the said premises, with the appurtenances

unto the said part Y *of the second part* his *heirs and assigns forever.*

IN WITNESS WHEREOF, the said part Y *of the first part h* as *hereunto set* his *hand and seal the day and year first above written.*

Signed, Sealed and Delivered in the Presence of

Donald D Bielenberg (SEAL)

(SEAL)

STATE OF MONTANA,
County of Powell } ss.

On this 17th day of January nineteen hundred and Fifty-three before me Daniel B. Hertz, Jr. County Clerk and Recorder, Powell County, Montana ~~A Notary Public for the State of Montana~~, personally appeared Donald D. Bielenberg

known to me

(or proved to me on oath of)

to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year in this certificate first above written.

Daniel B. Hertz Jr.
~~Notary Public for the State of Montana.~~
County Clerk and Recorder, Powell County, Montana
~~My Commission expires~~ ~~, 19~~

INDEXED
RECORDED
58031

QUIT CLAIM DEED

DONALD D. BIELENBERG

TO

P. L. GLINESKI

STATE OF MONTANA, } ss.
County of Powell

Filed for record this 3rd day of June A. D. 1953 at 10:25 o'clock A. M., and Recorded in Book 42 of Deeds Page 489 of the Records of Powell County.

State of Montana
Daniel B. Hertz
County Recorder.
By
Deputy.

Fees $.90

OZM—QO-R4

Return to: P. L. Glineski
511 N. Rodney Street
Helena, Montana

STATE OF MONTANA,
County of Powell } ss.

On this 14th day of January in the year nineteen hundred and 1963 before me R. RUSSELL CAMPBELL a Notary Public for the State of Montana, personally appeared CLAUDE N. BIELENBERG OF DEER LODGE, MONTANA and FLORIAN L. GLINESKI OF HELENA, MONTANA

known to me

(or proved to me on oath of)

to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal, the day and year first above written.

R. Russell Campbell
Notary Public for the State of Montana.

Residing at Helena, Montana

My Commission expires Sept. 29 1965

57611
COMPARED INDEXED RECORDED

OPTION CONTRACT

CLAUDE N. BIELENBERG
-TO-
FLORIAN L. GLINESKI
TO

STATE OF MONTANA, } ss.
County of Powell,
I hereby certify that the within instrument was filed in my office on the 20th day of February A.D. 1963 at 1:30 o'clock P. M. and is recorded on page 415 of Book 9 of Miscellaneous Records Powell County, State of Montana.
Attest my Hand and the Seal of said County.
County Recorder
By Deputy.

$1.50
Claude N. Bielenberg

No. 7-C OPTION CONTRACT

STATE PUBLISHING CO., HELENA, MONT.

KNOW ALL MEN BY THESE PRESENTS:

That, Claude N. Bielenberg

of the City *of* Deer Lodge

County of Powell *and State of* Montana *for and*

in consideration of the sum of Fifty *DOLLARS,*

in hand paid, at or before the ensealing and delivery of these presents by

Florian L. Glinoski

of the City *of* Helena, Montana

County of Lewis & Clarke *and State of* Montana *have*

agreed, and do hereby agree to hold until the 14th. *day of* January *A. D.*

19 54., *at 12 o'clock M., time being the essence and important part of this option, subject to the order*

of the said Florian L. Glinoski

or assigns, the following described property, to-wit: Seven unpatented lode mining claims to-wit

Strategic Lode Recorded Book 8 Page 148

Harmony Lode Recorded Book 8 Page 191

Tungstate Lode Recorded Book 8 Page 147

Friday #1 Lode Recorded Book 8 Page 100

Dozer Lode Recorded Book 8 Page 634

Copper Tung Lode Recorded Book 8 Page 151

Molly Tung Lode Recorded Book 8 Page 159

All located in Secs. 27-28-21 T. 11N R. 7W Co. of Powell, State of Montana

or to transfer the said property at any time within the time above prescribed, to the said

or such person or persons as he or they may direct at and for the price of Fifty thousand dollars

($50,000.00) *DOLLARS,*

good and lawful money of the United States of America, payable on the following terms: $1200.00 to be paid January 10, 1954 and each year there after for life of contract which is ten years. With ten per cent royalty on net smelter return on all mineral taken from property. Also the right of two options to purchase, 1st. on or before January 10, 1954 $11,150.00 or, on or before January 10, 1958 $25,000.00. Any and all payments to be applied on the purchase price. Florian L. Glinoski, or his assigns, agrees to do all necessary representing on these claims.

In event that the holder or holders of the option shall decide to purchase the said property at the above price and terms within the said time, then and in that case, the said amount paid for this option shall be credited upon the said purchase price, but in the event the holder or holders hereof do not conclude the purchase above named within the time prescribed, then and in that case, the said amount paid for this option shall be retained by the undersigned in full satisfaction for holding the property subject to said order for the said time.

It is provided, however, that in case there should be any delay on the part of the undersigned in perfecting the title to the above property for more than thirty *days after the notice of the election of the holder or holders hereof to purchase the said property, then and in that case, the holder or holders hereof reserves the right to cancel this option and receive back the consideration therefor, or to extend the time until the said title is perfected.*

Dated at Helena, Montana *this* 14th *day of*

January *A. D.* 1953

Claude N. Bielenberg (SEAL)

Florian L. Glinoski (SEAL)

Return to
F. L. Glineski
511 N. Rodney St
Helena, Montana

MINING LEASE AND OPTION

THIS AGREEMENT, Made and entered into in triplicate this 8th day of October, 1952, by and between Gayle Burleson of Grand Rapids, Michigan and Ernest Ecklesdafer of Missoula, Montana and Ed C. Hughes of Boulder, Montana, parties of the first part and Florian L. Glineski of Helena, Montana, party of the second part,

WITNESSETH: That the said parties of the first part for and in consideration of the sum of One Dollar ($1.00) and other valuable considerations to them in hand paid, and the covenants and agreements hereinafter contained to be kept and performed by the party of the second part, do demise, lease and let unto the party of the second part for the term of ten years from the date first above written, the following described mining claims:

All of the first parties' undivided interests in and to the following mining claims:

The FLAGSTAFF Quartz Lode Mining Claim (patented), Survey No. 10025; the MONTANA Quartz Lode Mining Claim (patented), Survey No. 10026; the SHAMROCK Quartz Lode Mining Claim (patented), Survey No. 10027; all located in Sections Twenty-seven (27) and Twenty-eight (28) of Township Eleven (11) North and Range Seven (7) West of the Montana Meridian; and The ARNOLD Quartz Mining Claim, Survey, No. 941, situated in Section Twenty-seven (27), Township Eleven (11) North, Range Seven (7) West of the Montana Meridian.

Party of the second part agrees to pay to the parties of first part, as a royalty, ten per cent of the net smelter returns on all ore shipped from the above described property, ~~xxxxxxxxxxxx~~,

Said party of the second part shall furnish to said parties of the first part a copy of the smelter statement on each and every shipment of ore immediately upon the issuance of the same by the smelter treating such ore, and shall cause such smelter to pay directly to the parties of the first part five per cent each to E. C. Ecklesdaier and Ed C. Hughes of the net smelter returns as royalty, as above set forth.

Party of the second part agrees that he will protect all of the above described property from the filing of any labor, liens or attachments as the result of any operation or expenditures made or caused to be made by the party of the second part under this lease; and that he will procure on behalf of his employees upon said property, industrial accident insurance, as required under the laws of the State of Montana, and that he will keep and obey all ~~ø~~state and federal rules and regulations relating to labor and to safety.

It is understood and agreed by and between the parties hereto that all building and improvements placed upon the above described claims by the party of the second part are to become part of the realty and to remain on said property, providing however that party of the second part in case he does not exercise the option given under the terms of this lease, shall at any time when he ceases operation on said premises have the right to remove all machinery, rails, pipes and tools of whatsoever nature and kind installed by him on said premises. It is specifically understood and agreed that party of the second part is to have the use of all improvements, equipment ect., that may now be located on the above described mining premises and that upon his quitting possession of said premises he shall leave such equipment, improvements etc., in as good a condition as he found them, reasonable wear and tear and damage by the elements alone excepted.

Parties of the first part hereby agree to pay all taxes levied upon the above described property during the time this lease is in effect except that party of the second part shall pay all net proceeds tax on the ores extracted from said mining premises.

Party of the second part shall have the right to use any timber located upon the above described mining premises for use in mining operations thereon or in connection therewith. ~~except that none of said timber shall be used for the construction of buildings on said premises~~.

Party of the second part agrees to pay to parties of the first part, in advance, an annual minimum royalty of $2500.00 which said minimum royalty shall be due as follows; the sum of $1000.00 the receipt of which is hereby acknowledged and $1500.00 to be paid on or before January 8th, 1953 and $2500.00 to be paid annually on or before the 8th day of each year thereafter during the term of this lease.

After the payment of said minimum annual royalty second party shall not be required to pay any further royalty to the parties of the first part during the year for which the royalty was paid in advance, until the royalty at the rate of ten percent of the net smelter returns shall have reached the total of $2500.00 at which time party of the second part shall resume payments of said ten per cent royalty to the parties of the first part.

OPTION TO PURCHASE. Parties of the first part hereby give and grant to the party of the second part an option to purchase all of their right, title and inserest in and to the above described property for the sum of $60,000.00, which option shall continue throughout the term of this lease. All payments of royalty made by second party to first parties shall be credited on said purchase price. Upon payment of the unpaid balance of said purchase price to the parties of the first part, at any time during the term of this lease, they will deliver a good and sufficient waranty

deed of all of their right, title and interest in and to the above described property to the party of the second part.

It is further understood and agreed by and between the parties hereto that should the party of the second become in default under the terms and conditions of this lease and option or should he fail to perform any of the covenants hereof by him to be performed, this lease and option shall be cancelled by the parties of the first part, at their option, by giving thirty days notice to second party of his failure to perform the conditions of this lease and requiring performance within said time. It is further understood and agreed by and between the parties hereto that any such notice to be given by first parties to second parties shall be deemed to have been legally served upon second party if made in writing and mailed to him through United States Registered Mail addressed to him at 811 No. Rodney St., Helena, Montana, at the date of the mailing of such notice be deemed to be the date of the service thereof upon said party of the second part.

It is further understood and agreed by and between the parties hereto that all the terms and conditions hereinabove set forth shall be obligatory and binding upon the heirs, administrators, executors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names the day and year first above written.

WITNESSES:

By _____
Their attorney in fact
Parties of the first part

_____
Party of the second part.

Page

In an Order [illegible] 1902 and Recorded in
(Page [illegible])
Book 9, Miscellaneous, [illegible]

Florian [illegible], of [illegible], Texas.

[illegible] "Grantor"

[illegible]

Powell

In an Option [illegible] 1960 and Recorded in
(Page [illegible]
Book 9, Miscellaneous, [illegible]

[illegible]

[illegible] Florian L. Gilreath, of [illegible], Montana

---

hereinafter called the "Optionor",

WHEREAS, [illegible] the Government [illegible] and [illegible] rights [illegible] and signed in said property.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

($8.00 per [illegible]

(2) [illegible] plus one-half (½) per cent [illegible] such net amount [illegible] eight dollars ($ [illegible] of five (5) per cent of such net amount [illegible]

(For instance, [illegible] net amount of [illegible] would be [illegible] net amount of ten dollars ($ [illegible] per [illegible] three and one-half (3½) per cent.)

[illegible] net amounts realized from the sale of [illegible] from sales or if not sold, the market value [illegible] the material when it is mined in the form in which and the place where it [illegible] disposed of as such, [illegible] from mining [illegible] for percentage depletion purposes [illegible] determination.

[illegible] hereby [illegible] minerals thereof [illegible]

[illegible] the Operator [illegible] obligation [illegible] the Operator of [illegible]

[illegible]

[illegible]

[illegible]

[illegible] eight hundred [illegible] dollars [illegible] cents (2, per cent of such net amounts

[illegible] would be [illegible] net amount of [illegible] and one-third (0⅓) per cent.

[illegible] amounts [illegible] sold, the market [illegible] and the place where it is [illegible] disposed of as such, [illegible] percentage depletion purposes [illegible]

[illegible] hereby [illegible] therefore [illegible]

[illegible] the operator or the operator [illegible]

[illegible] or other [illegible] by the operator [illegible] before [illegible] and [illegible] by the operator [illegible] vendee, by [illegible] with the [illegible] ment, [illegible] either, the [illegible] should [illegible] If the [illegible] regards, [illegible] the [illegible]

RELEVANT CONTRACT PROVISIONS

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 six 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) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent 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) per cent 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) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(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, 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.

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 and take possession of, and remove and dispose of any such property as above provided.

Patented mining claims owned by Gayle Burleson of Grand Rapids, Michigan, ~~and~~ Ernest Ecklesdafer of Missoula, Montana, and Ed C. Hughes of Boulder, Montana, and situated in secs. 27 and 28, T. 11 N., R. 7 W., Powell County, Montana, are listed as follows:

Arnold Copper Lode	U. S. Survey No. 941
Flagstaff Lode	U. S. Survey No. 10025
Copper Queen Lode	U. S. Survey No. 10025
Montana Lode	U. S. Survey No. 10026
Shamrock Lode	U. S. Survey No. 10027

Note: The Copper Queen Lode not included in Mining Lease and Option of Oct. 8, 1952, from above to Florian L. Glineski. We should have some document adding referenced claim to those covered by above lease.

orm 7
6)

OFFICIAL FILE COPY

Date	Surname	Code
3/2	Hoff	400
3/2	Martin	400
		190
4/24	[illegible]	110
5	[illegible]	100
4/8	C	220
		225

March 28, 1957

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro Alloys Division, DMEA

Subject: General Summary of Contract and Results Obtained
Docket No. DMEA 2973 - Tungsten
Boulder Ores, Incorporated
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588, Amended

Operator: Boulder Ores, Incorporated, (Assignee of Florian L. Glineski), 511 North Rodney Street, Helena, Montana.

Operator's Property Rights:

The operator controls 6 patented and 9 unpatented lode mining claims, situated in sections 21, 22, 27 and 28, T. 11 N., R. 7 W., W.M.M., in Snowshoe Gulch, Powell County, Montana, as follows:

(a) Owned by operator:

Patented - Snow Bird, U. S. Survey No. 8526.
Unpatented - Arnold Fraction, recorded in Book 9, page 1
Portal " " 9, " 3

(b) Leased by operator:

Patented mining claims owned by Gayle Burleson of Grand Rapids, Michigan, Ernest Ecklesdafer of Missoula, Montana, and Ed C. Hughes of Boulder, Montana:

Arnold, U. S. Survey No. 941
Flagstaff, U. S. Survey No. 10025
Copper Queen, U. S. Survey No. 10025
Montana, U. S. Survey No. 10026
Shamrock, U. S. Survey No. 10027

Unpatented mining claims owned by C. N. Bielenberg of Deer Lodge, Montans:

Unpatented mining claims (cont'd):

Friday No. 1 Lode,	recorded in Book 8, page 100
Strategic Lode,	recorded in Book 8, page 146
Tungstate Lode,	recorded in Book 8, page 147
Copper Tung Lode,	recorded in Book 8, page 151
Molly Tung Lode,	recorded in Book 8, page 159
Harmony Lode,	recorded in Book 8, page 191
Deser Lode,	recorded in Book 8, page 634

Book and page numbers of recordings of unpatented claims refer to records in the office of the County Recorder of Powell County, at Deer Lodge, Montana.

Contract:

(a) Executed August 24, 1953.

(b) Completion period: Work to be commenced within 60 days and to be completed within 9 months of the date of the contract.

(c) Work authorized:

Stage I

Agreed Unit Costs

Bulldozer trenching, 150 hours @ $14.00/hr. $2,100.00

Actual Costs

(* indicates allowable maximum)

Labor, 2 miners	300.00*	
Engineering services	1,000.00*	
Construct bunkhouse and tool house	500.00*	
Analyses	400.00*	
Contingencies (not applicable to "agreed unit cost" and "allowable maximum" items)	300.00	
Total estimated cost Stage I		$4,600.00*

Stage II

Agreed Unit Costs

Bulldozer trenching, 300 hours @ $14.00/hr.	$4,200.00
Diamond drilling, 1000 feet @ $8.00/ft.	8,000.00
Drifting, crosscutting and/or raising, 400 feet @ $37.50/ft.	15,000.00

Stage II Cont'd

Actual Costs
(* indicates allowable maximum)

Engineering services	$1,000.00*	
Analyses	800.00*	
Total estimated cost Stage II	$29,000.00*	
Total estimated cost of the project		$33,600.00*
Government's participation at 75 percent		25,200.00*

Amendment No. 1, executed July 15, 1954, effective as of May 24, 1954, extended the time for completion of the work from nine months to 15 months from the date of the contract.

Amendment No. 2, executed September 8, 1954, effective as of June 15, 1954, changed the limitation on time for which an engineer or geologist could be employed in Stage II, without changing the allowable maximum cost of such employment or the estimated total cost of the contract.

Amendment No. 3, executed April 28, 1955, provided:

1. Suspension of work under the contract beginning October 31, 1954, and ending not later than June 15, 1955.

2. Time for completion of the work was further extended from 15 months from the date of the contract, (or November 24, 1954,) to November 24, 1955.

3. The period for repayment of royalty was extended from 10 years to 11 years.

4. If work was not resumed on or before June 15, 1955, the contract was to be terminated as of October 31, 1954, and royalty on production was to be paid as though the project had been certified (a pseudo-certification).

(d) Work completed:

Stage I

Agreed Unit Costs

Bulldozing, 150 hours @ $14.00/hr. $2,100.00

Stage I Cont'd

Actual Costs

Labor, 2 miners	$ 300.00	
Engineering services	1,000.00	
Sampling and analyses	176.87	
Contingencies	12.60	
		$3,589.47

Stage II

Agreed Unit Costs

Bulldozing, 285 hours @ $14.00/hr.	$3,990.00	

Actual Costs

Engineering services	1,000.00	
		$4,990.00

Total accepted cost of project	$8,579.47
Government participation @ 75 percent	$6,434.60

Audits: A review in lieu of final audit, dated August 9, 1956, was received August 13, 1956.

Reports: The Operator's Final Report has not been received, although repeatedly requested by the Field Team. The Final Report of the Field Team dated January 1957, was received February 4, 1957.

Certification:

Certification of discovery or development is not recommended.

Comments: The project consisted of work on the Arnold Copper Mine group of claims to explore for tungsten which occurs as numerous small scattered deposits of scheelite in tactite zones along contacts between quartz-monzonite and limestone. Bulldozer trenching and random sampling indicated tungsten mineralization in a zone about 150 feet long, width unknown, but believed to be less than 5 feet and vertical extent at least 75 feet. Information obtained by this sampling was not adequate for computing any possible ore reserve.

The Operator not having resumed work on or before June 15, 1955 after the recess authorized by Amendment 3, the contract was automatically terminated as of October 31, 1954, and the pseudo-certification clause of that amendment also became effective, protecting the Government's right to royalty for a period of 11 years from the date of the contract. Accordingly, and as recommended by the Field Team, no certification of discovery or development will be issued.

Comments: (Cont'd)

The examiners note that tungsten exposures in and around the Arnold and Strategic adits indicate that additional exploration is warranted, but that both areas should be thoroughly sampled before further exploration is undertaken. The Field Team agrees with the examiners that further exploration is justified, should a different operator submit an application.

As the Operator, despite repeated requests, has never submitted an Operator's Final Report, it is recommended that no formal "closing letter" be sent in this case.

W. S. Martin

W. S. Martin, Chief
Iron and Ferro-Alloys Division

SPHolt:am
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
XXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

DMEA Form 17
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WORK COMPLETED ANALYSIS

After final audit or review report is received, prepare original only and file in official docket

Operator: Boulder Ores, Inc. (Assignee) STAGE 1		~~Actual Cost~~ AGREED UNIT COST 4,300.00	
State STAGE 2		Agreed Unit Cost 29,300.00	
Final Report of Audit	Commodity: Tungsten	Docket No. DMEA-2973	
Final Report of Review $8,579.47		Contract No. Idm-E588	

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting	400'	$15,000			
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond drilling.	1,000'	8,000			
Surface Excavation		6,300		$6,090	
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		500			
Other (Specify) Analysis, Supervisor, Contingencies.		$3,800		2,489.47	
Totals		$33,600		$8,579.47 *	$8.579.47

* Net cost total must agree with final report of audit or review.

Prepared by Thos. L. Chapman Date

TLC

31398

☐ Audited

☐ Certified

W[redacted] ANALYSIS SHEET - DMEA PROJECT[redacted]

Analysis as of 12-16-54

Incl. Voucher for Aug 54

☑ Actual Cost

☑ Agreed Unit Costs

Name Florian P. Hlinoski

Docket No. 2973

State Montana

Commodity Tungsten

Idm-E No. 588

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting ✓	400	15000			
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond ✓	1000	8000			
Surface Excavation ✓		6300		6090	6090
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc. ✓		500			
Other (Specify) Analysis, Contingencies & Supervision ✓		3800		2490	2490
Totals		33600		8580	8580

✓ Agreed Unit cost

✓ actual cost.

Prepared by [signature]

Stage I

Sub Ex
2100

Stage II

Sub Ex	Dev Cost	D+C
4200	1000 – 8000	400 – 15,000

Bldg + Imp	Other (analysis cont w/ Fee Sec)	
500	400	2300
	800	
	300	

Sub Ex

2100
4200
6300

MME Form 7
(2/63)

5/20/71

OFFICIAL FILE COPY

Date	Surname	Code
		120
		220
		120

AIRMAIL

MAY 20 1971

Mr. B. F. Pletka
2005 N. E. 27th Avenue
Portland, Oregon 97212

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Dear Mr. Pletka:

This is in reply to your letter of April 12, postmarked May 12, and received in this office May 17, 1971, inquiring about the availbility of information obtained under a DMEA contract to explore the Arnold Copper Mine.

This contract was originally issued to Florian L. Glineski and later was assigned to Boulder Ores, Incorporated, the last recorded owner according to our records through February 29, 1964. The last known address for Boulder Ores, Incorporated, was 511 North Rodney Street, Helena, Montana.

Material available on this project was furnished the Government by the Operators mentioned above. This material is considered company confidential and can be made available for inspection or duplication upon written authorization of the Operator who furnished it or, if its rights to ownership have been surrendered, by written permission of the present owners.

Upon receipt of acceptable evidence of right to this information, the material may be examined in our office during regular hours, or we will provide a commercial printing firm with the material for duplication at your expense, and at the same time send you a list of the material available. The printing firm will advise you on the cost of duplication so that you can order what you need and determine the cost involved. Prepayment is required with your order.

We will be glad to make this information available to you in this manner.

Sincerely yours,

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
OME Docket
Mineral Resources
OME Reading File
OME Region I w/cy incoming ltr.
Mr. Kirkemo

HKirkemo/gla 5-20-71

I have ordered the file
Cathrine

2005 N. E. 27th Avenue,
Portland, Oregon 97212
April 12, 1971

120

Mr. Harold Kirkemo, Chief,
Office of Minerals Exploration,
U. S. Geological Survey,
Washington, D. C. 20242

Dear Mr. Kirkemo:

Since Mr. A. E. Weissenborn of your Spokane, Washington Office wrote me the photo of letter dated February 24, 1971, he advised that there is in your files, under Docket No. DMEA-2973, considerable information about the Snowshoe or Arnold Copper mine.

He also states that the docket information has not been released to the general public, but under certain circumstances one can obtain a copy of the data.

There is a prospective company interested in the Marie Tungsten mine, the present owners of the property, and desires information regarding the Snowshoe mine. Marie Tungsten mine is seeking to lease the property to a company who will build a mill and develope the operation.

Any information you can give as to how we may obtain this data will be greatly appreciated.

Yours very truly,

B. F. Pletka

B. F. Pletka

United States Department of the Interior

GEOLOGICAL SURVEY
656 U. S. Court House
W. 920 Riverside Ave.
Spokane, Wash. 99201

February 24, 1971

Mr. B. F. Pletka
2005 NE 27th Ave.
Portland, Oregon 97212

Dear Mr. Pletka:

We have been aware of the presence of copper and tungsten in the Ophir Mining district northeast of Avon, Montana, for some time. In fact, the Government participated in an exploration project for tungsten at the Snowshoe mine in 1953 and 1954. We were not completely aware of the large potential tonnage of high-grade tungsten ore at the Marie Tungsten mine, and I want to thank you for bringing this to my attention. Thank you also for the interesting report with assay data that you enclosed with your letter.

Currently there is no Government program that offers financial assistance to owners of tungsten properties. As a consequence, I suggest that you attempt to interest private mining companies in your property. Several large mining companies have opened exploration offices in Spokane, and some of these might be willing to appraise the Marie Tungsten mine; particularly in view of the current high market price for tungsten and the favorable long-term possibilities for the metal. I'll be glad to send you the names of some of the exploration companies if you so desire.

Mr. U. M. Sahinen, Director, Montana Bureau of Mines and Geology, Montana College of Mineral Science and Technology, at Butte will be interested in learning of the potential of the Marie Tungsten mine. I suggest that you write to him and enclose a copy of the report you mailed to me.

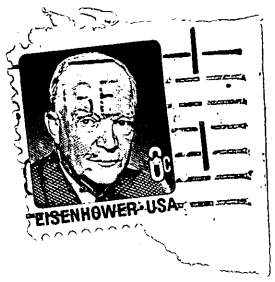
I will keep your property in mind and mention it to those I know who are looking for tungsten properties. However, under our present setup here, I cannot plan to make a personal examination of your property.

Thank you again for sending me the information about the Marie Tungsten mine.

Sincerely,

A. E. Weissenborn
Research Geologist
Branch of Pacific Mineral Resources

MME Form 7
(2/63)



OFFICIAL FILE COPY

Date	Surname	Code
10/13	Fisher	800
	Selfridge	120
12/13	Johnson	110
"	"	100
		230

OCT 13 1964

Mr. Ernest Ecklesdafer

Missoula, Montana

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Dear Mr. Ecklesdafer:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on March 18, 1953, under the Defense Minerals Exploration Administration program.

Sincerely yours,

George Fumich, Jr. (Ph)

Acting Director

Enclosure

MMerrithew/mm (10/13/64)
cc: Director's Reading File
Region I
Docket
Code 120M

Identical letter mailed to Ed C. Hughes, Boulder, Montana.

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/13	Fisher	800
	Selfridge	120
12/13	Johnson	110
"	[illegible]	100
		220

OCT 13 1964

Mr. Claude N. Bielenberg

Deer Lodge, Montana

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Dear Mr. Bielenberg:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on February 20, 1953, under the Defense Minerals Exploration Administration program.

Sincerely yours,

George Fumich, Jr. (pt)

Acting Director

Enclosure

MMerrithew/mm (10/13/64)
cc: Director's Reading File
Region I
Docket
Code 120M

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/13	[illegible]	800
	Selfridge	120
10/13	[illegible]	110
	[illegible]	100
		220

OCT 1 3 1964

Mrs. Gayle Burleson

Grand Rapids, Michigan

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Dear Mrs. Burleson:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by Mr. E. C. Ecklesdafer as attorney-in-fact for you on July 25, 1953, under the Defense Minerals Exploration Administration program.

Sincerely yours,

George Fumich, Jr.

Acting Director

Enclosure

MMerrithew/mm (10/13/64)
cc: Director's Reading File
Region I
Docket
Code 120M

23263

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

August 24, 1964

Re: DMPA-2973 (Tungsten)
Boulder Oreo, Inc.,
Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idu-E588

Mr. F. L. Glineski
511 North Rodney Street
Helena, Montana

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

No reply rec. to this form

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. From: February 29, 1964, to August 24, 1964 ~~Since~~ , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. From February 29, 1964, to August 24, 1964 ~~Since~~ , has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____	_____	_____
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane, Washington 99204
September 4, 1964

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 8 1964

DATE	INITIALS	CODE
9/9	[illegible]	120 m
		~~120~~
		220

Memorandum

To: Chief, Division of Exploration Operations

From: Acting Field Officer, Region I

Subject: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

On June 14, 1964, en route from Lewistown, Montana, to Kellogg, Idaho, an attempt was made to visit the property for a final royalty inspection. Late thaws and local showers resulted in a rather long stretch of soft, boggy road about 8 miles from the highway. As rain clouds were threatening and I had already come through a cloudburst in Helena, it was not expedient to continue the attempt to reach the property on this trip. Moreover, it was not certain that I was on the right road. No one who might be able to give information regarding activity at the property was encountered.

A second start for the property was made on July 24, 1964, en route from Helena to Spokane. About half way from the highway to the property at a ranch house beside the road, two men, a Mr. Ryerson and a Mr. Lundquist, were questioned as to the correct road to the mine. They were both familiar with the Operator, the property, and the DMEA project. Ryerson lived in this house and Lundquist lived about a mile from the road. Each said that no work has been done since 1957, the date of the last semi-annual report and that no ore has been shipped during that time.

D. R. MacLaren

D. R. MacLaren

Distribution:
OME(Orig.&1)
Docket
CPF

Garwood
220

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee

☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

T. L. Glenecki

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

E. M. Glenecki

DATE DELIVERED

22464

ADDRESS WHERE DELIVERED *(only if requested in item #1)*

2973

-16—71548-4 GPO

DM & A 2973

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

February 20, 1964

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc.,
Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Mr. F. L. Glineski
511 North Rodney Street
Helena, Montana

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

F M Murphy

F. M. Murphy, Acting Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 3 1964

DATE	INITIALS	CODE
3/3		800
		100
3/3		110
	Murphy	500
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 18, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since September 18, 1962, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name J. L. Klimeski Title Owner

Address 511 N. Rodney St. Date Feb 29, 1964
Helena, Montana

4511

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

October 22, 1963

Re: DMEA-2973 (Tungsten)
Boulder Oreo, Inc.,
(Assignee)
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Mr. F. L. Glinoski
511 North Rodney Street
Helena, Montana

send 635 by Registered Mail same address

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

s/F. M. Murphy
F. M. Murphy, Acting Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 18, 1962, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since September 18, 1962, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____		
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 3 1962

DATE	INV.	CODE
10/8	900	800
10/9	Principal	500
"	Int.	500
	S.T.A.	
		220

So. 157 Howard Street
Spokane 4, Washington
October 1, 1962

Memorandum

To: Chief, Fiscal Section, Division of Administrative Services, Office of the Secretary, Washington 25, D. C.

From: Acting Field Officer, Region I

Subject: DMEA-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

There is enclosed a Report of Royalty Review dated September 24, 1962, covering the subject contract for the period September 9, 1959, through September 18, 1962.

One copy of the Report has been retained in the files of the regional office. Since the Report is for record purposes only, no copy was provided for the Operator.

D. R. MacLaren

Enclosure

DRMacLaren:my
cc: CA&A Div.
CPF
Reading copies to:
Nolan
McKelvey

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

September 25, 1962

Memorandum

To: Acting Field Officer, Region I

From: E. D. Talbert, Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: [redacted]A-2973 (Tungsten)
Boulder Ores, Inc., Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and

(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 9-25-62

CC:
Docket
Director's Reading File
CA & A Division
Fiscal Section

43683

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

August 9, 1962

Re: DMEA-2973 (Tungsten)
Boulder Ores, Inc.,
Assignee
Arnold Copper Mine
Powell County, Montana
Contract Idm-E588

Boulder Ores, Inc.
511 North Rodney Street
Helena, Montana

Gentlemen:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED SEP 21 1962

DATE	ITEMS	CODE
9/21	WRG	800
"	Johnson	110
"	~~Greenwood~~	500
"	~~Hall~~ S.P.H.	500
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **September 8, 1959**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since **September 8, 1959**, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	NONE	Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see - of contract)? Yes ☐ No ☒

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name F. L. Glinski Title Owner of ground

Address 511 N. Rodney Date Sept. 18, 1962

Boulder Ores, Inc. non-active and not existant for several years. All of its officers having resigned.

4511

F L Glinski

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Division of Iron and Ferro-Alloys ~~Division~~ Date March 3, 1958

Semi-Annual Report - Certified Project Date June 30, 1956
(December 31, 1956)

DMEA No. 2973 Operator Boulder Ores, Inc Contract No. Idm-E 588
(Pseudo Certification)

Ore Reserves

Ore Estimates	Tons	Analysis
Original (DMEA)	Not estimated, report in preparation.	(Report, when (received, con- (tained no (estimate.)
Increase (Operator)	None	
Total	None	
Decrease (Production)	None	
Net Available	None	

Investment (From report of Dec. 31, 1956)

Shafts			Winzes			Drifts & Crosscuts		
Size	Feet	Cost	Size	Feet	Cost	Size	Feet	Cost

Raises			Drilling			Rehabilitation	
Size	Feet	Cost	Type & Size	Feet	Cost	Description	Cost
			Long-hole	3,000 to 4,000	$1,500 to $2,000	260 ft. adit	*
						Bulldozing, 115 hours	$1,500

Facilities

Mine Plant		Mill		Roads	
Description	Cost	Description	Cost	Description	Cost

* Included in total of $6,000 reported by Carl A. Coon, lessee, to have been spent on the property during the period of July 1 to Dec. 31, 1956.

Remarks

Production remarks: From report of June 30, 1956)

Mr. Clineski was contacted by telephone on June 13. He stated that there had been no production or exploration work at the property during the reporting period. He also stated that they have no definite plans for the property in the near future, except to do assessment work.

The property was visited June 13. At that time there was no one at the property and no sign of recent activity.

(Report of Dec. 31, 1956, lists investment and prepartary work listed above, but says no production from the property during the reporting period.)

Original to W. Chandler

51.14

00338

DMEA
RECEIVED JAN 27 1958

DATE	INITIALS	CODE
1/28	C	220
1/28	Com	100

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1957

Date of report: November 29, 1957

Operator: Boulder Ores, Inc., (assignee of Florian Glineski)
511 North Rodney St., Helena, Mont.

Mine name: Arnold Copper Mine

County and State: Powell County, Montana

Docket number and commodity: DMEA-2973 (tungsten)

Contract number: Idm-E588

Property inactive. No change in royalty status since report of January 1 to June 30, 1956.

Mr. Glineski stated that he still did not know if Mr. Carl Coon, lessee under a lease-purchase agreement, had completed the mill tests; he said Mr. Coon was not in the vicinity and his whereabouts not known.

Signed: George T. Krempasky (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1957 Date of exam: June 5, 1957

Operator: Boulder Ores, Inc., assignee of Florian Glineski, 511 North Rodney St., Helena, Mont.

Mine name: Arnold Copper mine

County and State: Powell County, Montana

Docket number and commodity: DMEA-2973 (tungsten)

Contract number: Idm-E588

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 11 1957

DATE	INITIALS	CODE
7/11	P.K.	220
11	Cohn	100

The status of the contract remains ~~the same~~ as reported for the period of January 1 to June 30, 1956.

The property was visited and nothing ~~at the~~ site indicated any activity since the previous visit on December 18, 1956. Mr. Carl Coon, lessee under a lease-purchase agreement, was not available at the time of the examination, having temporarily left the vicinity of Avon.

Mr. Florian Glineski was contacted in Helena and he reported that there had been no activity at the mine during the winter. He further stated that Mr. Coon had not completed the mill tests as mentioned in the previous report for the period of July 1 to December 31, 1956.

Signed: John A. Bowsher (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

OFFICIAL FILE COPY DMEA RECEIVED FEB 20 1957		
DATE	INITIALS	CODE
2-20	C	220
		225
Memorandum		

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

Date February 19, 1957

DMEA Docket No. 2973
DMEA Contract No. Idm-E588
Commodity Tungsten
Name of applicant Boulder Ores, Inc.
Name of property Snowshoe Gulch Tungsten Property
Location of property Powell County, Montana
Estimated cost of project

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals and Ferroalloys

From: R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals and Ferroalloys

Subject: Review of Field Team Final Report
(Application, Field Team Report, etc.)

1. Date of subject document: 1/57. 2. Date received by reviewer: 2/11/57.
3. Prior reports on this property known to reviewer: Yes [ ], No [x].
4. Prior reports on nearby properties known to reviewer: Yes [ ], No [x].
5. Information available on past production: Yes [ ], No [x].
6. Other pertinent factors known to reviewer: Yes [ ], No [x].
7. Explain items marked yes above:

8. Factors needing special consideration:
   a. Location [ ]
   b. Ownership [ ]
   c. Evidence of mineralization [ ]
   d. Geology [ ]
   e. Proposed exploration method [ ]
   f. Alternate exploration method [ ]
   g. Costs [ ]
   h. _____ [ ]

9. Action advised:
   a. Obtain information from applicant [ ]
   b. Refer to Field Team [ ]
   c. Denial [ ]
   d. Agree with Field Team [x]
   e. Disagree with Field Team [ ]
   f. Suggest alternate plan [ ]
   g. Request another examination [ ]
   h. Approval [ ]
   i. Consult with Mr. _____ at _____ AEC office.

10. Remarks: (Use back of page if necessary) A certification of Discovery was not recommended although results apparently would warrant additional exploration under a different operator. I concur with the recommendation that no certification be issued.

R. W. Holliday

R. W. Holliday

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

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE
2-4	C	220
"		130
2/11	C	220
12	COM	100

January 29, 1957

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

Re: Docket No. DMEA-2973 (Tungsten)
Boulder Ores, Inc.
(Assignee of Florian L. Glineski)
Snowshoe Gulch Tungsten Property
Powell County, Montana

Dear Mr. Selfridge:

Enclosed are four copies of a Field Team final report by Eldon C. Pattee, mining engineer, Bureau of Mines, and Darrell M. Pinckney, geologist, Geological Survey on this contract.

The contract became effective August 24, 1953, and was terminated October 31, 1954, because the Operator failed to resume work as agreed in the terms of Amendment No. 3. The work completed at a total cost of $8,579.47 (Government's share $6,434.60) comprised 435 hours of bulldozer trenching, opening of some of the caved adit portals on the Arnold and Montana claims, geologic mapping of the property, and assaying 25 samples. The Operator did not do certain additional sampling as he had agreed. The exposed tungsten occurrences were sufficiently encouraging to justify further work. Amendment No. 3 provided for termination of the contract as of October 31, 1954, and protected the Government's right to royalty, should the Operator not resume work by June 15, 1955; therefore, a Certification of Discovery or Development was not recommended.

Additional exploration is justified should a different Operator submit an application.

The Field Team concurs with the recommendations of the writers.

By Field Team, Region I, Northwest Dist.

A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
2-8-57
(date)

Enclosures
cc: USBM(2); USGS(SRO); Pinckney

FINAL F.T. Report

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION I
Northwest District

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE
		130
		220

FINAL REPORT

Contract Idm-E588

by

Eldon C. Pattee
Mining Engineer
U. S. Bureau of Mines

Darrell M. Pinckney
Geologist
U. S. Geological Survey

BOULDER ORES, INC.
(Assignee of Florian L. Glineski)
Helena, Montana

Docket No.:	DMEA-2973
Commodity:	Tungsten
Contract date:	August 24, 1953
Termination date:	October 31, 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-8-57
(date)

Snowshoe Gulch Tungsten Property
Ophir Mining District
Powell County, Montana

Spokane, Washington

January 1957

FINAL REPORT

BOULDER ORES, INC.
(Assignee of Florian L. Glinecki)
Snowshoe Gulch Tungsten Property
Ophir Mining District
Powell County, Montana

Contract Idm-E588

* * * *

INTRODUCTION

This report describes a tungsten exploration project conducted by Boulder Ores, Inc., with Defense Minerals Exploration Administration assistance, in Powell County, Montana, under Exploration Project Contract No. Idm-E588.

Summary

The project was undertaken to explore tactite zones at contacts between quartz monzonite and limestone. Numerous but small deposits of tungsten minerals are known to occur in the area, but the pattern of distribution remains obscure.

The work completed under the contract consisted of 435 hours of bulldozing, geologic mapping of the property, opening of some of the adits, and assaying of 25 samples.

The objectives of the exploration were only partially attained. The crosscutting, drifting, and raising were not started because sampling was inadequate making it impossible to determine a site for the work. The rehabilitated Arnold mine workings and 45 of the 54 trenches were not sampled, and the sampling that was done was inadequate. The Operator agreed to do additional sampling, but it was never done. The trenches have sloughed and debris would have to be cleared before further sampling can be done.

The management of the project was poorly handled by the Operator. The project was terminated because work was not resumed on the date agreed upon by Amendment No. 3.

Recommendations

It is recommended that a Certification of Discovery or Development not be made because subparagraph 5(c) of Amendment No. 3 is now operative and protects the Government's rights to royalty for the period of 11 years from the date of the contract.

The tungsten exposures in and about the Arnold and Strategic adits indicate that additional underground exploration is warranted; however, both areas should be thoroughly sampled before further exploration is undertaken. Government participation in any additional work should depend upon the results of the sampling.

LOCATION AND ACCESSIBILITY

The property is in secs. 27 and 28, T. 11 N., R. 7 W., Powell County, Montana. It is 11 miles by road northeast of Avon, Montana, the nearest rail shipping point. The route to the prospect from Avon is east on U. S. Highway 10N for 2.5 miles to the Snowshoe Gulch road; then north on the Snowshoe Gulch road for about 8.5 miles to the property. The Snowshoe Gulch road is graveled and maintained by the county for approximately 4.5 miles north of U. S. Highway 10N; the remaining portion of the road is unimproved.

The property is on the lower ridges and gulches of the mountains north of the Little Blackfoot valley. The area is well timbered though many south-facing slopes have only scattered trees. Altitudes at the property range from 5,500 to 6,500 feet above sea level.

The nearest supply center is at Helena, Montana, which is 30 miles east of Avon. Experienced miners can be found at Helena or at small settlements near the prospect. There is an electric power line within 6 miles of the property. Snowshoe Creek, which flows across the claims, can furnish an adequate supply of water for mining and milling.

The climate is semiarid, the annual precipitation ranging from 10 to 13 inches. During an average winter the snow will probably not exceed 4 feet in depth and will remain on the ground from November through April. The temperature in winter will occasionally drop to -30° F., and during severe winters as much as 30 days of subzero weather can be expected. The summers are mild with temperatures seldom above 100° F.

PROPERTY

The property covered by the contract consists of six patented and nine unpatented lode mining claims. The unpatented

claims are recorded in the office of the County Recorder at Deer Lodge, Montana. The Operator owns three of the claims; the remainder are under lease with option to purchase. The claims owned by the Operator are:

Snow Bird (patented)	Survey No. 8526
Arnold Fraction (unpatented)	Book 9, page 1
Portal Fraction (unpatented)	Book 9, page 3

The five remaining patented claims are owned by Gayle B. Burleson of Grand Rapids, Michigan, Ernest C. Eeklesdafer of Missoula, Montana, and Ed C. Hughes of Boulder, Montana. They are as follows:

Name	Survey No.
Arnold	941
Flagstaff	10025
Copper Queen	10025
Montana	10026
Shamrock	10027

The following seven remaining unpatented claims are owned by Claude N. Bielenberg, Deer Lodge, Montana:

Name	Book	Page
Friday No. 1 Lode	8	100
Strategic Lode	8	146
Tungstate Lode	8	147
Copper Tung Lode	8	151
Molly Tung Lode	8	159
Harmony Lode	8	191
Dozer Lode	8	634

History

Copper mining activities begun in this area about 1880 and continued intermittently until 1920. The Flagstaff, Old Lady Smith, and the Arnold mines have had a small production. Small shipments of copper ore were made from many of the prospects scattered throughout the area.

Tungsten was discovered at the Friday prospect in 1940. Many other occurrences were found shortly thereafter. Fred Tampke, the original discoverer of the tungsten, and Claude Bielenberg located a number of mining claims which were examined and optioned by several mining companies. The Homestake Mining Co. obtained an option on the claims in 1942, but there was no production during its term of option.

The Flagstaff, Arnold and Shamrock properties were purchased by Ernest C. Ecklesdafer. These properties were leased in 1943 to Porter Bros. Corp. of Helena, Montana. Porter Bros. shipped four carloads of ore from the Arnold and Old Lady Smith mines before relinquishing the lease. The tungsten mill to which the ore was shipped was not equipped for recovery of copper; therefore, no payment was received for the copper content.

Mine Workings

The property has been explored by numerous small adits, trenches, and prospect pits. Many of the adits are caved at the portal, but some of these are accessible from glory holes or air raises.

The Arnold claim has the most extensive underground workings. It has been explored by five short adits, a few shallow winzes, a few short raises, and four shallow shafts. The principal underground working is the 245-foot long main adit level of the Arnold mine. A shallow winze and a few stopes have been made from the adit level. The adit was reopened under the contract.

Most of the underground workings require a small amount of timbering and are dry.

GEOLOGY

The general geology of this area is briefly described by Pardee and Schrader (Pardee, J. T., and Schrader, F. C., Metalliferous deposits of the Greater Helena Mining Region, Montana: U. S. Geol. Survey Bull. 842, 1933). The area is underlain by Paleozoic limestones that have been intruded by granodiorite and quartz monzonite rocks. The area was cut into broad valleysin pre-Tertiary time and

Tertiary and Pleistocene deposits that once filled the valleys are largely removed. In the past the main economic value of the area has been in its gold placer deposits which now have been largely depleted. Some minor lode gold and gold-silver mines have been worked.

The Arnold mine is mentioned by Pardee and Schrader (p. 35) as one of a group of copper mines that has produced a small quantity of ore. Scheelite had not been recognized although contact-metamorphic zones had been noted.

The limestone in the area is white, coarsely recrystallized, massive, and devoid of bedding. The structure within the limestone is not known. The intrusive rocks are part of a stock of quartz monzonite or granodiorite. They are medium- to coarse-grained, of granitic texture, and have conspicuous phenocrysts of plagioclase up to about 5 millimeters across. The contact between the limestone and the intrusive body is sharp and irregular, and it does not appear to be controlled by any conceivable structure in the limestone.

In many places along the contact the limestone and granitic rocks are separated by tactite bodies up to 700 feet long and 180 feet wide. The tactites consist mostly of garnet, epidote, quartz, and calcite. They contain accessory amounts of magnetite, chlorite, and scheelite and in some places a little chalcopyrite or secondary copper minerals. The distribution of the tactite bodies is so erratic that bedding control is not apparent. All of the tactite bodies are either bordered by the intrusive body or they are very close to its edge.

Almost all of the known tactite bodies contain some scheelite mostly as scattered grains ranging in size from less than one-tenth of a millimeter to 1 centimeter. In a few places the scheelite is in poorly defined bands. The scheelite-rich bands in any one place seem to bear no structural relation to those in any other place, either in the same or in different tactite bodies. The bands also seem to bear no relation to the edges of the tactite bodies.

Four areas of tactite seem to contain more tungsten than the rest of the rocks along the contact. In the Strategic area a tactite zone ranging in width from a fraction of an inch to 180 feet crops out from coordinate 5000N, 3900E southwestward and coordinate 4500N, 3500E. Farther to the southwest its extension is indicated by exposures in the Strategic tunnel, in pits south of Pats Gulch and in the trench at sample locations 54-15 and 54-16. Sixteen samples of scheelite-bearing tactite from this zone contains from 0.014 to 1.53 percent WO_3, and three of them, 53-127, 54-15, and 54-16, contained over 1 percent WO_3.

In the Shamrock area a tactite up to 70 feet wide extends eastward from about coordinate 5040N, 4150E to about coordinate 5000N, 4530E. The samples from this zone contained from 0.30 to 5.15 percent WO_3. In the Tungstate claim a tactite up to 60 feet wide separates the intrusive body from limestone for about 700 feet along the contact. Samples from this body contained from 0.196 to 0.526 percent WO_3. Tactite is exposed in many of the pits and tunnels on the Snow Bird-Montana-Arnold Copper area although very little crops out at the surface. The relation of the tactite to the other rocks on this claim is not clear. Samples from this area contained from 0.005 to 1.85 percent WO_3. Three of these samples, 53-118, 53-122, and 53-124, contained over 1 percent WO_3. Scheelite is very conspicuous in the Arnold mine, but the mine was not sampled. Four samples from a tactite in the Friday No. 1 claim contained from 0.02 to 0.35 percent WO_3. This area was not visited by the writers.

THE PROJECT

The DMEA exploration program was undertaken to explore tactite zones at the contacts of quartz monzonite and limestone. Numerous small deposits of tungsten minerals were known to occur in tactite at the property, but the pattern of tungsten distribution was obscure.

Tungsten mineralization at the Arnold mine could be traced for a distance of 150 feet and for a vertical extent of at least 75 feet. The width was not known but was believed to be less than 5 feet. Most of the exploration was planned to explore the Arnold mine area.

The DMEA contract, dated August 24, 1953, was originally made with Florian L. Glineski, 511 North Rodney, Helena, Montana. In the latter part of September 1953, Mr. Glineski transferred his interests in the property to Boulder Ores, Inc., of Helena, Montana, and an Assignment of Exploration Project Contract was made.

The work as authorized by the contract was basically the same as that proposed by the applicant, except that no provision was made for winze sinking. The quantity of some of the work units was changed. Construction of a combination bunkhouse and tool shed was included as requested after the application had been submitted.

The work authorized by the contract was in two stages, Stage II to be undertaken should the results of Stage I warrant it.

Stage I

1. A total of 150 hours of bulldozer trenching on the Arnold, Arnold Fraction, Montana, and Snow Bird claims.

2. Rehabilitation of the Arnold mine workings and South Arnold winze.

3. Mapping the geology and sampling the mineralized occurrences of the 15 claims covered by the contract.

4. Constructing a combination bunkhouse and tool shed.

Stage II

1. A total of 300 hours of bulldozer trenching and preparation of drill sites.

2. Diamond drilling not to exceed 1,000 feet.

3. Drifting, crosscuting, and/or raising at the Arnold mine, an aggregate distance not to exceed 400 feet.

The total estimated cost of the project was $33,600, of which the Government's share at 75 percent was $25,200.

Work at the project started October 11, 1953. The completion date of the contract was May 24, 1954. Amendment No. 1, dated July 15, 1954, extended the completion period to November 24, 1955.

Amendment No. 2, dated September 8, 1954, removed the time limitations for services of an engineer.

Amendment No. 3, dated April 28, 1955, extended the completion period to November 24, 1955, provided for termination of the contract on October 31, 1954, if work was not resumed by June 15, 1955, and protected the Government's rights to royalty if the work was not resumed. The contract was terminated, effective October 31, 1954, because work under the contract was not resumed by June 15, 1955.

The work completed under the contract consisted of 435 hours of bulldozer trenching, geologic mapping of the property, opening of some of the adits on the Arnold and Montana claims, and assaying of 25 samples. The average length of the 54 bulldozer trenches is approximately 160 feet.

After completing 32 hours of bulldozing, opening of portals of adits on Arnold and Montana claims, and completion of geologic mapping of other claims, the exposed tungsten occurrences were sufficiently encouraging to authorize the bulldozing under Stage II.

Ore Reserves

The small amount of exploration and sampling done is insufficient on which to base ore reserve calculations. Most of the sides of trenches have sloughed and debris would have to be cleared to sample and measure the exposed tungsten occurrences. The Field Team representatives had requested additional sampling a number of times. The Operator agreed to do additional sampling, but it was never done.

According to the preliminary field examination, the ore reserves at the Arnold mine were estimated to be 300 tons of indicated ore and 3,000 tons of inferred ore with a grade of about 0.5 percent WO_3 (Weeks, R. A., and Buel, E. W., Field Examination, Docket No. DMEA-2973 (tungsten), Memorandum to Field Team, Region II, May 28, 1953).

The report of engineering work done under the contract during 1953 by Peter H. Toepfer, the Operator's engineer, estimated that one of the upper dumps at the South Arnold mine contains 50 tons of ore with a grade of 0.25 percent WO_3.

Summary of Factual Data

The work completed under Stage I of the contract consisted of:

1.	150 hrs of bulldozing @ $14.00/hr.	$ 2,100.00	
2.	Opening of portals on the Arnold and Montana claims	300.00	
3.	Geologic and engineering services	1,000.00	
4.	Assaying of 25 samples	176.87	
5.	Miscellaneous 1/	12.60	
	Total cost Stage I		$ 3,589.47

Work completed under Stage II consisted of:

1.	285 hrs. of bulldozing at $14.00/hr.	$ 3,990.00	
2.	Geologic and engineering services	1,000.00	
	Total cost Stage II		$ 4,990.00
	Total cost of project		$ 8,579.47

1/ Liability insurance and unemployment compensation totaled $4.50 and $8.10, respectively.

Total amount of contract	$33,600.00
Government's share at 75 percent	25,200.00
Total amount expended	$ 8,579.47
Government's participation	6,434.60
Total amount unexpended	$25,020.53
Government's share unexpended	18,765.40

Discussion of Conclusions

The project was only partially successful in that all the objectives were not completed. The management of the project was poorly handled by the Operator. The project was terminated because the Operator failed to resume work as agreed under Amendment No. 3. The drifting, crosscutting, or raising authorized by the contract was not started because sampling was inadequate to serve as a basis for determining a site for underground work. The Operator agreed to do additional sampling, but it was never done. The Operator has not submitted a final report. There is insufficient information to calculate ore reserves.

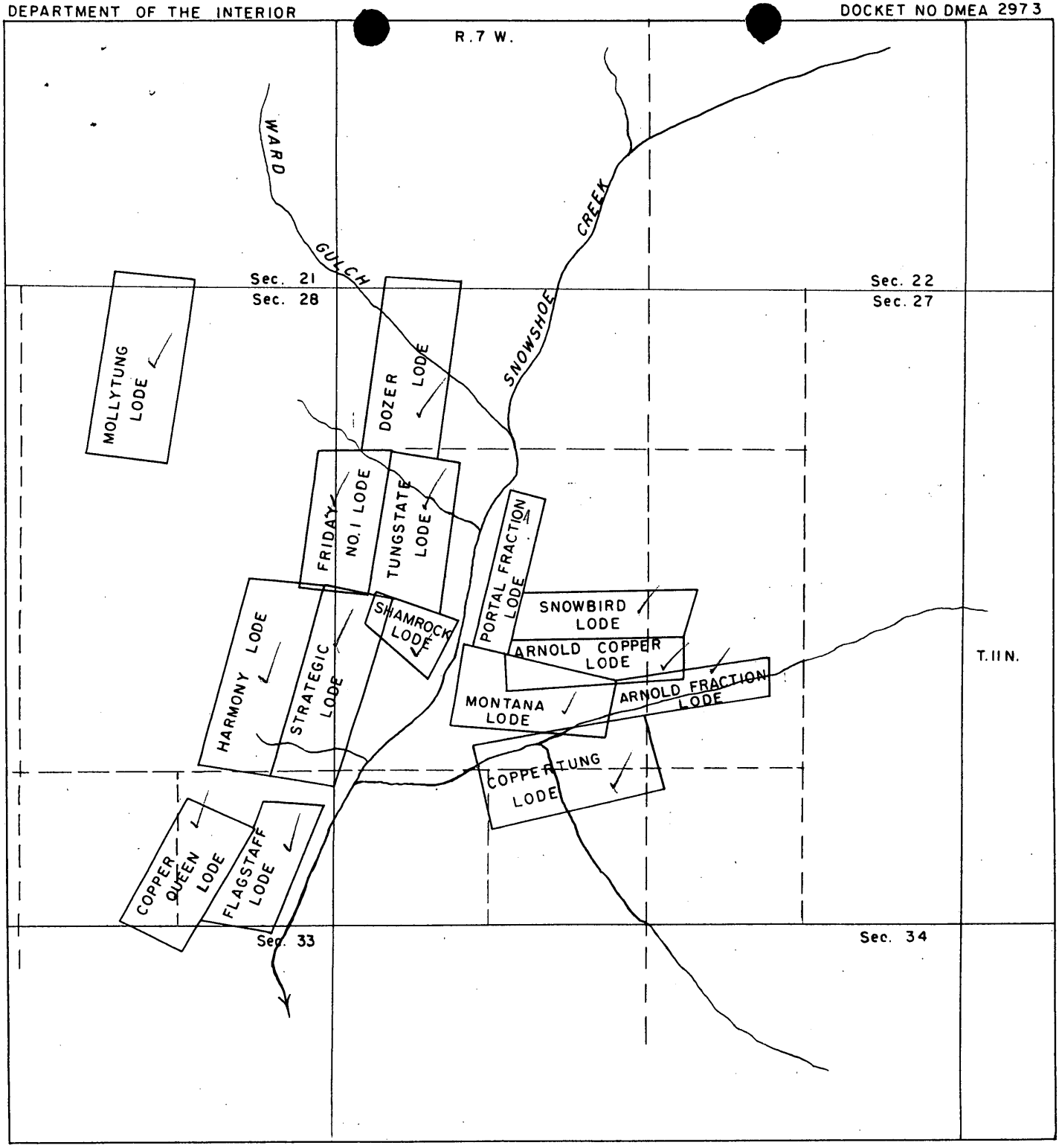
Exploration Possibilities

Further exploration is warranted. Scheelite occurs over a large area; but, as sampling has been inadequate, locations of the higher grade concentrations are uncertain. The first step toward further work at the property must necessarily be cleaning out of present trenches and sampling them. A decision could then be made as to how, and where, further work should be done. With present information participation by the Government in further exploration is not warranted. Such work might be done with greater efficiency by another Operator.

Enclosures
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Docket
Pinckney

UNITED STATES
DEPARTMENT OF THE INTERIOR

DOCKET NO DMEA 2973



CLAIM MAP OF THE
SNOWSHOE GULCH TUNGSTEN DEPOSITS
POWELL COUNTY, MONTANA

PLATE 1

RECEIVED
FEB 4 1957
D.M.E.A.

RECEIVED
JAN 22 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1956 Date of exam: Dec. 18, 1956

Operator: Boulder Ores, Inc., assignee of Florian Glineski, 511 North Rodney St., Helena, Mont.

Mine name: Arnold Copper Mine

County and State: Powell County, Montana

Docket number and commodity: DMEA-2973 (tungsten)

Contract number: Idm-E588

Mr. Carl A. Coon, Avon, Montana, has obtained a lease-purchase agreement on the property. Mr. Coon was interviewed on December 18. He stated that he has spent approximately $6,000 on the property during the reporting period. He did 3,000-4,000 feet of long hole drilling at a cost of $1500-$2000, rehabilitated 260 feet of adit, completed approximately 115 hours of bulldozing at a cost of $1500, and has repaired roads, made mill tests, and obtained samples.

The property was visited December 18. The access road had been repaired. The Arnold adit had been rehabilitated and a road constructed to the portal. Considerable bulldozing had been done near the Strategic adit. Preparatory work for obtaining a sample for mill tests is being done in the Arnold adit.

There was no production from the property during the reporting period, and the status of the project remains the same as for the period of January 1 to June 30, 1956.

Signed: Eldon C. Pattee (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

2973

ACTION ON INTE[illegible]
OR FINAL FIELD TEAM REPORT
Date 1-22-57

Referred to:

1. ~~Mr. Mittendorf~~
2. Mr. Johnson
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. _____ Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Investment data
2.
3.
4.

and take appropriate action.

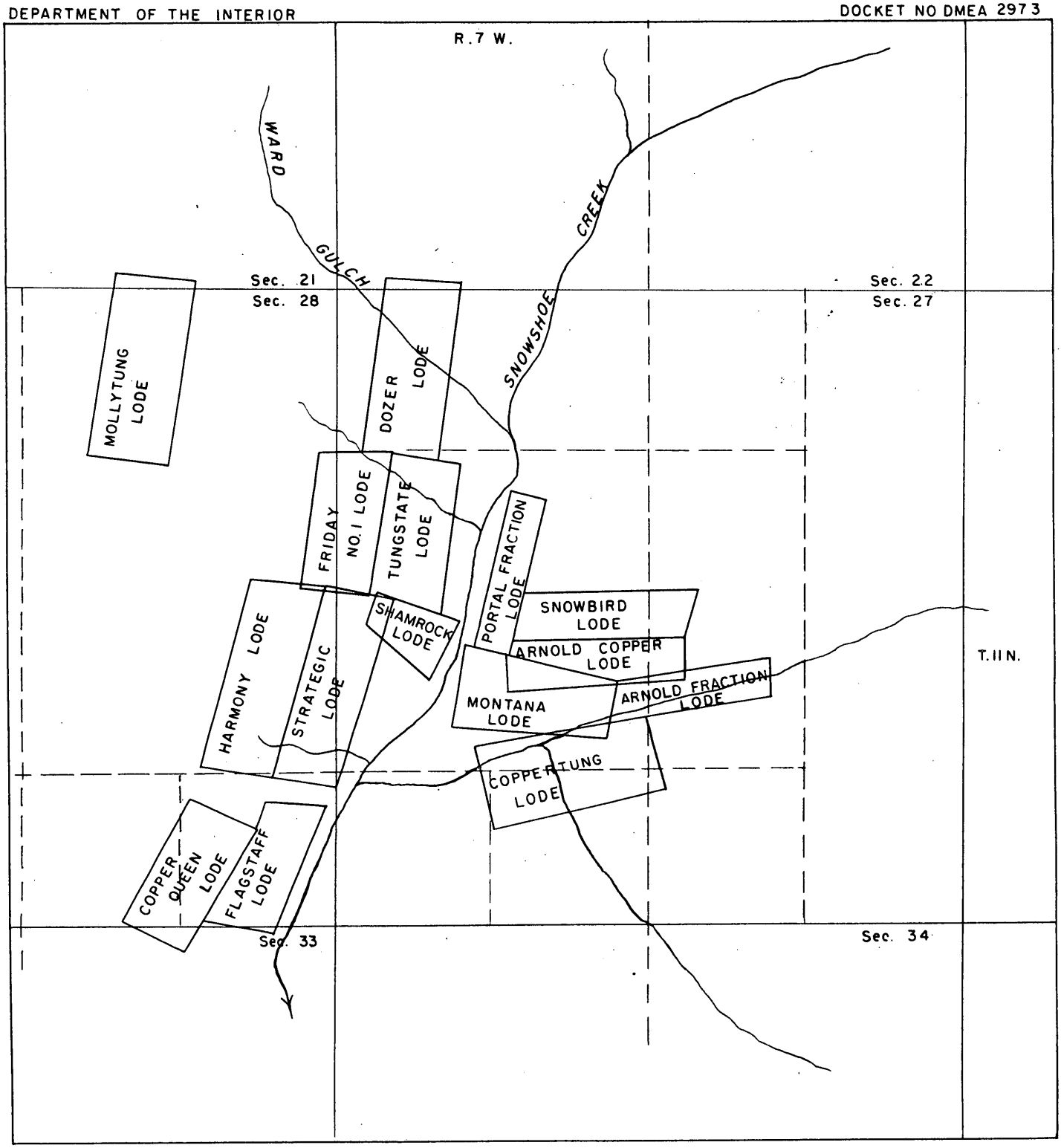
- - - - - - - -

Action taken by Division:

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR

DOCKET NO DMEA 2973



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CLAIM MAP OF THE
SNOWSHOE GULCH TUNGSTEN DEPOSITS
POWELL COUNTY, MONTANA

PLATE 1

RECEIVED
FEB 4 1957
D.M.E.A.

400

Docket
SURNAME
Chapman
Martin
Selfridge
Hefferman
Matthews

NOV 23 1956

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team
Region I, N. W. District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-3588

Dear Mr. Weissenborn:

Our review of the subject contract indicates that we have not received the Final Report of the Field Team. It would be appreciated if you could submit this report at your early convenience so that we may close our books and records on the project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

Frank D. Lamb
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

TLChapman:am 11-20-56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. I - NW
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Talbert

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

AUG 13 1956

Mr. Charles A. Turner
DMEA Auditor
1201 North Division Street
Spokane 2, Washington

Re: Report of Review
Boulder Creek, Inc.
Idm-5588, DMEA-2973

Dear Mr. Turner:

Receipt is acknowledged of your Report of Review covering the above-cited project.

The Report is acceptable and normal distribution may be effected.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

WBorovies/wb
August 13, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.K.

588

JUL 1 3 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1956 Date of exam: June 13, 1956

Operator: Boulder Ores, Inc., assignee of Florian Glineski, 511 North Rodney St., Helena, Montana

Mine name: Arnold Copper Mine

County and State: Powell County, Montana

Docket number and commodity: DMEA-2973 (tungsten)

Contract number: Idm-E588

Date of contract: August 24, 1953

Date of certification: April 28, 1955 (per amendment No. 3)

Expiration date of royalty payments: August 24, 1964

Total amount of contract: $33,600.00

Total expenditures under contract: $ 8,579.47

Amount of Government participation at 75%: $ 6,434.60

Royalty payments this period: none

Previous royalty payments: none

Total royalty payments to date: none

Percent Government participation repaid: none

Royalty due on production to date: none

Royalty remarks: none

JUL 12 1966

Date

Transmit to:

~~Mr. Chairman~~

~~Mr. Commissioner~~

~~Mr. Chairman~~

~~Docket Control Cards and Files~~

~~Docket Control Cards and Files~~

Docket Control Cards and Files

Make comments in report regarding:

1. F.T. report long overdue? yes

2.

3.

4.

Can take appropriate action.

Action taken by Division: Operations

Will check with long report from FT and if that gives no indication will write follow-up

WSR

Date

Semi-annual report
Contract Idm-E588, page 2

Original estimate of reserves (from final Engr.-Geol. report):	Not estimated; report in preparation.
Increase (or decrease) of reserves by work performed subsequent to original and last Field Team estimates:	none
Revised estimate of reserves:	none
Production this period:	none
Amount of previous production (since date of contract):	none
Total DMEA production to date:	none
Percent of revised reserves mined:	none

Certified 18 months ago.

Production remarks:

Mr. Glineski was contacted by telephone on June 13. He stated that there had been no production or exploration work at the property during the reporting period. He also stated that they have no definite plans for the property in the near future, except to do assessment work.

The property was visited June 13. At that time there was no one at the property and no sign of recent activity.

Other remarks: none

Signed: Eldon C. Pattee (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

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

1201 N. Division St.
Spokane 2, Washington
June 1, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: John A. Bowsher, Mining Engineer, Bureau of Mines

Subject: Final interim report, Docket No. DMEA-2973 (tungsten) Boulder Ores, Inc., Powell County, Montana, Contract No. Idm-E588

Amendment No. 3, April 28, 1955, suspended the contract work during the period October 31, 1954 to June 15, 1955 with the provision (Article 5) that if work was not resumed prior to June 15 the contract and all obligations would be terminated.

Since the work was not resumed and Messrs. G. A. Apell and E. C. Pattee, mining engineers, Bureau of Mines, reported in their inspection report of July 1, 1955 on the status of the contract work on June 14, 1955, that status will constitute the final summation of the contract work. Following is the status of the contract work as of June 14, 1955:

	Authorized	Completed
Stage I		
Unit cost		
Trenching with bulldozer	150 hrs.	Yes
Actual cost		
2 miners	$300	"
Engineering services	$1000	"
Bunkhouse and tool house	$500	none
Sampling and analysis	$400	$176.87
Contingencies	$300	$ 12.60
Stage II		
Unit cost		
Trenching with bulldozer	300 hrs.	285 hrs.
Diamond drilling	1,000 ft.	none
Drift, crosscut and/or raise	400 ft.	none
Actual cost		
Engineering services	$1000	$1000
Analysis	$800	none

Orig. & 3 cys - Wash.
USGS (2)
DMEA
Turner
AD
Engr.

John A. Bowsher

6/7

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

5. Northern Alloys

6. Western Contract Manufacturing

[illegible] comments in [illegible] meetings

1. Automatic terminations

2.

3.

4.

[illegible] take appropriate action

[illegible] by [illegible]

F.E.J. says write Admin. Memo, no closing letter. See Adams (Sent)

S. [illegible] 7.26.56

ROBERT E. ADAMS

[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
APR 23 1956

April 20, 1956

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

Re: Docket No. DMEA-2973 (Tungsten)
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

This is in reply to your letter of April 13.

We have received no reply from the Operator to our letter of March 14 and we have no hope that he will ever reply. Unfortunately, no money is withheld. As you suggest, we will not make another request for the report, and hereby waive its requirement. It is our opinion that any report the Operator would submit would add little to our information about the property. However, we do have very complete maps that were prepared by the Operator's engineer.

We have reminded the Operator, with copies of our letters to the owners, of the Government's lien on the property pursuant to paragraph 5(c) of Amendment No. 3.

By Field Team, Region I, NW District

Wing G. Agnew

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Verne C. Fryklund Jr.

Verne C. Fryklund, Jr., Acting Member
U. S. Geological Survey

Enclosure

cc: USBM (2)
USBM (AD)
Pinckney

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
No. 157 Howard Street
Spokane 4, Washington

RECEIVED
APR 23 1956

April 20, 1956

Mr. Florian L. Glinski, President
Boulder Gros, Inc.
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (Sangster)
Arnold Copper Mine
Powell County, Montana
Contract No. 14s-2508

Dear Mr. Glinski:

May we remind you at this time of the Government's lien on the property pursuant to paragraph 5(e) of Amendment No. 3, to wit:

"The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land referred to in Article 2 of the Contract, in the manner and amount provided in Annex XXI to this Amendment, for the period of eleven years from the date of the Contract or until the total net amount contributed by the Government is repaid, a certification of discovery or development being hereby waived."

By Field Team, Region I, DM District

Wing W. Agnew, Acting Dist. Officer
U. S. Bureau of Mines

Verne C. Vogland, Jr., Acting District
U. S. Geological Survey

Copies to:

Gayle B. Burkeen
Grand Rapids, Michigan,
through
Kenneth Ehlenfeldt
Missoula, Montana

Ed G. Hughes
Boulder, Montana

Claude E. Bielenberg
Bear Lodge, Montana

DMEA (3)
USBM (2)
USBM (AD)
FINANCE OFFICE
Pinckney

Certified Mail
Return Receipt Requested

DOCKET
SURNAME

Chapman
Chambers
Martin
Selfridge
Johnson
Mottendorf

APR 13 1956

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - NW District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E558

Dear Mr. Weissenborn:

Reference is made to the Field Team's letter of March 14, 1956, directing our attention to paragraph 5(c) of Amendment No. 3 to the subject contract, which provides for payment of royalty for the maximum period provided in the contract, a certification of discovery being waived; and suggesting that there is sufficient evidence to warrant a formal certification.

The purpose of Amendment No. 3 was to grant a suspension period and extend the time for completion of the contract work. The provisions of paragraph 5 of this amendment were to be effective only if work were not resumed by the end of the suspension period. As the Operator did not resume work as required, sub-paragraph 5(c) is now operative and protects the Government's rights to royalty for the period of 11 years from the date of the contract. As a certification of discovery or development is not required, there is no necessity for your making such a recommendation.

It is noted that you have repeatedly requested the Operator to submit his required engineering and geological final report. If you receive no reply to your letter of March 14, 1956, to Mr. Florian A. Glinski, within a reasonable time, and if any money has been withheld, it is requested that you advise the Operator that you are withholding $100 or $200 in lieu of a final report.

In case no money has been withheld no further word to the Operator concerning the final report is necessary. In that event,

N.C.G.

however, please remind the Operator, with copies to the owners of the property, of the Government's lien on the property pursuant to paragraph 5(c) of Amendment No. 3.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)

APPROVED:

J. W. Pennington

Member, Bureau of Mines (JB)

N. E. Nelson

Member, Geological Survey (JB)

cc: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. I - NWD
R. W. Holliday, USBM
T. H. Kiilsgaard, USGS
Mr. Chambers - Audit Div.

ADMcMAHON/ls/foc

Docket
Martin
Putin
Lawyer
Infantes
Chapman

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - NW District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2973, Tungsten
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

Reference is made to the Field Team's letter of March 14, 1956, directing our attention to paragraph 5(c) of Amendment No. 3 to the subject contract, which provides for payment of royalty for the maximum period provided in the contract, a certification of discovery being waived; and suggesting that there is sufficient evidence to warrant a formal certification.

The purpose of Amendment No. 3 was to grant a suspension period and extend the time for completion of the contract work. The provisions of paragraph 5 of this amendment were to be effective only if work were not resumed by the end of the suspension period. As the Operator did not resume work as required, sub-paragraph 5(c) is now operative and protects the Government's rights to royalty for the period of 11 years from the date of the contract. As a certification of discovery or development is not required, there is no necessity for your making such a recommendation.

It is noted that you have repeatedly requested the Operator to submit his required engineering and geological final report and that you do not think said report could add much to your present information. If you receive no reply to your letter of March 14, 1956, to Mr. Florian L. Glineski, within a reasonable time, it is requested that you notify him by certified mail (return receipt requested) that the requirement of said report is waived, reminding him

of the Government's lien on the property pursuant to paragraph 5(c) of Amendment No. 3, and that you send copies of your same notification to the owners of the property.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

cc: Docket
Code 400
Oper. Comm.
Adm. Read. File
T. Kiilsgaard, USGS
R. W. Holliday, USBM
FT, Region I-NW
Mr. Chambers

ADMcMahon/ls
3/23/56

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

RECEIVED
MAR 19 1956

March 14, 1956

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

Re: Docket No. DMEA-2973 (Tungsten)
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

This is in reply to your letter of March 5.

We have written Mr. Glineski, copies of letter enclosed, again asking for a final report. We do not think Mr. Glineski will reply to our letter; on the other hand, we do not think the Operator's report could add much to our present information. If we do not hear from the Operator in 30 days we will recommend that the requirement for the Operator's report be waived.

Drafting on the final Field Team report maps is near completion; however we are unable at this time to even attempt an estimate as to when our final report will be submitted.

Paragraph 5(c) of Amendment 3 provides for payment of royalty for the contract period, and certification of discovery was waived. We believe there is sufficient evidence to warrant formal certification and we will prepare such recommendation if you deem it necessary.

By Field Team, Region I, NW Dist.

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Verne C. Fryklund, Jr., Acting Member
U. S. Geological Survey

Enclosure

cc: USBM (2)
USBM (AD)
Pinckney

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

RECEIVED
MAR 19 1956

March 14, 1956

Mr. Florian L. Olinoski
511 North Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (Tungsten)
Boulder Gros, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. IDm-1988

Dear Mr. Olinoski:

We cannot close our books on the exploration project until we have received your final report.

We again call your attention to paragraph 5, subparagraph (c) referring to the Government's royalty due from any production from the contract land. May we also bring Article 7, paragraph 6 of the contract to your attention, which states that "upon . . . termination of the contract the Operator shall provide the Government with an adequate geological and engineering report in five copies, including an estimate of ore reserves resulting from the exploration work."

We would appreciate this report at your earliest convenience.

By Field Team, Region I, Ws Dist.

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Verne C. Fryklund, Jr., Acting Member
U. S. Geological Survey

Certified Mail
Return Receipt Requested

cc: DMEA (2)
USBM (2)
USBM (AD)
Pinckney

400

Docket
Chapman
Martin
Selfridge
Fl Brooks
Mitterling

MAR - 5 1956

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - N.W. District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2973, Tungsten
Boulder Ores, Inc.
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

Reference is made to your letters of November 1, 1955, one to Florian L. Glineski and the other to the Operating Committee, concerning the referenced project.

By Amendment No. 3, the project was terminated October 31, 1954, as work was not resumed before the termination of the period fixed for suspension. Therefore, please again advise the Operator that we await his final report so that we may close our books on the project. We also need your final report and recommendations.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

Approved:

/s/ Robert W. Geehan (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard (HB)
Member, Geological Survey

cc: Docket
Code 400
Oper. Comm.
Adm. Read. File
T. Kiilsgaard, USGS
R. W. Holliday, USBM
FT, Reg. I-NW

TLChapman/ls
3/2/56

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

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

Reference is made to your letters of November 1, 1955, one to Florian L. Glineski and the other to the Operating Committee, concerning the referenced project.

By Amendment No. 3, the project was terminated on October 31, 1955. Therefore, if no reply has been received from your same letter to Mr. Glineski, and if the Operators do not intend to proceed with the project, please again request that the Operator submit his final report. We also await your final report and recommendations.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

DOCKET
SURNAME
400 Chapman
Martin

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

Reference is made to your letters of November 1, 1955, one to Florian L. Glinski and the other to the Operating Committee, concerning the referenced project.

By Amendment No. 3, the project was terminated on October 31, 1955. Therefore, if no reply has been received from your same letter to Mr. Glinski, and if the Operators do not intend to proceed with the project, please again request that the Operator submit his final report. We also assit your final report and recommendations.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

TLChapman/foc 2/24/56
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. I - NW DIST.
Messrs. Holliday, USBM
Kiilsgaard, USGS

Member, Bureau of Mines

Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Period: July 1, 1955 to December 31, 1955

Docket No.: DMEA-2973
Contract No.: Idm-E588

Operator: Boulder Ores, Inc., assignee of Florian Glineski, 511 North Rodney, Helena, Montana

Commodity: Tungsten

Mine name: Arnold Copper mine

County: Powell
State: Montana

Date of contract: August 24, 1953

Date of certification: April 28, 1955 (per Amendment No. 3)

Expiration date of royalty payments: August 24, 1964

Date of examination for this report: December 21, 1955

Total amount of contract: $33,600.00

Total expenditures under contract: $ 8,579.47

Amount of Government participation at 75%: $ 6,434.60

Royalty payments this period: none

Previous royalty payments: none

Total royalty payments to date: none

% Loan repayment completed: none

Amount of royalty due: none

Royalty remarks:

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JAN 9 1956

Original estimate of reserves
(from final Engr.-Geol. Report): Not estimated; report in preparation.

Increase (or decrease) of reserves
by work performed subsequent to
expiration or termination of
contract: none

Revised estimate of reserves:

Production this period (ore or concentrates): none

Amount of previous production (since date
of contract): none

Total DMEA production to date: none

% of revised reserves mined: none

Production remarks:

Mr. Glineski was contacted by telephone December 21, 1955. He stated that there had been no production from the mine during the reporting period.

The property was inspected by S. W. Zoldok and J. A. Bowsher, Bureau of Mines Engineers, on October 27, 1955. At that time there was no one at the property nor were there any signs of recent activity.

Other remarks: (Investments, etc.)

Signed: Eldon C. Pattee (Engr.)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

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

November 1, 1955

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc., (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

This is in reply to your letter of October 17, 1955.

Because assay data was inadequate no location could be chosen for the Stage II underground work. The sampling was not done by the Operator in time to meet the June 15, 1955, dead line. The field men have discussed the necessary sampling with the Operator a number of times. On Friday, October 14, 1955, the Field Team prepared a letter to the Operator pointing out that the contract was terminated according to Amendment No. 3; it was decided, however, to make one more effort to have the necessary sampling done.

Mr. Pinckney, Geological Survey, at the request of the Field Team, then talked with Mr. Glineski twice over the week end. Mr. Glineski assured Mr. Pinckney that the matter would be taken care of immediately -- work to start on October 17, 1955. Mr. Carl Coon then discussed the sampling problem with Mr. Weissenborn in Spokane on October 17, 1955. We were again assured that the necessary sampling would be done immediately.

Mr. Pinckney visited the property October 19, 1955, in order to cut check samples and found no indication that the Operator had done any sampling. Mr. Zoldok and Mr. Bowsher, Bureau of Mines, visited the property on October 27, 1955, and they could find no evidence that the Operator had done any sampling.

We have been prepared ever since June 15, 1955, and still are, to recommend reinstatement of this contract by suitable amendment as soon as the Operator did the sampling that would permit choosing a portal

site. The property has considerable promise, but we see no alternative but to close out the contract. Copies of our letter to the Operator are enclosed.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Turner
Pinckney

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

No. 157 Howard Street
Spokane 4, Washington

November 1, 1955

Mr. Florian L. Glinoski
511 North Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Glinoski:

Under the terms of Amendment No. 3, unless work was resumed not later than June 15, 1955, the contract terminated October 31, 1954. The Government cannot participate in any costs incurred after the termination date.

Your attention is brought to paragraph 5, subparagraph (e) referring to the Government's royalty due from any production from the contract land. May we also bring Article 7, paragraph 6 of the contract to your attention, which states that "Upon . . . termination of the contract the Operator shall provide the Government with an adequate geological and engineering report in five copies, including an estimate of ore reserves resulting from the exploration work. We would appreciate receiving your final report within a reasonable time.

We shall, at any time, forward to our Washington office any request you may make for reinstatement of the contract; however, we will start the necessary work needed to close out the contract.

By Field Team, Region I, NW Dist.

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2) Turner
DMEA (2) Finchney USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 North Division Street
Spokane 2, Washington
August 19, 1955

RECEIVED
SEP 1955

MEMORANDUM

To: DMEA Field Team, Region I, NW District

From: John A. Bowsher and E. C. Pattee, Mining Engineers, U. S. Bureau of Mines, Region I

Subject: Interim Report, Docket No. DMEA 2973 (tungsten)
Boulder Ores, Inc., (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

The property was visited on July 27, 1955. The last visit to the project site by a representative of the Field Team was on August 25, 1954, and reported by Robert A. Weeks, geologist, U. S. Geol. Sur. in his memorandum to the Field Team, Region I, dated August 31, 1954.

During the interim between visits to the project site, conferences have been held between the Operator and the U. S. Bureau of Mines representatives of the Field Team.

Amendment No. 3, April 28, 1954, suspended the Contract during the period beginning October 31, 1954 and ending not later than June 15, 1955. Article 5 of the Amendment reads, "It is of the essence of this contract that the work be resumed before the termination of the period here fixed for suspension; and if it is not so resumed in the manner required by the Contract, the following provisions shall thereupon become effective: (a) Effective October 31, 1954, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated."

The U. S. Bureau of Mines engineers found no operating personnel or visible evidence of resumption of work in the vicinity of the Arnold adit on July 27, 1955, and returned to Helena to contact Mr. F. L. Glineski, president of the operating company. Mr. Glineski was reached the morning of July 28, 1955 by telephone at his Helena residence.

Mr. Glineski explained that the resumption of the project work was to be at the Strategic adit rather than at the Arnold adit and that the independent contractor Mr. Carl A. Coon (Mr. Glineski's letter of June 14, 1955 to Mr. A. E. Weissenborn) would be found either at the vicinity of the Strategic adit or his temporary residence at Ophir Gulch, north of Avon, Montana

Mr. Carl A. Coon was absent from the cabin in Ophir Gulch, being in Spokane, but, his brother Frank Coon was present. Mr. Frank Coon claimed no knowledge of the Contract, but that he had been cutting timber in the vicinity of the Strategic adit. He related that the adit needed rehabilitation before underground work could be started. He was informed that the Contract did not provide for such work at the Strategic adit without an amendment and that a narrative should be forwarded to the Field Team relating the work done in June and July.

Mr. Carl A. Coon was contacted by telephone from Avon to Spokane and he was given the same information related to Frank Coon.

Telephone conversation from Avon with Mr. A. E. Weissenborn informed him of the present circumstances of the project and he advised prompt action in contacting Messers Glineski and Carl A. Coon regarding their program in resuming the work.

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
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SURNAME

400
Martin
Selfridge
Johnson

OCT 17 1955

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc., (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-8588

Dear Mr. Weissenborn:

From joint memoranda to you of August 5 and 19, 1955, by John A. Bowsher and E. C. Pattee, we understand that you have recommended prompt action in contacting Messrs. Olinschi and Carl A. Coon regarding the resumption of work at the subject project.

According to Amendment No. 3, dated April 28, 1955, work was resumed as of October 31, 1954, until June 15, 1955, and time for completion was extended to November 24, 1955. If work was not resumed by June 15, 1955, the contract is to be terminated as of October 31, 1954, with the total amount contributed by the Government repayable in the form of a percentage royalty over a period of 11 years, a certification of discovery or development being waived.

Please advise us if work has been resumed and if you are suggesting another amendment.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

APPROVED:

P. F. Yopes (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

TLChapman/foc / 10/14/55
cc to: Docket
Code 400
Adm. Read. File
Oper. Comm.
FT. REG. I- NW Dist.
Messrs. Holliday, USBM
Kiilsgaard, USGS

R.C.S.

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

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SEP - 1 1955

August 5, 1955

Memorandum

To: DMEA Field Team, Region I, Northwest District

From: John A. Bowsher and E. C. Pattee, Mining Engineers, U. S. Bureau of Mines, and Darrell M. Pinckney, Geologist, U. S. Geological Survey

Subject: Interim Report, Docket No. DMEA-2973 (tungsten), Boulder Ores, Inc., (Assignee), Arnold Copper Mine, Powell County, Montana, Contract No. Idm-E588

The U. S. Bureau of Mines engineers, accompanied by Frank Coon, met Darrell M. Pinckney at the Strategic adit midafternoon on August 2, 1955. Enroute from Butte, Mr. Glineski was again contacted by telephone in Helena, informing him of the visit to the project site, and he agreed to meet the group after 6:00 p.m. at the property.

In the afternoon the first activity of the group was an examination of the Strategic adit and the surface trenching in the vicinity of the contact. It was noted that the adit would need rehabilitation, such as replacing timber and cleaning up the fallen rock, before exploration could be started. Scheelite was observed in the adit.

After Mr. Coon left the group, the Field Team representatives visited the Arnold adit and lamped the underground drifts and winze. Scheelite was observed along with copper and iron sulfide mineralization.

Mr. Glineski had not arrived when the Bureau engineers left the project site at 9:00 p.m. Mr. Pinckney remained to lamp the surface in the vicinity of the Strategic adit. Later Glineski arrived at the property.

The Field Team representatives believe that more sampling should be done to clarify the geological objective. The sampling should be done underground in the Strategic and Arnold adits and on the surface along the contact in the vicinity of the Strategic adit, as well as several other tactite areas of somewhat lesser extent.

The entire property has been very inadequately sampled. The attached sheet of sample data assembled from Topfer's maps shows that only 25 samples have been taken under the project and that only 12 samples were taken after the bulldozing was done. Fairweather's report indicates 15 samples taken from 54 trenches; three of these samples do not appear on the maps. No sampling seems to have been done in the Arnold mine after it was reopened, although scheelite and powellite are very conspicuous for a considerable distance in the mine workings.

The tactite zone along the ridge crest that extends northeast from the main Strategic adit contains two metamorphic facies: (1) a garnet facies is almost entirely garnet but contains conspicuous amounts of epidote, quartz, calcite, scheelite, and possibly hubnerite and powellite; and (2) a chlorite facies that is separated from the garnet facies and which contains some calcite, quartz, scheelite, and possibly hubnerite and powellite. Of the five samples from this zone, three appear to have come from a very restricted exposure of the chlorite facies in trench St-2, one was a dump sample from the garnet facies, and the third apparently was a sample of loose material from inside the main Strategic adit. Only one of the five samples was checked for metals other than tungsten. Between these sample localities is a tactite zone 500 feet long that contains two metamorphic facies and in places conspicuous tungsten minerals. Several other tactite zones shown on Topfer's maps apparently contain some good ore-grade material and should be well sampled before any program of drilling or underground exploration is decided upon.

Pinckney discussed the need of sampling before additional exploration is done. Mr. Glineski agreed to contact Mr. Carl A. Coon (who is to supervise the work) and arrange a meeting of representatives of the Operator and the Government to discuss the sampling program.

Attachment - 1

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Pinckney

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Mine or area	Sample No.	Sampler	WO_3 (%)	Cu (%)	Ag (oz.)	Au (oz.)	Remarks
Arnold Mine area	53-118	Topfer	1.05	0.8	0.5	0.005	Ore bin
	-119	"	0.05	1.4	0.5	0.005	Dump
	-120	"	0.35	3.1	1.3	0.02	"
	-121	"	0.15	2.4	1.4	0.02	"
	-122	"	1.85	0.9	0.3	Tr	3.6 ft. vein at surface
	-123	"	0.25	1.5	0.9	0.005	Dump
	-124	"	1.35	1.5	0.5	Tr	4.6 ft. vein at surface
	54- 3	Weeks and	0.015				7.5 ft. quartz
	- 4	Fairweather	0.03				3.0 ft. tactite
	- 5	"	0.15				3.5 ft. quartz
Friday area	53-130	Topfer	0.15	0.4	0.4	Tr	Dump (fines)
	54- 1	Weeks and	0.02				13.5 ft. tactite
	- 2	Fairweather	0.02				11.0 ft. tactite
	- 6	"	0.35				10.5 ft. tactite
Flagstaff area	No samples taken						
North Flagstaff area	No samples taken						
Strategic Shamrock area	53-125	Topfer	5.15	0.1	0.3	Tr	2.2 ft. contact zone
	-126	"	0.85	Tr	0.4	Tr	4.5 ft. vein
	-127	"	1.15	0.4	0.4	Tr	3.8 ft. vein
	-128	"	0.25	0.2	0.3	Tr	2.2 ft. contact zone
	-129	"	0.45	0.9	0.6	0.02	4.3 ft. contact zone
	54- 10	Weeks and	0.303				3.0 ft. tactite
	- 11	Fairweather	0.146				6.5 ft. "
	- 12	"	0.413				5.0 ft. "
	- 13	"	0.270				3.0 ft. "
	- 14	"	0.85				6.0 ft. "
	- 17	"	0.163				5.0 ft. "

Total samples taken - 25

UC 7

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
July 1, 1955

MEMORANDUM

To: DMEA Field Team, Region I, NW District

From: G. A. Apell and E. C. Pattee, Bureau of Mines Engineers

Subject: Routine inspection report, Docket No. DMEA 2973 (tungsten), Boulder Ores, Inc., Powell County, Montana, Contract No. Idm-E588

Amendment No. 3 of the above contract provided that the contract be automatically terminated if work was not resumed by June 15. The Operator, Mr. F. L. Glineski, president of the company, was contacted by phone on June 14. He informed the Bureau engineers that he had obtained the services of Carl A. Coon to do the contract work. According to Mr. Glineski, Mr. Coon agreed to move equipment to the mine and start work June 14.

The mine was not visited because Mr. Coon was to have visited the Butte field office on June 15. The project will be inspected during the next inspection trip in July.

Following is the status of the contract work as of June 14, 1955:

	Authorized	Completed
Stage I		
Unit Cost		
Trenching with bulldozer	150 hrs.	Yes
Actual Cost		
2 miners	$300	Yes
Engineering services	$1000	"
Bunkhouse and tool house	$500	none
Sampling and analysis	$400	$176.87
Contingencies	$300	$ 12.60
Stage II		
Unit Cost		
Trenching with bulldozer	300 hrs.	285 hrs.
Diamond drilling	1000 ft.	none
Drift, crosscut and/or raise	400 ft.	none
Actual Cost		
Engineering services	$1000	$1000
Analysis	$800	none

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

E. C. Pattee

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

June 17, 1955

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

Attached are the Government, Docket, and Division copies of Amendment No. 3 to the above-cited contract.

Distribution of this amendment is being made in the usual manner.

Sincerely,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

Attachments

cc: Finance Office w/encl.
USBM (2)
Pinckney

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

JUN 13 1955

Memorandum

To: The Administrator, DMEA

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2973, Boulder Ores, Inc.
Contract Idm-E588 - Owner's Consent to Lien

This responds to your memorandum dated June 9 regarding our memorandum of April 15 transmitting Amendment No. 3 to the subject contract.

Our memorandum of April 28 on the subject of Owner's Consent to Lien form of July 1, 1954, pointed out in detail that under an Owner's Consent to Lien on the July 1, 1954, form the owner is bound for a period of ten years and remains bound for this same period even though the operator's liability is extended beyond that period. Our memorandum of April 15, perhaps too briefly, was intended merely to point out that the landowner was bound for ten years although Annex III attached to said amendment extended the royalty payment period to eleven years.

Accordingly, the question in your memorandum dated June 9 as to whether our memorandum of April 15 was intended to suggest that new Consents to Lien be required only for the reason that the liability of the owner would not extend beyond ten years (as explained in the memorandum of April 28 discussed above) is answered in the affirmative.

As nothing in this memorandum is inconsistent with the general memorandum of April 28 on the subject it is suggested that this memorandum be filed with the docket in question.

/S/ Henry C. Rubin
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
W. S. Martin
J. L. Hofflund
H. C. Rubin
chron. Leffler

Selfridge

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

JUN - 9 1955

Memorandum

To: John L. Hofflund, Acting Assistant Solicitor
Defense Minerals

From: Administrator, DMEA

Subject: Owner's Consent to Lien--Form of July 1, 1953
Docket No. DMEA-2973 - Tungsten
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Reference is made to Amendment No. 3 to the subject contract and to your memorandum to me of April 15, 1955, in which appears the statement ". . . subject to acquiring new Consents to Lien because the period for repayment is extended by the amendment."

The Consent to Lien form of the subject contract states ". . . under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien . . . until said royalty is fully paid or ten years have elapsed from the date of the contract . . . ." In your memorandum of April 15 was it suggested that new Consents to Lien be acquired only for the reason that the liability of the owner would not extend beyond ten years, even though the lien states that the owner agrees to any amendment to the contract, as explained in your memorandum of April 28, 1955, relating to the Owner's Consent to Lien--Form of July 1, 1953?

C. O. Mittendorf

Administrator

GCSelfridge/esf
6/7/55
cc to: Docket
Admr. R. File
Messrs: Mittendorf
Johnson
Martin
Selfridge

R.G.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
JUN - 7 1955

June 3, 1955

Mr. Florian L. Glineski
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Glineski:

Reference is made to our letter of May 5, 1955, transmitting copies of the revised Amendment No. 3 for your approval and signature. We have not yet received these copies from you.

We called your attention to the fact that the new Amendment No. 3, paragraph 5 (a), provided that the contract be automatically terminated if work is not resumed by June 15, 1955. We understand that the property is still snowed in and that you might not be able to get in by that date. If it is not possible to resume work by June 15, it is important that you let us know immediately, for the above reason or any other, so that a postponement can be given consideration.

In any case, please sign and return to us the copies of Amendment No. 3 as well as indicate when you expect to resume contract work. We regret the necessity of asking you to execute a revised Amendment No. 3, but until this amendment is signed the contract is expired and has no standing.

By Field Team, Region I, NW District

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

cc: DMEA (2)
USBM (2)
USBM(AD)
Kellum

Wing G. Agnew, Member
U. S. Bureau of Mines

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

May 5, 1955

Mr. A. W. Berge, Secretary-Treasurer
Boulder Ores, Inc.
502 Fuller Avenue
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Berge:

In reply to your letter of April 29, 1955, our field men regularly inspect all DMEA projects when they are in operation but we do not furnish any formal report of their findings to the companies although we do freely discuss the project with the operator. Mr. Glinoski furnishes a monthly progress report to the Field Team and we think that the information you require should be obtainable from him.

In reply to your question as to the present status of the project, it has been recessed since October 1954 because of bad weather. We presume that the work will be resumed as soon as the weather permits.

By Field Team, Region I, NW District

A. R. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2) w/cy incoming
USBM (2) " "
Kellum

BOULDER ORES INC.
502-Fuller Ave.
Helena Montana.

April 29, 1955.

United States Department of Interior
Geological Survey
So. 157-Howard Street
Spokane Washington.

Dear Mr. Weissenborn;

Will you please furnish me with a report and findings of the bull-dozing on the Snow Shoe Sheelite Project north of Avon by the Boulder Ores Inc., and the approved government loan. This work was preformed during 1954.

It seems I have misplaced my copy of the report or perhaps I never received any. Also advise the present status of the project. Is there any further prospecting being considered by the government, etc?

Thanking you for an early reply, I remain,

Yours truly

Boulder Ores Inc.

/s/ A. W. Berge

A. W. Berge, Sec.-Treas.

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Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

No. 157 Howard Street
Spokane 4, Washington

May 5, 1955

Mr. Florian L. Glinoski
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Gros, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Glinoski:

We are enclosing herewith a new Amendment No. 3 which has been signed by the Administrator of the DMEA. This extends the time limit for completing the contract and replaces the one which you returned to us at our request. Please note that according to the terms of Amendment No. 3, paragraph 5(a), if work is not resumed by June 15, 1955, the contract is automatically terminated, effective October 31, 1954.

If this amendment meets with your approval, please sign all copies, retain the one marked "Operator's Copy" and return the rest to this office.

At your convenience will you please advise us when you expect that work may be resumed on this project.

By Field Team, Region I, NW District

cc: DMEA (2)
USBM (2)
USGS(AD)
Kellum

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

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

DOCKET
Surname:
Rutledge
Chandler
Newcomb
Hall
Selfridge
Johnson

KIILSGAARD, USGS
CKET
T, REG. I-Spokane
CODE 400
ADM. READ. FILE
OPERATING COMMITTEE
ROBT. HOLLIDAY, USBM

APR 2 8 1955

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I-Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc. (Assignee)
Arnold Copper mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

Enclosed are the original and five copies of a proposed amendment, Amendment No. 3, to Contract No. Idm-E588, signed by the Administrator for the Government, together with Annex III (3 pages). Amendment No. 3 embodies a suspension-termination agreement.

If the terms and conditions of this proposed amendment are satisfactory to you and the operator, all six copies should be signed, subject to the attachment of new Consents to Lien by the owners, and the usual distribution made.

If any part of this proposed amendment does not have either your approval or that of the operator and cannot be amended within your delegated authority, the original and all copies of the proposed amendment are to be returned to this office, together with the proposed changes for consideration.

Please note that the amendment while authorizing suspension of the exploration during the period beginning October 31, 1954, and ending not later than June 15, 1955, also automatically terminates the subject contract as of October 31, 1954, if the work is not resumed before termination of the suspension period. In addition, the royalty repay period is extended to eleven years and, whether or not certification of discovery or development is made, the operator is required to pay royalty on all minerals mined or produced within a period of eleven years from the date of the contract or until the total net amount contributed by the Government is repaid, whichever occurs first.

Sincerely yours,

George C. Selfridge By 554
Chairman, Operating Committee

Enclosures

APPROVED: /s/ Robert W. Geehan By 557
Member, Bureau of Mines

Thor H. Kiilsgaard By 554
Member, Geological Survey

R.L.H.

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

1201 N. Division St.
Spokane 2, Washington
April 27, 1955

Bureau Mines Minerals Administration
RECEIVED
MAY 12 1955

MEMORANDUM

To: DMEA Field Team, Region I, NW District

From: John D. Bardill, G. A. Apell, and E. C. Pattee,
Bureau of Mines Engineers, Region I

Subject: Routine inspection report, Docket No. DMEA 2973 (tungsten), Boulder Ores, Inc., Powell County, Montana, Contract No. Idm-E588

A meeting was held the evening of April 20, 1955, at the Placer Hotel, Helena, Montana, with Florian L. Glineski, president of Boulder Ores, Inc., and the above-named representatives of the Bureau of Mines.

Mr. Glineski was invited to meet Messrs. Apell and Pattee who will assume the DMEA duties of Bardill at this project, and to discuss his plans for completion of the captioned contract. Mr. Glineski assured us that he proposed resuming work as soon as weather conditions permitted and that he was financially prepared to do so. It was suggested that another meeting, to include a Geological Survey representative, should be held shortly before he was ready to start work so as to map a specific exploration program in order that any necessary amendments to the contract could be made promptly.

Following is the status of the contract work as of April 20:

Stage I

Unit cost	Authorized	Completed
Trenching with bulldozer	150 hrs.	150 hrs.
Actual cost		
2 miners	$300	$300
Engineering services	1000	1000
Bunkhouse and toolhouse	500	0
Sampling and analysis	400	176.87
Contingencies	300	12.60

Stage II

	Authorized	Completed
Unit Cost		
Trenching with bulldozer	300 hrs.	285 hrs.
Diamond drilling	1000 feet	0
Drift, crosscut and/or raise	400 "	0
Actual Cost		
Engineering services	$1000	$1000
Analyses	800	0

Government participation of the allowable costs is 75 percent.

The project has been recessed since October 31, 1954; the contract period ended on November 24, 1954. The Washington, D.C. office is preparing a suspension-termination agrement to cover the period the project is recessed and to extend the completion date.

John D. Bardill

Orig. & 3 cys - Wash.
USBS (2)
DMEA
AD
JDB/he

Rubin

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

APR 15 1955.

Memorandum

To: The Administrator, DMEA
Attention: W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2973 (Tungsten), Boulder Ores, Inc., (Assignee) Arnold Copper Mine (Snowshoe Gulch property) Powell County, Montana, Contract No. Idm-E588

As requested in Mr. Martin's memorandum dated April 7 we have prepared the attached Amendment No. 3, in satisfactory legal form for execution; subject to acquiring new Consents to Lien because the period for repayment is extended by the amendment.

/S/ Henry C. Rubin
for J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

Attachments

HCRubin:gjb 4/15/55

Copy to: DMEA Docket
Sol. Docket
W. S. Martin (2)
J. L. Hofflund
H. C. Rubin
Chron. File

400

DOCKET
SURNAME
Rutledge
Martin

April 7, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Iron and Ferro-Alloys Division, DMEA

Subject: Preparation of Amendment No. 3
Docket No. DMEA 2973 - Tungsten
Boulder Ores, Inc. (Assignee)
Arnold Copper mine (Snowshoe Gulch property)
Powell County, Montana
Contract No. [illegible]

INTERIOR DEPT.
APR 8 - 1955
SOLICITOR

Transmitted herewith is a rough draft of a proposed amendment, Amendment No. 3, to the referenced contract for your use in preparing the final draft.

Please advise us if new Owner's Consent to Lien forms should be executed.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Attachment

FARutledge:foc
cc to: Docket
Code 400

EXPLORATION PROJECT CONTRACT
BOULDER ORES, INC.
DOCKET NO. DMEA 2973

It is agreed this _____ day of April, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Boulder Ores, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E588, dated August 24, 1953, as amended, hereinafter called the "Contract," that:

1. (a) Work under the Contract shall be suspended during the period beginning October 31, 1954, and ending not later than June 15, 1955.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. The time fixed for the completion of the work is extended to November 24, 1955.

3. The maximum period for royalty payments and lien for the payment thereof, provided for in the Contract, is increased to eleven (11) years.

4. It is of the essence of this Contract that the work be resumed before the termination of the period here fixed for suspension; and if it is not so resumed in the manner required by the Contract, the following provisions shall thereupon become effective:

   (a) Effective June 15, 1955, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

   (b) The Government shall contribute only to the allowable costs incurred prior to said effective date in accordance with the Contract.

   (c) Any work or operations prosecuted or costs incurred by the Operator beginning with said effective date shall be for the sole account of the Operator without contribution by the Government except for the allowable costs incurred in performing winding-up and settlement actions provided for in the Contract, including the making and rendering of reports and accounts.

(d) The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land referred to in Article 2 of the Contract, for the period of eleven years from the date of the Contract or until the total net amount contributed by the Government is repaid, a certification of discovery or development being hereby waived.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided in this Amendment No. 3.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

BOULDER OREB, INC.

_____

_____

Defense Minerals Exploration Administration

xxxxxxxxxxxxxxxxxxxxxxxxxx

14X1hC1 (C1) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secretary)

DOCKET SURNAME

Rutledge
Martin
Hedges
Kiilsgaard
Selfridge
Johnson
Mottendorf

APR - 6 1955

T E L E T Y P E

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Relet March 29, Docket DMEA 2973, Boulder Ores, Inc., Contract Idm-8588. Operator's reports infer discoveries have been made while Field Team reports little tungsten mineralization. Please wire Field Team's recommendations regarding: 1. certification, 2. an in lieu of certification clause in suspension-termination agreement, or 3. straight suspension-termination agreement.

George C. Selfridge

Chairman, Operating Committee

FARUTLEDGE:FOC
4-5-55
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. I - NWD - CONFIRMATION
Mr. Holliday, USBM
Mr. Kiilsgaard, USGS

R.C.S.

X DXXXXXX-110K

YWA182 WAF SP ~~GWO~~ 20 I-GS-G

SPOKANE WASH 4-6-55 429P

GEORGE C. SELFRIDGE

CHAIRMAN OPERATING COMMITTEE

C DMEA DEPARTMENT INTERIOR WA V

REURTEL APRIL 6. DOCKET DMEA 2973 BOULDER ORES INC., CONTRACT IDM-E588. SUGGEST INSERTING AN IN LIEU OF CERTIFICATION CLAUSE IN SUSPENSION-TERMINATION AGREEMENT.

E. E. WEISSENBORN, EXECUTIVE OFFICER

DMEA FIELD TEAM, REGION 1 NORTHWEST DISTRICT

6 2973 IDM-E588 AN

VA 432P

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 7 1955

RECEIVED
APR 6 7 57 PM '55
BMD - COMMUNICATIONS

APR 7 9 48 AM '55
BUREAU OF MINES
MAIL ROOM
WASHINGTON D C.

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

So. 157 Howard Street
Spokane 4, Washington

March 29, 1955

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

Re: Docket No. DMEA 2973 (tungsten)
Boulder Ores, Inc.
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

After sending the operator of the cited contract, on February 3, 1955, Amendment No. 3 changing the completion period of the contract from 15 to 24 months, we realized that we were in error, as such an amendment should contain a provision for both a recess and an extension of time, and that therefore it should be issued from your office. On March 10, 1955 we wrote the operator asking him to return the copies of the amendment, which he has done; these are being destroyed.

We now would like for your office to issue an amendment which would provide for a recess of the project from October 31, 1954 until weather permits resumption of the project, but not later than June 15, 1955, and a change of completion period of the contract from 15 to 27 months; this will make the completion date November 24, 1955. It is also suggested that in the event the operator does not resume work by June 15, 1955, weather permitting, a provision calling for termination of the contract be included in the recess agreement.

A recess is necessary because of bad weather conditions. To have continued exploration during the winter months would have been too costly both for the operator and the Government; therefore, it is advantageous to the Government that the project be recessed until weather conditions permit access in the spring.

By Field Team, Region I
Northwest District

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
Bureau of Mines

cc: USBM(2)
USBM(AD)
Kellum

xxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

March 10, 1955

Mr. Florian L. Glinecki
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Gres, Inc.
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Glinecki:

Reference is made to our letter of February 3, 1955, transmitting to you proposed Amendment No. 3 which would change the completion period of the contract from 15 to 24 months.

We are sorry, but we must ask you to return immediately all copies of this amendment unsigned. It is necessary that a recess provision be inserted, and this must come from our Washington office.

Very truly yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

cc: DMEA (2)
USBM (2)
Kellum

C

400

DOCKET
SURNAME

Rutledge
Martin
Selfridge
Johnson
Mottendorf

FEB 4 1955

Mr. A. E. Weissenburg, Executive Officer
DMEA Field Team, Region I - Northwest District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Boulder Gem, Inc. (Assignee)
Arnold Copper mine
Powell County, Montana
Contract No. [illegible]

Dear Mr. Weissenburg:

The last operator's monthly report and voucher received under the subject exploration contract [illegible] for August 1954. As the period for completion of the project work expired November 24, 1954, it appears that the operator should request an amendment to authorize the present status and perhaps an extension of the period for completion of the project work. Such a request should be supported and accompanied by suitable justifications.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

APPROVED:

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

Thor H. Kiilsgaard
Member, Geological Survey (JHB)

FARutledge:fcc
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. I - Northwest Dist.
W. McInnis, USBM
T. H. Kiilsgaard, USGS

RR.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington
February 3, 1955

MEMORANDUM

To: DMEA Field Team, Region I

From: John D. Bardill, Bureau of Mines, Region I

Subject: Routine inspection report, Docket No. DMEA 2973 (tungsten), Boulder Ores, Inc., Powell County, Montana, Contract No. Idm-E588

The Operator, Mr. F. L. Glineski, president of the company, and I were unable to arrange a meeting at Helena at a time convenient for both of us so project plans were discussed briefly by long distance telephone the evening of January 13, 1955.

Mr. Glineski stated that he definitely plans to resume project contract work in the spring when weather conditions permit easy access to the property. The extent of the work will be largely dependent upon his financial capabilities, and definite plans will be formulated at the time consistent with the terms of the contract. In the meantime, the contract will be amended to extend the completion date to August 24, 1955, the end of the two-year period.

John D. Bardill

John D. Bardill

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

xxxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

Administration
Received

February 3, 1955

Mr. Florian L. Glineski
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc.
Powell County, Montana
Contract No. Idm-8588

Dear Mr. Glineski:

Enclosed are the original and six copies of proposed Amendment No. 3 to the cited contract which will change the completion period of the contract from 15 to 24 months from the date of the contract, or until August 24, 1955.

If the terms and conditions of this amendment meet with your approval, please sign all copies, retain that copy marked for the Operator, and return the remaining copies to this office.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

Enclosures

cc: DMEA (2)
USBM (2)
Kellam

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

RECEIVED
SEP 20 1954

September 16, 1954

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc.
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

Enclosed are the original and two signed copies of Amendment No. 2 to the cited contract, with attached justification.

Distribution of this amendment is being made in the usual manner.

Sincerely yours,

John S. Vhay

John S. Vhay
Acting Member, DMEA
Field Team, Region II

Attachments

cc: Finance Office w/encl.
USBM (2)
Weeks

RECEIVED
OCT 21 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
SEP 13 1954

September 9, 1954

Mr. Florian L. Glineski
511 N. Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc.
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Glineski:

Enclosed are the original and six copies of proposed Amendment No. 2 to the cited contract which removes the 4-week allowable maximum limitation. This will allow us to participate in the payment for services of an engineer up to a maximum of $250.00 a week and a maximum of $1,000.00.

If the terms and conditions of this amendment meet with your approval, please sign all copies, retain that copy marked for the Operator and return the remaining copies to this office.

Sincerely yours,

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

Enclosures

cc: DMEA (2)
UMEM (2)
Weeks

DOCKET
DMEA 2973

Set 2267 for summary

Interior Department

Defense Minerals Exploration Administration

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secretary).

SEP 8 1954

TELETYPE

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

Reurlet August 31 requesting status information for following dockets:

1. West Slope Mining Company, DMEA 2267-Tungsten. Contract was mailed to you for execution September 2.

2. Twin Sisters, DMEA 3412-Chromite. We anticipate mailing contract next week.

3. Northfield Mines, DMEA 2436-Cobalt & Copper. Amendment authorizing recess being held in abeyance pending receipt of equipment and supply inventory. Your July 29 letter indicated inventory giving realistic appraisal of possible salvage values would follow shortly.

4. Boulder Ores, Inc., DMEA 2973-Tungsten. You are hereby authorized and requested to prepare amendment covering payment for Mr. Fairweather's services, removing limitation on time but not the other restrictions, as recommended in your letter of August 27

George C. Selfridge
Chairman, Operating Committee (GHB)

cc: Docket
Code 400
FT, Reg. 2 - confirmation
Oper. Committee
R. W. Geehan, USBM
Thor. Kiilsgaard, USGS
Adm. Reading File

WSMartin/ls
9-3-54

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Received
OCT 15 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

SUPPLEMENTAL VOUCHER FOR

Month of JULY & AUGUST, 1954 Docket No. DMEA 2973 Contract No. 1DM-E500
Operator's Name BOULDER CREEK, INC., Minerals TUNGSTEN
Address 511 N. RODNEY ST., HELENA, MONTANA
Contract Amount, $ 33,600.00 Government Participation: 75 % Amount, $ 25,200.00

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		6090.00	6090.00			
Bulldozing					6090.00	6090.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor		300.00	300.00		300.00	300.00
JULY Supervision 550.00						
AUGUST Technical Services 376.68	926.68	1073.32	2000.00	926.68	1073.32	2000.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
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		176.87	176.87		176.87	176.87
Payroll Taxes		4.50	4.50		4.50	4.50
Liability Insurance						
UNEMPLOYMENT COMP.		8.10	8.10		8.10	8.10
(8) Contingencies (specify):						
TOTALS		7652.79	8579.47	926.68	7652.79	8579.47

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

Date 9/28/54 *Payee BOULDER CREEK, INC.,

Per Florian R. Glinecki Title PRESIDENT

*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 cer that this account is correct and proper for ment in the amount of:

$ 695.01

Signature MDP
(Authorized Ce

Date 10/11/54 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-588 in accordance with the terms of the contract.

Signature /S/ John D. Bardill Title Metallurgist Date 9/30/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W. Goldsp Title Mining Engr Date 10/1/54

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

402

1201 N. Division St.
Spokane 2, Washington

September 22, 1954

Mr. Florian L. Glineski, President
Boulder Ores, Inc.
511 N. Rodney St.
Helena, Montana

WSM

Re: Contract Idm-E588
Docket No. DMEA 2973
Monthly Operating Report
for August 1954

Dear Mr. Glineski:

The subject operating report has been received and processed for payment.

We regret that it has been necessary to delete the amount claimed for technical services as no supporting payroll or other acceptable documentation was submitted with the MF-104. As you know, an amendment has now been signed removing the time limitation so that we may participate in the payment of Mr. Fairweather's salary up to the maximum amount of $1,000.00 allowed by the contract under Stage II. It is necessary, however, that you reclaim the amount of $550.00 which was deducted from your July 1954 MF-104 and the $376.68 which we have deducted from the August 1954 MF-104. You may do this either by filing a supplemental MF-104 or by reclaiming the items on the next monthly MF-104 you submit for payment.

We have prepared payroll statements covering the months of July and August which may be of help to you in making up your voucher. If you wish, you may just sign the enclosed original statement covering the technical service charges for each month and attach them to the MF-104 on which you reclaim these costs. We are enclosing a supply of forms for your use.

Yours very truly,

Thomas E. Howard
For Wing G. Agnew, Member
DMEA Field Team, Region II

MF-104

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

Budget Bureau No. 42-R1036.5

SEP 27 1954

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

Month of August, 1954 Docket No. DMEA 2973 Contract No. Idm-E588

Operator's Name Boulder Ores Inc. Minerals Tungsten

Address 511 N. Rodney St. Helena, Montana

Contract Amount, $ 33,600.00 Government Participation: 75 % Amount, $ 25,200.00

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 ~~Stockpile~~ Contracts:						
Drilling						
Bulldozing 132 hours	1848.00	4242.00	6090.00	1848.00	4242.00	6090.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor		300.00	300.00		300.00	300.00
Supervision						
Technical Services	376.68	1623.32	2000.00	-0-	1073.32	1073.32
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
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	85.87	91.00	176.87	85.87	91.00	176.87
Payroll Taxes		4.50	4.50		4.50	4.50
Liability Insurance						
Unemployment Comp.		8.10	8.10		8.10	8.10
(8) Contingencies (specify):						
TOTALS	2310.55	6268.92	8579.47	1933.87	5718.92	7652.79

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

Date 9/8/54 *Payee Boulder Ores Inc.

Per Florian L. Zlinski Title President

*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:

$ 1450 40

Signature M.J.P. (Authorized Certifying Officer)

Date 9/23/54 Vou. No. 1288

(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 588 in accordance with the terms of the contract.

Signature /s/ John D Bordell Title Metallurgist Date 9/17/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Eng Date 9/20/54

MONTHLY REPORT OF OPERATOR

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(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.

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

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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.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
SEP 27 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1954 Docket No. DMEA 2973 Contract No. Idm-E588

Operator's Name Boulder Ores Inc. Minerals Tungsten

Address 511 N. Rodney St., Helena, Montana

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	hour	1848.00	132	6090.00	435			
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1848.00	132	6090.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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 9/8/54 Operator Boulder Ores Inc.

Per Florian L. Jelinski Title President.

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

BOULDER ORES INC.

PROGRESS REPORT FOR AUGUST 1954.

DOCKET No.DMEA 2973 CONTRACT No.Idm-E588

A total of 132 hours of trenching was done in this period. This makes an overall total of 403 hours spent in cutting 54 trenches which includes the work performed in the preceding period.

Following is a very brief report on the findings in each trench and all disclosures, together with sample locations and results are indicated on the accompanying maps.

ARNOLD COPPER

Trench No.AC-3 Contact as shown
" No.AC-4 " " "
" No.AC-5 All limestone
" No.AC-6 " "
" No.AC-7 All Limestone with 7.5' of quartz in west end assaying 0.015 WO3.
At portal of old upper workings a sample was taken across 3.0' tactite assaying 0.03%WO3.

ARNOLD FRACTION

Trench No.AF-1 Contact as shown
" No.AF-2 All limestone
" No.AF-4 " "
" No.AF-5 Small tactite zone in west end.
" No.AF-6 All limestone with small quartz vein in south end.

MONTANA

Trench No.M-1 Contact and small tactite zone north end.
" No.M-2 " " " " " " " .
" No.M-3 Contact and small tactite zone as shown.
" No.M-4 Contact as shown.

COPPERTUNG

Trench No.C-1 All limestone with a 3.5' quartz vein of obscure strike assaying 0.015% WO3.
" No.C-2 All limestone.
" No.C-4 All limestone with a little quartz and lots of copper stain.
" No.C-5 All limestone
" No.C-6 " "
" No.C-7 " "

SNOWBIRD

Trench No.S-1 Small spot of tactite shown.
" No.S-2 A 10' zone of tactite adjacent to Arnold Copper main adit.

PORTAL

Trench No.P-1 All limestone with granite contact on west end.
" No.P-2 All limestone.

MOLLYTUNG (Claim not shown on map)

Trench No.MT-1 Contact shown with wide tactite zone.
" No.MT-2 " " " " " "
" No.MT-3 " " " " " "

FRIDAY NO.1

Trench No.F-1 Contact shown with considerable tactite.13.5' sample assayed 0.02% WO3.
" No.F-2 Contact shown,wide tactite zone. 11.0' sample assayed 0.02% WO3.
" No.F-3 West contact beyond map border. Tactite zone 200' wide with scattered WO3.
" No.F-4 West contact beyond map border. Tactite zone 200' wide,isolated WO3.
" No.F-5 Contact shown with considerable tactite and rather spotty WO3.
" No.F-6 Contact shown with wide tactite zone and showing some WO3.
A sample cut across 10.5' of tactite in an open cut just east of Trench No.F-5 was 0.35%WO3

TUNGSTATE

Trench No.T-1 All granite.
" No.T-2 Wide tactite zone. 2.5' sample 0.227% WO3. Sample 3.2' assayed 0.413% WO3.
" No.T-3 Wide tactite zone. 1.5' sample assayed 0.526% WO3.
" No.T-4 Contact shown,some tactite and little WO3.
" No.T-5 Contact shown,some tactite with little WO3.
" No.T-6 Contact shown,good tactite zone and considerable WO3.

SHAMROCK

Trench Shamrock No.1 Small tactite zone in the granite.
" Shamrock No.2 Cuts 3 contacts with wide tactite zone north end.3.0'sample 0.303WO3.
" Shamrock No.3 Contact shown.Fairly wide tatctite zone. 5.0' sample 0.163% WO3.
" Shamrock No.4 Contact shown and some tactite.

STRATEGIC

Trench No.ST-1 Contact as shown with little tactite.
" No.ST-2 Contact shown on north end.Tactite zone over 200' wide.Four samples were cut,6.5',5.0',3.0',~~xxxxxxx~~,assaying 0.146%,0.413%,0.270% WO3 respectively. the fourth sample taken close to P.F.Toepfer's sample No.53-127 was cut across 6.0' and assayed 0.850% WO3.
" No.ST-3 Contact as shown with wide tactite zone showing moderate amount WO3.
" No.ST-4 Formation undisclosed due to heavy overburden.
" No.ST-5 " " " " " "
" No.ST-6 Contact shown and fairly wide tactite zone exposed with some WO3.
" No.ST-7 Contact shown with two tactite belts each 1.5'wide assaying 1.016% WO3 and 1.153% WO3.
" No.ST-8 Contacts shown both ends.No tactite exposed.

FLAGSTAFF

Due to rugged terrain,any trenching of informative value was impossible.

CHIEF (Directly southwest of Flagstaff Claim)

Trench No.C-1 Contacts as shown. No tactite disclosed.
" No.C-2 " " " " " "

A study of the exposures made by trenching operations and all accessible underground workings in the area EAST of Snowshoe Creek has been somewhat disappointing with one exception. This exception is the present showing in the main underground workings of the Arnold Copper claim. This property beyond any question merits further development of its lower workings as there are at the present time several hundred tons of commercial ore opened up and no indication that the orebody limits have been reached.

On the WEST side of Snowshoe Creek, trenching has definitely disclosed several very promising locations for further development work. Mr. Robert Weeks, of the U.S.G.S., on Aug. 25th. lamped all the cuts made since his last visit on July 28, and at eleven points the scheelite showing warranted sampling. The results of such sampling are indicated on the accompanying maps.

Trenching on the Mollytung and Friday No.1 claims show extremely wide tactite zones which when lamped, for the most part show slight quantities of scheelite. An old cut on the Friday No.1 claim just east of Trench No.F-5, assayed 0.35% WO3 for a 10.5' width.

Tungstate claim trenches, disclose a wide tactite belt for 500 feet in length. Two samples in Trench No.T-2 gave the following results: 2.5' wide, 0.227% WO3 and 3.2' wide 0.413% WO3. A sample in Trench No.T-3, 1.5' wide assays 0.526% WO3. All trenches were examined under black lamp and showed varying amounts of scheelite.

Four trenches on the Shamrock claim disclosed a tactite zone of varying size and for the most part scheelite was indicated under the black light. Two samples taken gave the following results: Shamrock Trench No.2, cut 3.0' wide, 0.303% WO3. Shamrock Trench No.3, cut 5.0' wide, 0.163 WO3.

Eight trenches in all were cut on the Strategic claim and one of these ST-8 was cut just south of the south end line. In trenches Nos. ST-4 and ST-5, it was impossible to expose the formation due to the extremely heavy overburden. Trench ST-1 shows contact and a little tactite in the south end, black light showing some scheelite. Trench ST-2 disclosed the contact and a tactite zone of over 200' in width. Four samples cut where the black light indicated better values gave the following results: 6.5' wide 0.146%, 5.0' wide 0.413%, 3.0' wide 0.270%, and 6.0' wide 0.850%. The last sample was taken rather close to Mr. P.H. Toepher's sample No.53-127 which assayed 1.15% WO3. Trench No.ST-3 cut the contact and disclosed 60' of tactite which lamps rather spottily. Trench No.ST-6 cut the contact with approximately 40' of tactite. Trench No.ST-7 disclosed the contact and cut two tactite zones, each 1.5' wide. A sample taken from each zone assayed 1.016% and 1.153% WO3.

SUMMARY With but three exceptions, all trenching on the Friday No.1, Tungstate, Shamrock, and Strategic claims has disclosed tactite zones varying in width from 1.5' to over 200'. In no instance have these cuts failed to show at least a small quantity of WO3, when lamped. In many cases the result of sampling has indicated commercial ore. The outstanding possibility, as now indicated, of developing commercial ore, lies on the Strategic claim. Samples taken by Mr. P.H. Toepher in this area, both surface and underground, appear to substantiate this statement.

The Strategic lower adit was driven some distance on the contact and below a rather deep gulley. This tunnel is caved about 120' from the portal and splits at about 70 feet. The left fork is in very good tungsten ore, while the right fork is in a spotty condition. This tunnel if used for further development, would require retimbering for its entire length as it is too low and in bad shape in many places.

There is an excellent small camp site immediately adjacent to the Strategic adit. The ground is quite flat and ample water is available for ordinary purposes.

Surface development in the form of trenching has eliminated the necessity for using any part of the $8000.00 set up in Stage 2 for diamond drilling. Stage 2 also provided for 400 feet of drifting, crosscutting and or raising, and at $37.50 per foot would equal $15,000.00. Thus the total appropriation would amount to $23,000.00 for stage 2.

RECOMMENDATIONS: Trenching and sampling results have indicated ore of commercial grade at several locations on the Strategic claim. I therefore unhesitatingly recommend that an amount of $500.00 be allocated to enlarge and retimber the lower Strategic adit. That at least 600 feet of drifting, crosscutting and or raising be authorized at $37.50 per foot. The direction of such drifting, crosscutting and or raising, to be mutually agreed upon between the representative of Boulder Ores Inc. and the government engineer or geologist, but such work to be done through the Strategic adit and for the express purpose of developing at depth, the tungsten bearing zones now disclosed on the surface. The $8,000.00 set up for diamond drilling, I hope may be used for the additional footage requested for drifting, crosscutting and or raising.

I sincerely believe this proposed development is fully justified by the results of the work already performed, and I do earnestly urge you to give it your careful consideration.

Respectfully submitted,

S.H. Fairweather

S.H. Fairweather, Supervising engineer.

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

August 31, 1954

Memorandum

To: DMEA Field Team, Region II

From: Robert A. Weeks, Geologist, U. S. Geological Survey

Subject: Routine Inspection, Docket No. DMEA-2973 (tungsten), Boulder Ores, Inc., Arnold Copper Mine, Powell County, Montana, Contract No. Idm-E588.

On August 25, accompanied by S. E. Fairweather, consultant for the operator, I examined the final dozer trenches on the subject property and checked the mapping of these trenches. The last trench was completed at noon of the 25th. According to Fairweather, the total dozer time for the work done this year amounted to about 403 hours.

During the evening of the 25th and early morning of the 26th, Fairweather and I, accompanied part of the time by F. L. Glineski, operator, lamped the trenches and marked the zones to be sampled. After the results of the sampling are available, decisions and recommendations for additional work will be made.

Briefly, all tactite areas mapped by Toepfer have been examined, and trenching of all possible areas has been completed. As reported previously, results on the Arnold and adjacent claims east of Snowshoe Gulch were disappointing. Some tactite was revealed, but tungsten mineralization was sparse and too low grade to merit additional work, with the possible exception of the main Arnold workings, where a small reserve of ore-grade material is shown in the underground workings and in the trenches in its vicinity.

West of Snowshoe Gulch, more continuous tactite zones have been encountered. Most of the trenches contain one or more zones of tactite, some zones being up to 80 feet thick. Scheelite is sparsely disseminated through most of this tactite, but in a number of trenches scheelite is moderately abundant in zones ranging from 15 inches to 7 or 8 feet wide. Samples of these higher grade zones are to be taken, and contingent upon the results of this sampling, some underground work may be recommended in the area of the Strategic claim, where the best showings were observed.

Distribution:
DMEA (orig. & 3)
USBM (2)
Docket
Weeks

COPY

So. 157 Howard Street
Spokane 4, Washington

August 31, 1954

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

2973

Dear Mr. Selfridge:

We are being pressed for decision on the following matters which have been submitted to the Operating Committee:

1. West Slope Mining Company, Birdie Mine, Silver Bow County, Montana, Docket No. DMEA 2267 (tungsten), Contract Idm-E249. A request for an amendment to permit resumption of work was contained in our letter to you of August 5, 1954. A decision on this is extremely urgent as work is actively in progress.

2. Prompt action is needed on the Twin Sisters application, Docket No. DMEA-3412 (chromite) Skagit County, Washington. Field Team recommendations were submitted August 9, 1954. Drilling (on company account) is in progress and, unless the contract is received very soon, it will be of little benefit to the company.

3. Northfield Mines, Docket No. DMEA-2936 (cobalt-copper), Lemhi County, Idaho, Contract Idm-E334. A Field Team memorandum, dated July 29, 1954, transmitted a request from the company for a recess until next spring. Certain aspects of the recess were discussed by the Field Team and the advice of the Operating Committee was requested. Some decision is needed as the contract is now neither active nor officially recessed.

4. Of more recent date is the Field Team s letter of August 27, 1954, concerning Boulder Ores, Inc., Docket No. DMEA 2973 (tungsten), Powell County, Montana, Contract Idm-E500. The matter is of considerable importance to Mr. Fairweather, add the Field Team would appreciate as early a decision as possible on the matter of Mr. Fairweather's salary so that he may be informed.

We will appreciate anything you can do to expedite decision on the above.

By the Field Team, Region II

A. E. Weissenborn, Exec Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
Certifying Officer

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

August 27, 1954

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mines
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

Enclosed is a memorandum from the Certifying Officer, dated August 23, 1954, explaining why, under the terms of the contract, we are unable to pay the salary of Mr. Fairweather, supervising geologist for the company, for more than a period of four weeks.

As you will note, Mr. Fairweather's salary is $550 a month and not the $250 a week permitted in the contract for a geologic consultant and helper.

In the Field Team's opinion it would be greatly to the advantage of the contract to obtain the services of Mr. Fairweather for a longer period of time at a lower monthly rate. Therefore, we think that in the interests of good administration of the contract an amendment should be prepared stating that the engineer and/or geologist and assistant may be employed for a period longer than four weeks, provided that neither the allowable maximum rate per week nor the total amount ($1,000) permitted in the contract is exceeded. In other words, we want the limitation on the time removed, but not the other restrictions.

We trust that this adjustment can be made at once.

By Field Team, Region II

A. E. Weissenborn

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

Wing C. Agnew

Wing C. Agnew, Member
U. S. Bureau of Mines

Enclosure
cc: USBM (2)
Certifying Officer
Weeks

STANDARD FORM NO. 64

COPY

Office Memorandum • UNITED STATES GOVERNMENT

TO : DMEA Field Team, Region II

DATE: August 23, 1954

FROM : DMEA Certifying Officer, Region II

SUBJECT: Docket DMEA 2972, Contract Idm-E588, Boulder Ores, Inc., Monthly Operating Report for July 1954.

The subject monthly operating report has been received, processed, and sent to the Disbursing Officer at Portland, Oregon for payment.

We found it necessary to delete the amount claimed for the supervising geologist, Mr. S. H. Fairweather, because the invoice submitted did not conform to the terms of the contract. The Operator has employed Mr. Fairweather at a salary of $550.00 per month. Stage II of the contract calls for

1 engineer and/or geologist plus assistant at $250.00/wk.*	4 weeks*	$1,000.00*

The Operator claimed $73.32 for 4 days work by Mr. Fairweather in June 1954. This was allowed. The charge of $550.00 claimed for salary for Mr. Fairweather for July 1954 could not be allowed because the contract specifies a particular time period during which a supervising geologist may be employed; namely 4 weeks-- and the 4 weeks is starred. We understand Mr. Fairweather is working full time for Boulder Ores, Inc.

This matter has been discussed with the engineers concerned and it is the concensus of opinion here that Mr. Fairweather is doing a good job and that the project will derive more benefit from Mr. Fairweather's services if we are allowed to participate in the cost of his services for a longer period of time than the contract allows. His rate of pay is less than that allowed by the contract, and the Operator expects to be held to the total cost of $1,000.00, as specified by the contract.

If the Field Team is in agreement with this thought, it is suggested that a letter be written asking the Washington office to take the necessary steps to remove the star from the time period and allow us to participate in this project cost to the extent of the $1,000.00.

The attached copy of this memorandum is to be sent the Operator, if you so desire.

/s/ Myrtle Purdy
Myrtle Purdy

cc: USGS

RECEIVED
AUG 24 1954
U.S.G.S.
Spokane, Wash.

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

August 24, 1954

Memorandum

To: DMEA Field Team, Region II

From: R. A. Weeks, Geologist, U. S. Geological Survey

Subject: Routine Inspection, Docket No. DMEA-2973 (tungsten), Boulder Ores, Inc., Arnold Copper Mine, Powell County, Montana, Contract No. Idm-E588.

On August 12, 1954, accompanied by J. D. Bardill, Bureau of Mines, and Stanley Fairweather, engineer, I examined the surface trenching accomplished since my last visit. Most of the trenches expose tactite, but as they were not lamped the tungsten content could not be determined.

The results of sampling the trenches that were lamped arrived in the mail just before we left Mr. Fairweather, and showed disappointingly low amounts of tungsten.

Agreement was reached with Mr. Fairweather to have him notify me as soon as the trenching is completed, which will be within the next 2 or 3 weeks, at which time the new trenches will be lamped and sampled, and the progress of the work will be reviewed completely.

Distribution:
DMEA (orig. & 3)
USBM (2)
Docket
Weeks

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

North 1201 Division Street
Spokane 2, Washington
August 20, 1954

Memorandum

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection report, Boulder Ores, Inc., Powell County, Montana, Docket No. DMEA 2973, Contract No. Idm-E588 (tungsten)

A routine inspection was made of this project August 11, 1954 accompanied by R. A. Weeks, U.S.G.S. and S. H. Fairweather, company mining engineer.

Forty-one bulldozer trenches had been completed requiring 284 hours of bulldozer time. Trenches were located as follows:

Name of Claim	Number of trenches
Arnold Copper	7
Arnold Fraction	5
Montana	5
Coppertung	6
Portal	2
Snow Bird	2
Friday	6
Molytung	3
Tungstate	5
	41

See attached map for location of trenches.

Some scheelite mineralization occurs near the Arnold and old Montana workings.

One good scheelite occurrence was exposed in trench C1 on the Coppertung claim.

Some mineralization was observed at the portal of the tunnel on the Snow Bird claim.

Trenches 1 and 2 on the Friday claim were reported to "lamp" fairly well. Tactite was exposed in trenches 3, 4, 5, and 6 but had not been lamped.

Tactite was exposed in trenches 2, 3, 4, and 5 in the Tungstate claim but had not been lamped.

About 12 more trenches will be cut on the Lower Tungstate, Strategic, Flagstaff and Chief claims.

Five samples were taken where scheelite mineralization occured.

Claim	Trench	Sample Width of Cut ft.	%WO_3 Union Assay	%WO_3 Montana Laboratory
Friday	1	13.5	0.02	0.002
"	2	11.0	0.02	0.006
Arnold Copper	7	7.5	0.015	0.009
" "	near portal	3.0	0.03	0.037
Coppertung	1	3.5	0.015	0.018

Approximately, 166 hours of bulldozing time remained to complete the trenching phase of the contract.

John D. Bardill

Enclosure

cc: Orig & 3 cys Wash.
USGS (2)
DMEA
M/D
AD

JDB:lb

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

August 6, 1954

Memorandum

To: DMEA Field Team, Region II

From: Robert A. Weeks, Geologist, U. S. Geological Survey

Subject: Routine inspection, Docket No. DMEA-2973 (tungsten) Boulder Ores, Inc., (Assignee), Arnold Copper Mine, Powell County, Montana, Contract No. Idm-E588

On July 20, 1954, accompanied by D. M. Lemmon, Geological Survey, I examined the bulldozer trenching accomplished to that date on the subject property. In discussion with Mr. Stanley Fairweather, consultant for the operator, arrangements were made to lamp the trenches.

On July 28, Fairweather and I examined the trenches and lamped them. Results of the lamping indicate that, although tungsten mineralization is widespread, in only a few trenches has the mineralization been intense. The specific areas showing the most mineralization are two trenches on the Friday claim and one trench on the Coppertung claim. Dozing has been completed in the Arnold mine area and the Coppertung area. Currently, dozing is in progress on the Friday claim, and will progress to the Tungstate and Strategic claims. The first two trenches on the Friday claim have revealed a tactite zone more than 30 feet wide. Lamping of this zone has indicated a width of 7 feet of material containing an estimated 0.25 to 0.50 percent tungsten. Zones for sampling were marked and Fairweather will sample these zones. The lateral continuity of this zone will be tested by additional trenches. On the Coppertung claim, one trench reveals a zone about 2 feet wide containing very high-grade tungsten. Adjacent trenches have not shown comparable results.

The trenches on the Arnold claim have shown disappointing results. Tungsten mineralization is widespread, but two dispersed for commercial interest, except in the immediate vicinity of the Arnold mine.

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Weeks

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

Budget Bureau No. 42-R1036.5

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

Month of July, 1954 Docket No. DMEA 273 Contract No. Idm-2588
Operator's Name Boulder Cres Inc. Minerals Tungsten
Address 511 N. Rodney St. Helena, Montana.
Contract Amount, $3,600.00 Government Participation 75 % Amount, $5,200.00

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 Contracts: ~~Short Form~~						WSM
Drilling						
Bulldozing 253 hours	3542.00	700.00	4242.00	3542.00	700.00	4242.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor		300.00	300.00		300.00	300.00
Supervision						
Technical Services	550.00	1073.32	1623.32	—o—	1073.32	1073.32
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
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		91.00	91.00		91.00	91.00
Payroll Taxes		4.50	4.50		4.50	4.50
Liability Insurance						
Unemp. Comp.		8.10	8.10		8.10	8.10
(8) Contingencies (specify):						
TOTALS	4092.00	2176.92	6268.92	3542.00	2176.92	5718.92

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

Date 8-3-54 *Payee Boulder Cres Inc.

Per Vivian L. Ghinetti Title President

*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:

$ 2656.50

Signature MJP
(Authorized Certifying Officer)

Date 8/16/54 Vou. No. 1245

(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 588 in accordance with the terms of the contract.

Signature /S/ Stephen W Zoldok Title Mining Eng Date 8/16/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Eng Date 8/16/54

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.

Form MF-101A
(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 July 1954 Docket No. DMEA 2373 Contract No. 16m-3588
Operator's Name Boulder Ores Inc. Minerals Tungsten
Address 511 N. Rodney St. Helena, Montana

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	hour	3042.00	203	4242.00	303	14.00		
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3042.00	203	4242.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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 8-2-54 Operator Boulder Ores Inc.

Per Florian L. Glinski Title President.

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

PROGRESS REPORT FOR JULY 1954.

Docket No.DMEA 2973 Contract No.Idm-E588

A total of 253 hours of bulldozing was done on the several properties as specifically shown by Trench number on the accompanying maps.

With the exception of three areas on claims located EAST of Snowshoe Creek,results of dozing are somewhat disappointing. Mr.Robt.Weeks of the U.S.G.S.,on July 28th.accompanied me on an examination of all cuts and after dark we lamped everything which had indicated the prescense of tungsten. The three exceptions are indicated by samples which have been taken in each instance and a cut of which will be forwarded to your office shortly.

In the area WEST of Snowshoe Creek,we have just got started with our dozing program. The trenches to date,as before stated,are specifically shown by trench number. At the time of Mr.Weeks visit,trenches No.F-1 and No.F-2 were just completed,and both when lamped,were quite encouraging. One sample was taken from each cut and if the assay result bears out the black lamp indication,I believe we have commercial ore in at least two trenches.

It has not always been physically possible to follow Mr.Toepfer's dozing instructions,but for the most part the trenches conform very closely to his plan.

We are now in a more rugged terrain and it will take more dozing hours per trench than heretofore required I believe to accomplish the results needed for intelligent investigation.

Respectfully submitted

S.H.Fairweather,Supervising Engineer.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION II

Administrative Audit Difference Statement

Date: Aug. 16, 1954
Payee's
Reference: Boulder Ores, Inc.
Contract Idm-E588, July 1954
Operating Report

DMEA Field Team, Region II
Spokane, Washington

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend their account accordingly:

Amount Claimed	$ 4,092.00
Difference	$ 550.00
Amount Approved	$ 3,542.00

The reason for the difference was:

The invoice covering technical services is incomplete. The amount deleted may be reclaimed on a subsequent Operating Report by showing the days and weeks worked as the contract limits the time as well as the amount which may be spent for engineering supervision. The payroll data submitted must, of course, bear the words "Certified True Copy" and must be signed.

Any reclaim for deductions made above must be supported by a copy of this form.

DMEA Certifying Officer, Region II

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

Defense Minerals Administration
RECEIVED
JUL 30 1954

July 27, 1954

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

Enclosed are the original and two signed copies of Amendment No. 1 to the cited contract with attached justification.

Distribution of this amendment is being made in the usual manner.

Sincerely yours,

A. E. Weissenborn

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

Enclosure

cc: Certifying Officer w/encl.
USBM (2)
Weeks

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

July 23, 1954

Boulder Ores, Inc.
511 North Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-2588

Gentlemen:

Enclosed are several copies of Amendment No. 1 to the cited contract which changes the completion period of the contract from 9 months to 15 months. If the terms and conditions of this amendment meet with your approval, please sign all copies, retain that copy marked for the Operator and return the remaining copies to this office.

As soon as the signed amendment is received, we will release for payment to you funds currently being withheld.

Sincerely yours,

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

Enclosures

cc: DMEA (2)
USBM (2)
Weeks

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

1201 N. Division St.
Spokane 2, Washington
July 15, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection, Boulder Ores, Inc., Showshoe Gulch, Powell County, Montana, Docket No. DMEA 2973, Contract No. Idm-E588 (tungsten)

A conference was held at Helena, Montana, on June 28, 1954 with Mr. Florian L. Glineski, president, Boulder Ores, Inc., to discuss plans for resumption of work. The project had been recessed since last November when it became snowbound.

Mr. Glineski advised me that a bulldozer had been moved into the property that morning and that trenching would be resumed according to the plan set forth in the Field Team letter of April 9, 1954 to him.

Mr. Stanley Fairweather, mining engineer, has been retained as resident engineer to supervise the trenching and sample the trenches for the Operator.

The contract has been amended to extend the time for completion of the work.

John D. Bardill

John D. Bardill

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

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

Month of [redacted] 195[redacted] Docket No. DMEA [redacted] Contract No. [redacted]
Operator's Name [redacted] Minerals [redacted]
Address [redacted]
Contract Amount, $[redacted] Government Participation: [redacted] % Amount, $[redacted]

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) [redacted] Short Form } Contracts:						WSM
Drilling [redacted]	[redacted]	[redacted]	[redacted]			
Bulldozing				252.00	448.00	700.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor		[redacted]	[redacted]		300.00	300.00
Supervision [redacted]						
Technical Services	[redacted]	[redacted]	[redacted]	73.32	1000.00	1073.32
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		[redacted]	[redacted]			
Sampling and Analysis		[redacted]	[redacted]		91.00	91.00
Payroll Taxes					4.50	4.50
[redacted] Insurance		[redacted]	[redacted]		8.10	8.10
(8) Contingencies (specify):						
TOTALS	[redacted]	[redacted]	[redacted]	325.32	1851.60	2176.92

I certify that the above bill is correct and just and that payment therefor has not been received.
Date [redacted] *Payee [redacted]
Per F. L. Klimeski Title [redacted]

*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:

$ 243 99

Signature [redacted]
(Authorized Certifying Officer)

Date 8/2/54 Vou. No. 1239
(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 5588 in accordance with the terms of the contract.

Signature /S/ John D Bardill Title Metallurgist Date 7/16/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 7/19/54

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. 4
Approval expires 6-30

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 195[illegible] Docket No. DMEA 2075 Contract No. 1[illegible] - 2 583
Operator's Name Boulder Ores, Inc.,
Address 511 N. Rodney St., Helena, Montana
Minerals Tungsten

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	$14.00 p/ hr.	$252.00	18	$700.00	50	$700.00	450	$6300.00
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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 July 13, 1[illegible] Operator Boulder Ores, Inc.,
Per J. L. Glinski Title President

REMARKS: Trenching was done by D-7 Dozer with hydraulic controlled blade. Operated by Dave Bower, Owner, under the supervision of Stanley Fairweather, Supervising Engineer.

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

NARRATIVE REPORT FOR JUNE 1954.
CONTRACT No. Idm - E 588
DOCKET No. DMEA 2973.

Defense Minerals Administration
RECEIVED
AUG 5 - 1954

A late Spring with considerable snow and rain, and the necessity of having to locate another contractor to do the dozing delayed the start of work on this project.

The dozer operator, a Mr. Dave Bower of Breanneau, Idaho moved his equipment from Bruneau to do the bull-dozing. He arrived in Snowshoe Gulch Sunday June 27th, ready to work Monday. However, because of a bad snow storm Monday, he was unable to start trenching until Teusday, June 29th, putting in 9 hours that day and 9 hours Wednesday June 30th, for a total of 18 hours for June 1954.

Mr. Stanley Fairweather, engineer in charge, had him clean out and deepen the trenches made last fall on the Arnold Survey as well as make some of the new cuts called for in Spokane's instructions.

Mr. Fairweather arrived in Elliston on Saturday June 27th and spent Sunday going over the ground with me. Mr. Fairweather has contracted his professional services to our company at the stipulated rate of $550.00 per month. This contract also calls for our furnishing a 4 x 4 pickup truck and its expenses for his transportation between his motel and the mine. It further calls for the payment by him, of all of his and ours pay roll taxes and insurance on the amounts paid to him.

Mr. Bob Weeks went over the ground with Mr. Fairweather at the start of the job and will again go over it with him this next week.

F. L. Glineski.

F. L. Glineski.

July 13th, 1954.

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

Defense Minerals Administration
RECEIVED
JUN 29 1954

June 29, 1954

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

Re: Docket No. DMEA-2973 (tungsten)
Boulder Ores, Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Selfridge:

In regard to your inquiry of June 24, 1954, regarding a possible time extension on the above contract, one of our engineers is now in the field checking on the progress of the work. If an amendment is necessary, we will prepare a request as soon as we hear from him.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM (2)
Weeks

Docket
Surname

Rutledge
Martin
Selfridge
Feldman
Rittenhouse

JUN 24 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 1, Washington

Re: Docket No. DMEA 1973 - Tungsten
Rockbar Corp., Inc. (Assignee)
Arnold Copper Mine
Powell County, Montana
Contract No. 14-[illegible]

Dear Mr. Weissenborn:

Reference is made to the above-designated contract. In requesting this term, it was noted that the time for completion of the exploration work expired May 24, 1954.

If the exploration program was not completed by that date and it is in the interest of the Government that the work be completed, an amendment should be prepared extending the period in which the project is to be completed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (24B)

APPROVED:

J. H. Hedges

Director, Bureau of Mines (24B)

D. M. Larrabee

Director, Geological Survey (24B)

FARutledge:fce
6-21-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
PT. Reg. 2
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.S.

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

1201 N. Division St.
Spokane 2, Washington
May 4, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection report, Boulder Ores, Inc., Snowshoe Gulch, Powell County, Montana, Docket No. DMEA 2973 (tungsten), Contract Idm-E588

Mr. Stanley Fairweather, mining engineer, and I met Mr. Florian L. Glineski, president of the company, at Helena on April 27, and discussed plans for the project when work is resumed.

Mr. Glineski agreed to the recommendations incorporated in the Field Team letter dated April 9, 1954 to Boulder Ores, Inc. in which the plan would be to complete the geologic mapping, bulldoze trenches, sample and reopen several caved adits before any underground drifting or crosscutting would be undertaken. The trenches should indicate the most favorable locations for subsequent underground exploration. It was recommended that a competent mining engineer be employed on a full-time basis to direct and sample the trenches.

It is my understanding that Messrs. Glineski and Fairweather mutually agreed on terms for employing Mr. Fairweather to supervise and direct the field work.

The property is still snowbound, but Mr. Glineski is hopeful that work may be resumed about the middle of May or shortly thereafter.

John D. Bardill

John D. Bardill

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

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

April 9, 1954

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

Re: Docket No. DMEA 2973 (tungsten)
Boulder Ores, Inc.
(Assignee of Florian L. Glineski)
Powell County, Montana
Contract Idm-E588

Dear Mr. Selfridge:

Enclosed for your information and files are the following documents pertaining to approval of Stage II of the subject contract, and recommendations and instructions to the operator for carrying out this phase of his program.

1. Three copies of a 7-page report dated December 6, 1953, by Peter Toepfer on work accomplished under subject contract during 1953, together with 9 maps.

2. Original and 3 copies memo dated March 15, 1954, by R. A. Weeks, giving his recommendations, 1 map.

3. Two carbon copies of a letter to operator dated April 9, 1954, authorizing commencement of Stage II of the contract and outlining the program to be followed.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

cc: USBM (2)
Weeks
Hindman

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

No. 157 Howard Street
Spokane 4, Washington

April 9, 1954

Boulder Crew, Inc.
511 North Rodney
Helena, Montana

Re: Docket No. DMEA-2973 (tungsten)
Snowshoe Gulch property
Powell County, Montana
Contract No. Idm-2788

Gentlemen:

We have recently received at this office a report on the referenced property prepared by P. H. Toepfer. This report has been reviewed by our field examiners and compared with our own maps and compiled information of the property. We are in general agreement with Mr. Toepfer's recommendations, although we believe that some of his proposed work is beyond the terms of the DMEA contract. We definitely believe, however, that work under Stage I of the contract has been sufficiently encouraging to warrant Government participation in work under Stage II.

According to our examiners, DMEA work to date, under Stage I, has amounted to 32 hours of bulldozing on the Arnold claim; labor required to open the portals of adits on the Montana and Arnold claims; and to Toepfer's mapping, sampling, and report writing. Work remaining to be done amounts to 118 hours of dozing, and appropriate sampling. It is our understanding that proposed trenching sites for remaining work in Stage I have been located and that this trenching will be completed as soon as spring weather will permit.

Toepfer's mapping indicates that tungsten mineralization is as widespread as was previously suspected and that sufficient tungsten exists on claims west of Snowshoe Creek to merit authorization of some of the work under Stage II of the contract. Completion of Toepfer's mapping in the Tungstate, Friday, Chief, and Copperstung areas, as authorized in Stage II, should be completed as soon as possible in order that trenching proposed for these claims may be properly located. It is believed that no more than $500 of the $1,000 allotted in Stage II for Engineering & Geology should be spent on this work. The remaining funds allotted for this purpose could then be used to partially pay the salary of the supervisor whom we understand you intend to hire.

Inasmuch as it would be impractical to do the remaining dozing in Stage I and then release the dozer only to recall it at a later date to do the work in Stage II, it is suggested that Stage II dozing, as outlined below, be simply a continuation of work in Stage I. You are hereby authorized to commence this dozing as soon as practicable.

It is suggested that remaining dozing time in Stage I, and also the dozing allowable in Stage II, be at the following sites.

432 hours of bulldozing to be used in the following trenches:

Arnold area - Finish trench #1 and #2, plus about nine additional trenches, to test the South Arnold, Montana, East Arnold, and Arnold Fraction claims.

Copperstung prospects - 2 or more trenches contingent upon further mapping.

Friday area - Central Friday prospect, 4 trenches; South Friday prospect, 4 trenches.

Tungstate area - Complete mapping before locating trenches, but tentatively 3 or more trenches will be needed.

Strategic-Shamrock area - Lower Tungstate area, 1 trench (?); Lower Shamrock prospect, 2 trenches; Southeast Shamrock island, 1 trench; Upper Shamrock prospect, 2 trenches; Strategic adit, no trenching; Southern textite outcrops, 2 trenches; Northern textite outcrops, 4 trenches; Twin shafts, 5 trenches.

North Flagstaff area - South Strategic pit, 2 or 3 trenches; North Flagstaff island, 1 trench; Flagstaff mine, 3 trenches; Chief prospect, 2 trenches.

In Toepfer's report it is recommended that several caved adits be opened, among which are:

Friday prospect
South Friday prospect
Lower tungstate prospect
Flagstaff mine

Of these, it is recommended that no attention be given the Friday and South Friday prospects until the bulldozing in that area has been completed. We understand that only minor caves block the Lower Tungstate prospect and the Flagstaff mine and we therefore suggest that you open these on your own account as there are no funds allotted in the contract for such work.

Mr. Toepfer has informed us that he will be busy during the coming summer and able to devote only part time to your operation. As bulldozing is tricky exploration that demands close attention to avoid wasting of money, we suggested to Mr. Toepfer that a full-time supervisor be engaged. Mr. Stanley Fairweather, mining engineer, was called to our attention, and as we have had past experience with Mr. Fairweather and have found him to be capable we suggested that Mr. Bardill recommend him to you. We suggest that you consider Mr. Fairweather or some other competent engineer or geologist as a supervisor for your exploration option as your property will benefit from close observation.

By Fld Team, Region II

A. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USBM (2)
Weeks

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

March 15, 1954

Memorandum

To: Field Team, Region II

From: R. A. Weeks, Geologist, U. S. Geological Survey *Rawl.*

Subject: Recommendations on Snowshoe Gulch Property, Docket No. DMEA-2973 (tungsten), Boulder Ores, Inc., Assignee of Florian L. Glineski, Powell County, Montana, Contract No. Idm-E588.

A report on the subject property has been prepared by P. H. Toepfer, and received in this office. In it, Toepfer transmits the results of his geologic and engineering work conducted on DMEA funds, and his recommendations to the operators. The report and accompanying maps are of good quality. I have gone over the area with Toepfer in the field, and discussed it recently in the office. His recommendations are basically sound, but the work he outlines is somewhat in excess of the terms of the contract. He admits this, but points out that the report, prepared for the operators, should be of use to them in planning work beyond the present exploration program.

With this report in hand, it is desirable to review the status of this contract, and to recommend to the operators the best program possible from the present state of our knowledge. To do this, I have recompiled Toepfer's 60-scale maps to a single 200-scale map (copy attached). Work performed under the contract thus far has amounted to 32 hours of bulldozing on the Arnold claim, labor required to open the portals of adits on the Arnold and Montana claims, and Toepfer's mapping, sampling, and report writing. Work remaining to be done under Stage I amounts to 118 hours of dozing, and appropriate sampling. The dozer trenches for Stage I were located, but work had scarcely begun when weather conditions forced the operations to cease. It is anticipated that bulldozing the remaining trenches of Stage I will require less than a month, as soon as the snow cover is gone, presumably sometime in May.

The results of Toepfer's mapping indicates that tungsten mineralization is as widespread as previously believed, and that sufficient tungsten exists on the claims lying west of Snowshoe Creek to merit authorization of some of the work under Stage II of the contract. If the bulldozing work outlined in Stage II is authorized, it will permit continuous employment of a bulldozer at a savings to the contract in both time and money. Further work by Toepfer is

essential to locate the trenches. This work should include the remainder of the mapping, plus sampling of the trenches.

In order to save on wordiness, the remainder of my specific recommendations are tabulated below:

432 hours of bulldozing to be used in the following trenches:

Arnold area - Finish trench #1 and #2, plus about nine additional trenches, to test the South Arnold, Montana, East Arnold, and Arnold Fraction claims.

Coppertung prospects - 2 or more trenches contingent upon further mapping.

Friday area - Central Friday prospect, 4 trenches; South Friday prospect, 4 trenches.

Tungstate area - Complete mapping before locating trenches, but tentatively 3 or more trenches will be needed.

Strategic-Shamrock area - Lower Tungstate area, 1 trench (?); Lower Shamrock prospect, 2 trenches; Southeast Shamrock island, 1 trench; Upper Shamrock prospect, 2 trenches; Strategic adit, no trenching; Southern tactite outcrops, 2 trenches; Northern tactite outcrops, 4 trenches; Twin shafts, 5 trenches.

North Flagstaff area - South Strategic pit, 2 or 3 trenches; North Flagstaff island, 1 trench; Flagstaff mine, 3 trenches; Chief prospect, 2 trenches.

It is recommended that the opening of caved adits suggested by Toepfer be allowed as follows:

Friday prospect	(2 man weeks)
South Friday prospect	(4 man weeks)
Lower tungstate prospect	(2 man weeks)
Flagstaff mine	(2 man weeks)

It is recommended that exploration drifting as suggested by Toepfer in the Arnold, East Arnold and Strategic adits not be authorized at this time, pending completion of the mapping, trenching and sampling suggested above. After the results of these recommended exploration jobs are studied, the best method and places for further exploration can be established. Similarly, diamond drilling is not recommend at this time.

In summary, the following work is recommended:

a) completion of mapping
b) cutting of approximately 40 trenches, with appropriate sampling and assaying
c) necessary work to reopen 4 caved adits for mapping and sampling

If the Field Team approves these recommendations, the operators should be so advised, and with their concurrence, the portions of Stage II discussed above should be authorized.

Enclosure

Distribution:
DMEA (4)
USBM (2)
Docket
Weeks

Docket No. DMEA 2973 (tungsten)
Contract Idm-E588

SNOWSHOE GULCH TUNGSTEN-COPPER DEPOSITS
POWELL COUNTY, MONTANA

(Report of engineering work done under the DMEA contract by Peter H. Toepfer during the year, 1953.)

My original report on the Snowshoe deposits covered only the Arnold Mine area, which was the only area mapped in detail. The engineering work this year consisted mainly of bringing this map up to date, and surveying and mapping five new areas. The following maps are to accompany this report:

ARNOLD MINE AREA
FRIDAY AREA
TUNGSTATE AREA
STRATEGIC-SHAMROCK AREA
NORTH FLAGSTAFF AREA
FLAGSTAFF MINE AREA

Bureau of Mines
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Except for the STRATEGIC-SHAMROCK AREA, further survey work will be required for the completion of these maps. However, these maps can be used for expanding the bulldozer trenching program into these other important areas. If three further maps are made, the known tungsten deposits will be completely covered.

Several geological observations were made during the course of the work, which should be added to my original report. My original report, written from survey and geological notes 10 years old, in general appears to be accurate. However, the report stresses the presence of quartz veins in the limestone east of the Arnold mine. Re-examination showed that while quartz is present in quantity, tactites are also present in quantity, and some scheelite was observed in all these "veins".

Actually, no true veins are present in the limestone and the contact zones. The ore occurs in tactite zones along the granite-limestone contact, and extending from that contact into the limestone. Most of the ore occurences are enclosed by unaltered limestone walls. Where ore does occur in the contact zones, it appears to be always directly under the unaltered limestone. In the maps, I have retained the use of the word, "vein", to describe the ore occurences between limestone walls. I have stressed this so that future trenching and underground exploration will not be confined solely to the contact zones.

During the course of the surveying, it was observed that where the granite-limestone contact is relatively flat, little or no tactite was formed, and no ore occurred. The ore occurences appear confined in places where the granite batholith has unusually steep sides. Future bulldozer trenching should be confined to areas where there is geological evidence of a steeply-dipping contact.

My original report stated that the average grade of the ore shipped by Porter Bros. Corp. was 0.533% WO_3. On the basis of samples taken this year, it appears that either Porter Bros. was stung, or else paid on the basis of poor recovery. My sample of ore remaining in the ore bin assayed 1.05% WO3, and a sample taken near the Porter stopes assayed 1.85% WO_3.

The remainder of this report will describe the various ore occurences shown on the maps, with recommendations regarding further exploration.

ARNOLD MINE AREA

Main Arnold Mine (Arnold Copper Patent)

The dumps were sampled, and the eastern part of the main dump was found to carry 0.35% WO_3. An estimated 250 tons of this grade is available, and suitable to milling concentration. A further tonnage may be concealed below the surface of the dumps.

One sample was taken from the vein outcrop, this sample assaying 1.85% WO_3 over a width of 3.6 feet.

Bulldozer trench #1 uncovered the wide tactite zone just north of the main portal, but disclosed no mineralization. Trench #2 has been almost completed, crossing the tactite zone near the portal of the eastern adit. Mineralization was disclosed, but no examination was made because of the snowfall which ended work for the season. This trench disclosed two tactite zones, one at the contact, and one far into the limestone in the bottom of the gulch. The tactite at the bottom of the gulch projects with the ore zone of the Arnold Mine and may prove to be its extension. Previous exploration was confined to the contact zone, and the extension of the Arnold deposit had never been looked for in this direction.

Further trenches are planned eastward along the granite-limestone contact, and have been laid out. It is expected that the trenching will show the granite to extend farther south and east than shown on the map.

A large scale map of the Arnold Mine was started, but as the weather was favorable to the more important general mapping, the lower level was not mapped, nor were any underground samples taken. This should be done next year. Should trench #2 disclose the extension of the Arnold "vein", underground drifting is to be recommended to pick up this vein beyond the point where it was lost.

South Arnold Mine (Arnold Copper and Montana Patents)

A roadway was bulldozed to the lower portal of the South Arnold, and from there to the portal of the Main Arnold Mine. This roadway, to be extended to the East Arnold, is for use in future drifting and diamond drill exploration to which water and supplies must be hauled.

In bulldozing the road, an unexpected outlier of limestone was crossed on the ridge east of Snowshoe Creek. Trenching failed to disclose mineralization at the contacts.

One of the upper dumps was sampled and assayed 0.25% WO_3. An estimated 50 tons are available for milling.

In only one place could the full thickness of the vein be sampled. This assayed 1.35% WO_3 for a width of 4.6 feet. Three bulldozer trenches are planned in this area.

The lower adit of the South Arnold is entirely in granite, and drifting eastward into the limestone will be required to pick up the vein. When the surface trenching is completed, the further information will allow the projection of the vein to the lower level to be determined, and very likely, drifting is to be recommended.

Montana Prospect (Montana Patent)

The caved upper adit showed a seam of high grade copper ore within a wide zone of soft limonite. Due to the caved condition, few observations could be made, and little scheelite was observed. The lower adit is barren. One bulldozer trench is planned to cross

the granite spur just south of the upper workings.

East Arnold Mine (Arnold Fraction Claim)

A strong tactite vein was mined for copper here. Scheelite is present rather spottily, and it is my belief that in depth, as the granite batholith is approached, commercial tungsten ore will be found. As erosion has not cut down this deposit, it is my belief that this is one of the best prospects in the district. This year, a tactite vein outcrop was observed 120 feet eastward from the present workings, which indicates this vein to be longer than shown on the map.

One bulldozer trench is planned west of the workings, but eastward, no bulldozing can be done because of a cliff along the course of the vein. This cliff, which is not indicated by the contouring on the map, will allow easy exploration in depth by either diamond drilling or cross-cutting. A relatively short adit would intercept the vein 100 feet below the presnt lower adit, and this cross-cut would yield reliable information. The pockety nature of the scheelite occurences would make the results of diamond drilling unreliable. This cross-cutting is to be recommended as soon as the bulldozer trench is completed and a large-scale map is prepared.

It is further recommended that the lower adit be cleaned out so that channel samples can be taken across the vein on the adit floor. This may take two men, one week.

Eastern Prospects (Arnold Copper Patent and Arnold Fraction Claim)

East of the East Arnold Mine, two veins similar to the East Arnold and an area of float copper ore indicative of a third vein, are found. Little work has ever been done here. If commercial tungsten ore is found in depth on the East Arnold vein, these veins can also be assumed to carry commercial ore in depth. Three bulldozer trenches are planned in this area.

Coppertung Prospects (Coppertung Claim)

Further mapping to outline the granite contacts is recommended. With this mapping completed, bulldozer trenching can be planned, and is to be recommended.

The prospect workings show wide tactite zones, but relatively little scheelite. Some copper of fair grade is found. Bulldozer trenching will be highly informative, as the old prospectors were handicapped by the deep soil cover and the heavy vegetation in this north-sloping area.

FRIDAY AREA

This map is uncompleted, and very likely a new map covering the MOLYTUNG AREA to the north will have to be made. Granite-limestone contacts will be found throughout the FRIDAY AREA map, and extend northwestward into the MOLYTUNG AREA.

Friday Prospect (Dozer Claim)

This adit is just beyond the area mapped, and was the original scheelite discovery in the district. This adit was driven into a granite-limestone contact. This adit was later found to have penetrated extremely high-grade scheelite ore. Later drilling

and blasting is said to have shown the scheelite to be merely a small pocket, but as the portal is caved, no observations can be made. The portal should be reopened so that an examination can be made. This may require two men, one week.

No ore remains on the dump, which testifies to the efficiency of rock hounds in removing samples. It is hard to believe that ore was actually found here, and but for my first-hand knowledge, I would not believe it.

Central Friday Prospect (Friday #1 Claim)

These workings are in dark tactites close to the granite contact. No copper nor scheelite was found. However, the tactite zone is of unusual width, certainly wider than 70 feet, and as the ore is generally found on the limestone contact or within the limestone, bulldozer trenching is to be recommended. Four trenches across the tactite zone is to be recommended in this area.

South Friday Prospect (Friday #1 Claim)

This appears to be one of the best prospects in the district. The test pit above the adit shows scheelite through a distance of at least 8 feet below the limestone. This ore occurence was insufficiently exposed for sampling. The adit is caved at the point where it enters the tactite zone. This adit should be reopened and may require the work of two men for two weeks, and possibly longer if further caved areas are encountered.

Chunks of high-grade scheelite ore were found all over the surface of the dump, which proved that the workings encountered ore. However, I sampled the minus 1-inch material from the surface of the dump and it assayed only 0.15% WO_3. It is evident that the prospector who formerly owned this claim gathered the high-grade chunks from the slopes of the dump, and dressed up the top of the dump. Regardless of this, it does show that high-grade ore was encountered in the workings. It is important that this adit be reopened.

It is further recommended that four bulldozer trenches be placed across the contact in this area.

The limestone in the vicinity of the Friday prospects is different from the uniformly pure limestone in the rest of the district. Beyond the mapped area north of the Central Friday, it approaches an argillite. Elsewhere, stratification is prominent. Much of the limestone is very pure, and recrystallized in coarse calcite crystals. It is expected that bedding will be important in the localization of the ore in this area, though bedding appears to be unimportant elsewhere in the district.

TUNGSTATE AREA

This map is incomplete, and until completed, cannot be used as a basis for exploration work. The surface workings of the Tungstate prospects were plotted from my surveys made 11 years ago. I believe these prospects were mapped and sampled by the Homestake Mining Co., and the maps are in the Bureau of Mines files in Spokane. If so, that information can be plotted on this map, and be used for recommending exploration. These prospects are said to be among the most important in the district.

Further mapping is required along the granite-limestone contact

east of Snowshoe Creek on the Portal Claim. I have not fully examined this contact, but my impression is that this is a flat-lying contact which has produced no mineralization nor even a tactite zone. North of the Portal Claim, the contact turns abruptly westward and this abrupt turn may be indicative of a steep-sided part of the batholith. It is my belief that the ore occurences are confined along the steep-sided portions of the batholith.

STRATEGIC-SHAMROCK AREA

Lower Tungstate Prospect (Tungstate Claim)

This adit was driven on the granite-limestone contact, and from the size of the dump, may be over 700 feet in length. Only slight showings of ore were found on the dump, and the adit is caved at the portal. This adit should be reopened so that the contact can be examined. When surveyed, this adit may prove to be an ideal location from which diamond drill exploration can explore the Tungstate prospects in depth.

It should take two men, two days to dig through the caved portal, though a week should be allowed for this work as further caving may be encountered.

Lower Shamrock Prospect (Shamrock Patent)

Some copper and scheelite is found scattered in these workings, but there appears to be no important ore showing uncovered. Nevertheless, it is recommended that two trenches be bulldozed across this small limestone "island" to see whether ore can be found. Likewise, one trench should be bulldozed across the limestone "island" at the south corner of the Shamrock, as this area has been unexplored.

Upper Shamrock Prospect (Shamrock Patent)

The sample taken in the test pit on the side of this small limestone "island" yielded a result of 5.15% WO_3 for a thickness of 2.2 feet. This ore is under a limestone capping in a contact zone. It is doubtful whether this ore zone is extensive, but nevertheless, trenches should be placed across this contact above and below this test pit to determine the extent of this high-grade ore.

Strategic Prospect (Strategic Claim)

The Strategic Adit was driven on a contact zone which is plainly indicated on the surface by a deep gulley. This gulley had its origin in the erosion which attacked the tactite zone more readily than the adjoining granite and limestone. As the contact zone dips steeply, a sharp and deep gulley has been formed.

The adit begins in detrital material and enters mineralized tactite enclosed in limestone walls. Due to timbering, few observations of the scheelite content can be made, and the copper content appears to have been mainly leached out. Near the end of the accessible part, the tactite zone appears to split. The left-hand split enters the wall of the drift and assayed 0.85% WO_3 for an estimated thickness of 4.5 feet. The main drift followed the right hand split of the tactite zone which appears to be wider. This drift is blocked by caving and old gob and timbering prevent any sampling. A newer drift was started in the limestone to the right of the main drift in an effort to drive around the caved area, but this drift was not

completed.

This prospect appears to be one of the best in the district. Bulldozer trenching cannot be done because of the deep gulley on the contact and the heavy surface detritus within the gulley. Diamond drilling is not advisable due to the soft and blocky nature of the weathered ore, and its spotty mineralization. Exploration would best be conducted by further drifting. It is my recommendation that 200 feet of drifting be conducted here. The adit will require retimbering as the old timbers are rotton. The new drift would follow the left-hand fork of the tactite zone, beginning at the point where the 0.85% WO_3 sample was taken. After drifting 70 feet, a crosscut to the right should be driven to determine the grade of ore on the right-hand fork of the tactite zone beyond the caved area. Further drifting would follow the best of the ore showings.

No samples were taken on the Strategic dump. Very likely, some milling grade ore is present on the dump but has been covered over by the later drifting in the barren limestone.

Southern Tactite Outcrops (Strategic Claim)

North of the Strategic adit, there is a large surface area of tactite, apparently flat-lying and of considerable thickness. While I have stated that tactite seldom forms where the contact is relatively flat, this thick tactite apparently had its origin in the steep-sided section of the batholith known to be present immediately to the west. This tactite zone consists of almost pure, dark red garnet. It is probably too soft for use as commercial garnet, though this possibility should be investigated.

A great deal of prospect drifting has been carried out, but little evidence that commercial copper ore was found. In examining the workings with the ultra-violet light, three zones of scheelite mineralization were observed. These zones do not appear to be persistant, the scheelite fading out in short distances. For the most part, the ore appears to be low grade. However, some tonnage should be available by low-cost surface mining. It is recommended that three bulldozer trenches be cut in the vicinity of the surface workings so that sampling can be done. Likewise, it is recommended that four further trenches be cut across the narrow tactite zones lying immediately north of this area.

East Strategic Shaft (Strategic Claim)

This shaft was sunk on a tactite "vein" enclosed in limestone walls. At the collar, the ore assayed 1.15% WO_3 through a thickness of 3.8 feet. At the bottom of the shaft, the incompletely exposed ore zone appears to be of lower grade, but as the foot wall is unexposed, this ore may be equally good.

Due to the cliff-like limestone exposures along the course of this tactite vein, bulldozer trenching to determine itscontinuation, cannot be done. Test pitting by hand would be advisable here, and four test pits should be put down. This should require the work of two men, one week.

Northern Tactite Outcrops (Strategic Claim)

Another large surface area of tactite lies immediately west of the East Strategic Shaft. Examination of a shallow roadway cut

crossing this tactite area showed scheelite particles to be scattered throughout the soil. Float copper ore of good grade was also observed. It is evident that at least one scheelite-bearing ore zone will be found here. It is advisable that four bulldozer trenches be cut across the tactite in this area.

Twin Shafts (Strategic Claim)

At the northeastern end of the Northern Tactite Outcrops, two short shafts have been sunk within the contact zone. In the western shaft, a 2.2-foot sample assayed 0.25% WO_3. In the eastern shaft, a 4.3-foot sample assayed 0.45% WO_3. The strike of the mineralization in the western shaft appears to follow the contact, while the strike in the eastern shaft follows fracturing at right angles to the contact.

It is not certain that these shafts have been placed on the best scheelite bearing zone. Two bulldozer trenches should cut this contact in the immediate vicinity of the shafts, and three further trenches should be located to cross the contact farther east. The test pit east of the shafts showed abundant scattered scheelite on its dump, and the contact zone in this direction is concealed by heavy detritus.

NORTH FLAGSTAFF AREA

South Strategic Pit (Strategic Claim)

A scheelite-bearing tactite zone, containing ore of good grade and width, has been opened south of the Strategic Adit. No samples nor geological observations were made previous to the snowfall which blocked further work. The tactite zone is enclosed within limestone walls. The dump appears to carry milling grade ore.

This ore zone occurs within a narrow limestone finger extending into the granite area. The limestone is deeply covered with hillside detritus which has hindered prospecting. It is recommended that bulldozer trenches be placed both north and south of the known tactite zone, and the southern trench be extended to follow along the lower granite-limestone contact as far south as the limestone extends. Should float tactite be found in the detrital material, the bulldozer should do further trenching within the limestone to determine its source.

North Flagstaff Limestone "Island". (Flagstaff Patent)

No float tactite nor indications of ore were observed at this limestone area. Neither has any prospecting been done here. However, as further bulldozing will be required high on the hillside at the Flagstaff Outcrops and at the Chief Prospect, and the bulldozer will have to cross this limestone area on its way to these locations, it will be advisable to trench where the roadway crosses the contacts, and check closely for tactite float where the roadway crosses the limestone area.

FLAGSTAFF ~~XXXX~~ MINE AREA

Flagstaff Mine (Flagstaff Patent)

The Flagstaff Mine has produced copper ore; one stope extending

125 feet to the surface. That this ore contained scheelite is evident as some of the dump rock contains this mineral. The snowfall prevented me from examining the upper workings with an ultra-violet light. The lower adit extends 240 feet, at which point it is blocked by caving. This level is said to be 500 feet in length. To the point at which it is caved, the adit is entirely in granite, but it is said that the adit enters limestone just beyond this point. These workings should be made accessible for examination, and may require the work of two men for one week.

The surface workings disclose two tactite zones. The one zone is the "vein" which has been stoped from the lower adit. Where the stope reaches the surface, its average width appears to be about 2.5 feet. Its lateral extent on the surface may not exceed 50 feet. Northward, the outcrop is concealed by detritus, and immediately south, the upper adit shows only barren shearing on the projection of the ore zone. This "vein" is approximately in the center of the limestone area.

The other tactite zone is on the western granite-limestone contact, and was reached at the face of the upper adit. A raise was driven to the surface on this tactite zone. The bottom of the raise is blocked by caved material so no observations could be made on the adit level. At the collar of the raise, the tactite zone appears to be about 5 feet wide and vertical. A slight amount of copper is present. No examination was made for scheelite.

It would be advisable to cut three bulldozer trenches across the limestone area above the Flagstaff workings. Any new discoveries here could immediately be developed in depth from the present workings.

Chief Prospect (Harmony Claim ?)

A short adit has been driven in the limestone south of the Flagstaff patent. This adit was intended to cut the granite-limestone contact, but was abandonned short of its goal. The contact it was to cut is well-defined by a deep gulley extending from the west and beyond the area mapped. One side of the gulley has steep limestone walls and the other side has somewhat less steep granite slopes. It is evident that the contact is close to being vertical, and the gulley follows a soft tactite zone. As such, it is definitely worthy of exploration, though no work has ever been done on the contact and no float can be observed.

It is doubtful whether bulldozer trenching can cut through the deep detritus to expose the contact zone, as the gully is quite narrow. Nevertheless, bulldozer trenching should be attempted in at least four places along the gulley. The bulldozer should be able to reach a depth of 15 feet, and further sinking could be done by hand methods. This contact is on the southern edge of the batholith, no further granite being observed to the south.

OTHER AREAS TO THE WEST.

Steep exposures of limestone along the granite contact indicate a steep-sided batholitic margin for probably 3,000 feet westward from Snowshoe Creek beyond the Chief Adit. Strangely, no prospect work has been done on the contact along this distance. I consider this area highly favorable.

Farther west, within the valley of the east fork of Basin Gulch, the batholitic contact appears to be flat-lying and probably unfavorable. a slight amount of prospecting has been done near the valley bottom, but without favorable results.

On the east side of the west fork of Basin Gulch, the Old Lady Smith mine was located, and is said to have produced a fair tonnage of high-grade copper ore. Examination of leached material on the dump showed that this ore contained high-grade scheelite. As I recall, my belief 10 years ago was that this ore occurred in a small isolated block of limestone sunk into the granite close to the main contact, and that this ore-body was completely mined out. However, it does show that scheelite mineralization extends along the contact in this direction, and further prospects may be found in this area. The area has not been thoroughly prospected, and all of the work done to date in the district has been in search of copper ore; the presence of scheelite being unknown.

Philipsburg, Montana.
Dec. 6, 1953.

Peter H. Toepfer, Mining Engineer.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Budget Bureau No. 42-R1036.4
Approval Expires 6-30-55
RECEIVED
JUL 9 - 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Supplemental Report to

Month of Oct. Nov. Dec., 1953 Docket No. DMEA 2973 Contract No. Idm - E 888
Operator's Name Boulder Ores, Inc., Minerals Tungsten
Address 511 N. Rodney St., Helena, Montana
Contract Amount, $ 33,600.00 Government Participation: 75 % Amount, $ 25,200.00

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:						WSM
Drilling						
Bulldozing					448.00	448.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	300.00		300.00	300.00	-0-	300.00
Supervision						
Technical Services	40.00	(1000.00) (Only 960.00 allowed.)	1000.00	40.00	960.00	1000.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
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					91.00	91.00
Payroll Taxes	9.00		9.00	4.50	-0-	4.50
Liability Insurance						
Unemp. Comp. on allowable labor.	8.10		8.10	8.10	-0-	8.10
(8) Contingencies (specify):						
Add'l Technical Services to Geological work. See Teepfer letter.	300.00		300.00	-0-		
TOTALS	657.10		657.10	352.60	1499.00	1851.60

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

Date April 24, 1954 Payee Boulder Ores, Inc.,

Per Marian R. Johnson Title President

*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:

$ 264.45

Signature MJP
(Authorized Certifying Officer)

Date 7/1/54 Vou. No. 1204
(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-588 in accordance with the terms of the contract.

Signature /S/ John D Bardill Title Metallurgist Date May 6-1954

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Thomas E Howard Title Mining Eng Date May 6-1954

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

(Rev.)
(2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

400

RECEIVED

Month of Oct. Nov. Dec., 1953 Docket No. DMEA 2973 Contract No. Idm-E 588
Operator's Name Boulder Ores, Inc., Minerals Tungsten
Address 511 N. Rodney St., Helena, Montana
Contract Amount, $ 35,600.00 Government Participation: 75 % Amount, $ 25,200.00

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 Contracts: ~~Short Form~~						WSM
Drilling						
Bulldozing 32 hrs.	$448.00	-	$448.00	448.00	—	448.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	686.00	-	686.00	—	—	—
Supervision						
Technical Services	1000.00	-	1000.00	960.00 J.A.R.		960.00 J.A.R.
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
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 15	91.00	-	91.00	91.00	—	91.00
Payroll Taxes	16.80	-	16.80	—	—	—
Liability Insurance	-	-	-			
Unemployment Comp.	15.12	-	15.12	—	—	—
(8) Contingencies (specify):						
Additional survey to geological work. (authorized)	440.00	-	440.00	—	— 0 —	— 0 —
TOTALS	2696.92	-	2696.92	1499.00	— 0 —	1499.00

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

Date Jan. 11, 1954 *Payee Boulder Ores, Inc.,

Per Florian A. Glinski Title President

*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:

$ 1124.25

Signature (Authorized Certifying Officer)

Date 4/1/54 Vou. No. 1124
(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. E588 in accordance with the terms of the contract.

Signature 1st John D Bardell Title Metallurgist Date 3/29/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1st Stephen W Zoldok Title Mining Engr. Date 3/29/54

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-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 195 3 Docket No. DMEA 2973 Contract No. Ida- 2588
Operator's Name Boulder Ores, Inc., (Florian L. Glinoski, Pres.) Minerals Tungsten
Address 511 N. Rodney St., Helena, Montana

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								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	$14.00 p/hr	$448.00	32	$448.00	32	$448.00	450	$6300.00
Test Pits								
Roads and Trails								
								TOTAL COSTS AUTHORIZED BY CONTRACT
TOTAL DISTRIBUTED COSTS		$448.00		$448.00				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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.

REMARKS: Trenching was done by a D-8 Dozer.

Date January 11, 1954 Operator Boulder Ores, Inc.,
Per Florian L. Glinoski Title President

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

Snowshoe Tungsten Mine
Powell County
Montana

RECEIVED
JAN 12 1954

DMEA Contract No.2973

Florian L. Glineski
511 N. Rodney St.,
Helena, Montana

NARRATIVE REPORT FOR OCTOBER, NOVEMBER, DECEMBER 1953.

After receipt of Contract Approval, Mr. Peter H. Toepfer was contacted to assimalate the technical data required for the project.

H e started on October 11, 1953. During the course of the work it was seen that he could not thoroughly do the job and cover the ground stipulated by the contract in the time allotted.

In discussing this with Mr. Bob Weeks and Mr. Jack Bardill, inasmuch as the weather was still good, with no snow, it was agreed that the further work needed to be done could be covered to the extent of the contingency fund allowed in the contract. Mr. Toepfer worked in the field until snowfall and then worked up his maps from his notes. A copy of his letter to me covering days worked is attached. His maps and report and assay results have already been submitted to the Bureau.

The building of a compressor house and tool shed was not started pendddg the examination of another location for the drifting other than that originally contemplated.

A total of 32 hours was used in bulldozing on the project in making cuts on the contact and a roadway to the South Arnold and Main Arnold entrances. Heavy snowfall made any further work by the dozer impractical. A D-8 dozer was used. Prior to starting work on the project, $550.00 was spent in building approximately a mile of new road to the area, eliminating two creek crossings and making a more uniform grade. This latter item was not called for in the contract.

Thirteen assays were made of samples given to Goodall Bros. The charge is $91.00.

Mr. Dean R. Akin was hired at the rate of $300.00 per month to rehabilitate and clean out the caved in portals of several of the tunnells and drifts on the Arnold and Montana claims. His wages came to a total of $560.00 for 56 days spent there. The Contract allowed for $300.00 of this expense.

Additional work of hand drilling in the Main Arnold tunnell which was not called for in the contract was contracted to Mr. William Eden for $126.00 as we desired this work to be done.

Respectfully submitted,

Florian L. Glineski

Florian L. Glineski

1 - 11 - 1954

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

1201 N. Division St.
Spokane 2, Washington
November 12, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, Boulder Ores, Inc., Snowshoe Gulch Property, Powell County, Montana, Docket No. DMEA 2973 (tungsten), Contract No. Idm-E588

The first routine inspection of this project was made on November 3, 1953, accompanied by R. A. Weeks, geologist, U. S. Geological Survey, and Peter Toepfer, engineer for the company.

The first bulldozer trenching under the DMEA contract was started that morning near the portal of the Arnold mine workings. Tentatively, four parallel trenches are planned there to definitely locate and sample the Arnold copper-scheelite-bearing vein. Another trench is planned at the extreme end of the Arnold claim.

Probably 2 trenches will be cut on the Arnold Fraction and 3 on the Montana claim.

A surface reconnaissance of outcrops and dumps in the Friday 1 and 2, Tungstate, Harmony and Flagstaff claims was made. Scheelite occurrences were found to be widespread on these claims and may warrant further investigation.

If the present fair weather continues, the bulldozer trenching, mapping,and sampling the mineralized occurrences on the claims covered by the contract may be completed under Stage I before winter halts the work. Rehabilitation of the Arnold mine workings and South Arnold winze has almost been completed.

John D. Bardill

John D. Bardill

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

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

October 20, 1953

Mr. Florian L. Glinski
511 North Rodney Street
Helena, Montana

Re: Docket No. DMEA-2973 (Tungsten)
Florian L. Glinski
Boulder Ores, Inc. (Assignee)
Arnold Copper mine
Powell County, Montana
Contract No. Idm-2588

Dear Mr. Glinski:

Enclosed is your copy of an assignment of the above-referenced contract by yourself to Boulder Ores, Inc., signed by the Administrator for the Government.

Sincerely yours,

James J. Quinlan
Acting Member, DMEA
Field Team, Region II

Enclosure

cc: Finance Officer w/encl.
USBM (2)
DMEA (2)
Weeks

400

cc 10-13

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge
H Johnson

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

OCT 13 1953

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Florian L. Glineski
Boulder Ores, Inc. (Assignee)
Arnold Copper mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Weissenborn:

We are enclosing the Operator's, Finance Officer's, and the Field Team's copies of an assignment of the above-referenced contract by Florian L. Glineski to Boulder Ores, Inc., signed by the Administrator for the Government.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines (JHB)

T. P. Thayer

Member, Geological Survey (JHB)

Copy to: Docket
Adm. Read. File
FT, Reg. 2
Code 400
Oper. Comm.
R. W. Geehan, USBM
R. P. Thayer, USGS

R.C.G. 10-13-53

AGREEMENT AND TRANSFER OF INTEREST

THIS AGREEMENT, made and entered into this 26 day of August, 1953, by and between F. L. GLINESKI and ETHEL M. GLINESKI, his wife of Helena, Montana, FIRST PARTIES, and BOULDER ORES INC., a Montana corporation, SECOND PARTY, WITNESSETH:

That for and in consideration of the mutual covenants hereinafter contained, IT IS AGREED as follows:

Said second parties do hereby sell, transfer and assign all of their right, title and interest in and to the following described real estate and mining claims situated, lying and being in the SNOW SHOE unorganized mining district, County of Powell, State of Montana, and particularly described as follows, to-wit:

Strategic Lode, recorded book 5, Page 146;
Harmony Lode, recorded Book 8, Page 191;
Tungstate Lode, recorded Book 8, Page 147;
Friday No. 1 Lode, recorded Book 8, Page 100;
Dozer Lode, recorded Book 8, Page 634;
Copper Tung Lode, recorded Book 8, Page 151;
Molly Tung Lode, Recorded Book 8, Page 159;
Badger Placer, Recorded Book 38, Page 439;
Snow Shoe Placer, Recorded Book 38, Page 438;
Golden Rod Placer, Recorded Book 38, Page 438;
All of the above located in Sections Twenty-one (21) Twenty-Seven (27) and Twenty-Eight (28), Township Eleven (11), North Range Seven (7) West, Powell County, State of Montana, all of which claims are unpatented.

Also the following patented claims being described as follows:

Flagstaff Quartz Lode Claim, Survey No. 10025;
Copper Queen Quartz Lode Claim, Survey No. 10025;
The Montana Quartz Lode Claim, Survey No. 10026;
The Shamrock Quartz Lode Claim, Survey No. 10027;
All of which are located in Sections Twenty-seven (27) and twenty-eight (28) of Township Eleven (11), North Range Seven (7) West, Powell County, Montana.

Also the following patented claim located in Powell County, Montana, and described as follows:

The Arnold Quartz Lode Survey No. 941 in Section Twenty-seven (27), Township Eleven (11), North Range Seven (7) West.

Also the Snowbird Patented Lode Claim, Survey No. 8526 in Section twenty-seven (27), Township Eleven (11) North Range Seven (7) West.

Also the following unpatented mining claims as follows: Arnold Fraction, and Portal Fraction Quartz Lode Claims, all in Section Twenty-seven (27), Township eleven (11), North Range seven (7) West.

LEO J. KOTTAS
ATTORNEY AT LAW
SUITE 14-16
UNION BANK BLDG.
HELENA, MONTANA
TELEPHONE 380-W

Said Second Party agrees to make the following payments to the following persons for and on behalf of said First Parties, as follows, to-wit:

Second Party agrees to pay to Peter Toepher the sum of $200.00 on or before Oct. 15, 1953.

To C. N. Bielenberg of Deer Lodge, Montana, the sum of $5000.00 on or before Jan. 10, 1954, as First Parties claim interest in said claims heretofore first above described and sold to Second Party; That is the claims first described in this instrument;

To Ernest Eklesdafer of Missoula, Montana, individually and as attorney in fact for Gayle Burleson of Grand Rapids, Michigan, the sum of $3,000.00 on or before Jan. 10, 1954;

To Ed C. Hughes of Boulder, Montana, the sum of $3,000.00 on or before Jan. 10, 1954, further said Second Party agrees to deliver to First Parti's its promissory note in the amount of $4,885.00 payable as follows:

The sum of $1500.00 on January 10, 1954;
The sum of $1650.00 on Feb. 10, 1954;
The sum of $1585.00 payable on March 10, 1954; and the sum of $150.00 payanle on April 10, 1954.

That in addition to the above said Second Party agrees to issue and deliver to First Parties 60,000 shares of its capital stock:

Said First Parties sell and assign the above described property to Second Party, together with all and singular the rights and appurtenances thereto in anywise belonging, unto said Second Party and its assigns forever, and said First Parties do hereby bind themselves, their heirs, executors and administrators to warrant and forever defend all and singular the said property unto the said Party of the Second Part and itd assigns against every person whosoever lawfully claiming or to claim the same or and pat thereof.

IN WITNESS WHEREOF the parties have hereunto set their hands and seals in this instrument first above written.

/s/ E. L. GLINESKI

/s/ Ethel M.Glineski
First Parties
BOULDER ORES INC.
a Montana Corporation
By JOHN S. STOHR
President

(SEAL)
ATTEST:

A. W. BERGE
Secretary

LEO J. KOTTAS
ATTORNEY AT LAW
SUITE 14-16
UNION BANK BLDG.
HELENA, MONTANA
TELEPHONE 380-W

State of Montana,)
: ss.
County of Lewis and Clark.)

On this 26 day of August, 1953, before me, the undersigned Notary Public in and for the State of Montana, personally appeared F. L. GLINESKI and ETHEL M. GLINESKI, his wife, known to me to be the persons whose names are subscribed to the aithin instrument and acknowledged to me that they executed the same, the wife was examined separately.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

(Seal)

/s/ Leo J. Kottas
Notary Public for the State of Montana
Residing at Helena, Montana.
My commission expires Feb. 7, 1956

State of Montana,)
: ss.
County of Lewis and Clark.)

On this 26 day of August, 1953, before me, the undersigned, a Notary Public in and for the State of Montana, personally appeared JOHN S. STOHR and A. W. BERGE, known to me to be the President and Secretary of the corporation which executed the within instrument and acknowledged to me that such corporation executed the sa me, and that they executed said instrument as such officers for and on behalf of the Boulder Ores, Inc.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

(SEAL)

/s/ LEO J. KOTTAS
Notary Public for the State of Montana
Residing at Helena, Montana
My commiss ion expires Feb.7,1956

LEO J. KOTTAS
ATTORNEY AT LAW
SUITE 14-16
UNION BANK BLDG.
HELENA, MONTANA
TELEPHONE 380-W

400

FILE COPY
SURNAME: 9-B

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

Rutledge
Martin
Hedges
Thayer
Griffiths
Jameson

OCT 13 1953

Hon. Mike Mansfield
United States Senate
Washington 25, D. C.

My dear Senator Mansfield:

Reference is made to your inquiry by letter of October 8, 1953, in behalf of Lloyd J. Skedd, Helena, Montana, for information concerning a contract between Boulder Ores, Inc., and the Government acting through the Defense Minerals Exploration Administration.

A contract for exploration at the Arnold Copper mine, our Docket No. DMEA 2973 - Tungsten, was executed with F. L. Glineski, Helena, Montana, on August 24, 1953, covering the Arnold Copper Mine, Powell County, Montana. On August 26, 1953, Mr. Glineski transferred his interest in the property covered by the contract to Boulder Ores, Inc.

Mr. Glineski executed an assignment of the DMEA contract to Boulder Ores, Inc., on September 21, 1953, and this Administration recently received copies of the corresponding "Transfer of Interest" and "Assignment of Exploration Project Contract." I am pleased to report that the transfer from Florian L. Glineski of Exploration Contract No. Idm-E588 to Boulder Ores, Inc., has now been approved by the Government.

Strictly speaking, the Government does not advance funds under our contracts; in practice, the operator is reimbursed each month for his authorized expenditures during the previous month as shown by his vouchers.

Sincerely yours,

C. O. Mittendorf

Administrator

Copy to: Docket
FT, Reg. 2
Code 400
Adm. Read. File
R. W. Geehan, USBM
T. P. Thayer, USGS

FARutledge/ls
10/12/53

F. C. G.
10-13-53

ALEXANDER WILEY, WIS., CHAIRMAN
H. ALEXANDER SMITH, N. J.
BOURKE B. HICKENLOOPER, IOWA
CHARLES W. TOBEY, N. H.
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WILLIAM LANGER, N. DAK.
HOMER FERGUSON, MICH.
WILLIAM F. KNOWLAND, CALIF.
WALTER F. GEO[illegible]GA.
THEODORE FRANCIS GREEN, R. I.
J. W. FULBRIGHT, ARK.
JOHN J. SPARKMAN, ALA.
GUY M. GILLETTE, IOWA
HUBERT H. HUMPHREY, MINN.
MIKE MANSFIELD, MONT.

FRANCIS O. WILCOX, CHIEF OF STAFF
JULIUS N. CAHN, COUNSEL

United States Senate

COMMITTEE ON FOREIGN RELATIONS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 9 1953

October 8, 1953

C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

I have received the following telegram from Mr. Lloyd J. Skedd, of Helena, Montana:

DMEA-2973

"Boulder Ores, Inc. claim contract with Defense Minerals Exploration Administration. Can you advise regarding same and the prospects of Government advancing funds for such work."

I would appreciate your looking into this matter and advising me on the same at your earliest convenience.

Thanking you and with best personal wishes, I am

Sincerely yours,

Mike Mansfield
Rheem

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

September 28, 1953

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

Re: Docket No. DMEA-2973 (Tungsten)
Florian L. Glineski
Snoeshoe Gulch property
Powell County, Montana
Contract Idm-E588

Dear Mr. Selfridge:

Reference is made to our letter of September 17, 1953, returning the original and two signed copies of the subject contract to the Washington office. In that letter we stated that Mr. Glineski had transferred his interest to a corporation and that we had requested officials of that corporation to obtain copies of the instrument of assignment.

Enclosed are six copies of an Agreement and Transfer of Interest and six copies of an Assignment of Exploration Project Contract. These instruments assign the property interests and the contract from Florian L. Glineski to Boulder Ores Inc.

It will be noted that the Agreement and Transfer of Interest are copies and do not have signatures as such; however, in the letter forwarding the instrument to this office, Mr. John S. Stohr, president of Boulder Ores Inc., certifies that these are true and correct copies of the original.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM (2)
Weeks

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
Sc. 117 Howard Street
Spokane 1, Washington

September 23, 1953

Boulder Ores, Inc.
511 North Rodney
Helena, Montana

Re: Docket No. DMEA-2973 (Durston)
Florian L. Olinski
Snowshoe Gulch property
Powell County, Montana
Contract 10-158

Attention: John B. Stohr

Gentlemen:

This will acknowledge receipt of five copies of an assignment and acceptance of DMEA contract.

In a conversation with Mr. Stohr held in Spokane some time ago, it was called to his attention that before we could consider the contract for reassignment, we would need six copies of the assignment of contract, inasmuch as all six copies would have to be signed by the Administrator, DMEA. Mr. Stohr was also advised that we would need copies of the instrument assigning Mr. Olinski's interest to the Corporation.

As we have not received the instrument assigning Mr. Olinski's interest to the Corporation, we will retain the above-mentioned copies of the assignment of the contract at this office until the referenced instrument is received. Upon its receipt, we will transmit both the instrument and the assignment of contract to the DMEA, Washington, D. C., for their consideration.

These matters are again called to your attention as we will be unable to participate in exploration costs until the contract has been officially transferred to Boulder Ores, Inc.

Very truly yours,

Thorvin Hillsgaard
Acting Executive Officer
DMEA Field Team, Region [illegible]

cc: (2)
(2)
[illegible]

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

case 9-23

September 17, 1953

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

Re: Docket No. DMEA-2973 (Tungsten)
Florian L. Glineski
Snowshoe Gulch property
Powell County, Montana
Contract Idm-E588

Dear Mr. Selfridge:

Enclosed are the original and two copies of the subject contract. One copy has been retained for the files of this office, one for the Operator, and one for the Certifying Officer.

We have recently learned that Mr. Glineski has transferred his interests in the Snowshoe Gulch property to a corporation which intends to do the project work. We have contacted officials of this corporation and instructed them to give us copies of the instrument assigning Mr. Glineski's interest to the corporation and also copies of the assignment of the contract.

When these documents are received, we shall immediately forward them to you for consideration.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
Acting Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM(2)
Weeks

Docket

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
SEP 8 1953

1201 N. Division St.
Spokane 2, Washington
September 1, 1953

WSM

Mr. Florian L. Glineski
511 North Rodney
Helena, Montana

Subject: Docket No. DMEA 2973 - tungsten
Arnold Copper Mine
Powell County, Montana
Contract No. Idm-E588

Dear Mr. Glineski:

Enclosed are the original and five copies of an exploration project contract, signed by C. O. Mittendorf, Administrator, DMEA.

If the terms and conditions of this contract are satisfactory to you please sign all copies, retain the copy marked "Operator's Copy" for your files, and return all the remaining copies to this office.

At the time of signing the contracts please insert in the blank space provided in Article 3 of the contract form the number of days within which you will commence work.

If any part of the contract does not meet with your approval please return all copies with your comments.

Sincerely yours,

M. E. Volin
Member, DMEA Field Team
Region II

Enclosure

cc: DMEA, Wash. (2)
USGS (2)

Copy retained 400

Docket

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
Bureau of Mines
SEP 3 - 1953

September 1, 1953

WSM
HCB
DCG 9/9/53

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

Re: Docket No. DMEA-2973 (Tungsten)
Florian L. Glineski
Arnold Mine
Powell County, Montana

Dear Mr. Selfridge:

Enclosed please find four copies of an amendment to the Mining Lease & Option, dated October 8, 1952, which has been submitted to this office by Mr. Glineski in response to a letter from Mr. W. S. Martin dated August 7, 1953.

It is assumed that the enclosed amendment is the same as that amendment requested in the letter forwarding the contract to the field for signature. On this assumption, we have sent the contract to Mr. Glineski for signature.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: USBM (2)
Weeks

RECEIVED
SEP 9 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Missoula, Montana

June 15th. 1953

Mr. F.L. Glineski.

I, the undersigned E.C.Ecklesdafer do hereby certify that the Name Copper Quieen Should of been inserted along with the name Flagstaff as part of the Patented Mining property sold and/or leased to F.L. Glineski, as dated on that certain lease and option dated ---- October 8th, 1952. The Copper Quieen Being a part of the Flagstaff patent # 10025 Patent survey.

Signed E.C.Ecklesdafer

Both signatures Wittnessed by

Signed Gayle B. Carlson by E.C. Ecklesdafer Attorney in Fact.

Dated June 15th, 1953

RECEIVED
AUG 17 1953
U. S. G. S.
SPOKANE, WASH.

Missoula, Montana

June 15th, 1953

Mr. F.L. Glineski.

I, the undersigned E.C.Ecklesdafer do hereby certify that the Name Copper Quieen Should of been inserted along with the name Flagstaff as part of the Patented Mining property sold and/or leased to F.L. Glineski, as dated on that certain lease and option dated ---- October 8th, 1952. The Copper Quieen Being a part of the Flagstaff patent # 10025 Patent survey.

Signed E.C.Ecklesdafer

Both signatures Witnessed by

Signed Gayle B.Darlesen by E.C. Ecklesdafer Attorney in Fact.

Dated June 15th, 1953

RECEIVED
AUG 17 1953
U.S.G.S.
SPOKANE, WASH.

FILE COPY
SURNAME:

400

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

AUG 2 4 1953

Rutledge
Martin
Champlin
Guyon
Selfridge

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten
Florian L. Olinoski
Arnold Copper mine (Flagstaff mine
and Old Lady Smith mine)
Powell County, Montana

Dear Mr. Weissenborn:

We are enclosing the original and five copies of a proposed contract, for an exploration program by the above referenced applicant, signed by the Administrator for the Government, together with Annex I (1 page), Annex II (1 page), Exhibit "A" (4 pages), three maps, and three Owner's Consent to Lien.

If the terms and conditions of this proposed contract are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. However, before execution of the proposed contract, the Lease and Option dated October 8, 1952, must be amended retroactively to include the Copper Queen claim.

If any part of this proposed contract does not have either your approval or that of the Operator and cannot be amended within your delegated authority, the original and all copies of the proposed contract are to be returned to this office, together with the proposed changes for consideration.

Please note that the following changes have been made in the proposed contract as originally outlined:

1. Unit price for diamond drilling was reduced from $9.00 a foot to $8.00 a foot and includes prorated share of supervision.

2. Unit price for underground work was increased from $35.00 a foot to $37.50 a foot and includes prorated share of supervision.

3. Separate item for supervision was deleted.

These and other minor changes have decreased the amount of the proposed contract from $35,350.00 to $33,600.00.

Under Article 3, the starting date has been left blank and is to be filled in when the proposed contract is signed by the Operator.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

Enclosures

APPROVED:

C. H. Johnson
Member, Bureau of Mines

D. M. Larrabee
Member, Geological Survey

FARUTLEDGE:FOC
8-20-53

cc: Docket
Code 400
FT. Reg. 2
Operating Comm.
Adm. Reading File
R. W. Geehan, USBM
Mary Miller, USGS

HHK
8-24-53

400

FILE COPY
SURNAME:

Rutledge
Martin

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

AUG 2 4 1953

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My dear Mr. Metcalf:

On July 9, 1953, Mr. Merrill W. Englund in your office telephoned to our Iron and Ferro-Alloys Division to learn what action we had taken with regard to the application of Mr. Florian L. Glineski, Helena, Montana, for aid in exploring for tungsten at the Arnold Copper mine, our Docket No. DMRA 2973.

By letter of the same date, you were advised that a report covering a field term examination of the Arnold Copper mine had been received in Washington and was being reviewed. Subsequent processing of the application was delayed while we obtained legal documents which were required from Mr. Glineski.

We are pleased to report that a proposed contract is now being transmitted to Mr. Glineski for execution.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

CC: DOCKET
ADM. HEAD. FILE
CODE 400
FIELD TEAM, REG. 2
MARY MILLER, USGS
R. V. GEHMAN, USBM

FARutledge/ls
8/21/53

8-24-53

FILE COPY
SURNAME:

140

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

MS in RR August 19, 1953

Bartin
Hofflund

Memorandum

To: The Administrator
Through: W. S. Martin
From: Chief Counsel
Subject: Florian L. Glineski - Docket No. DMEA-2973

There is attached, in satisfactory legal form for execution, a contract covering the above-described project, subject to the Lease and Option dated October 8, 1952, being amended retroactively to include the Copper Queen claim.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

HCRubin/ema

cc: Mails & Files
W. S. Martin
J. L. Hofflund
H. C. Rubin
Chron.

HHR 8-20-53

400

FILE COPY
SURNAME:

Rutledge
Martin

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

August 12, 1953

MEMORANDUM

To: Chief Counsel, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Review and preparation of exploration project
Docket No. DMEA 2973 - Tungsten
Florian L. Glineski
Arnold Copper mine (Flagstaff mine and Old Lady Smith mine)
Powell County, Montana

Transmitted herewith is the rough draft of a proposed contract for your use in preparing the contract in final form.

Please note that although the Copper Queen claim is not now included in the Mining Lease and Option of October 8, 1952, we advised the applicant that this must be taken care of and suggested that an amendment adding said claim to those listed in the above-referenced lease be furnished to Mr. A. E. Weissenborn.

Copies of Fig. 1 - Claims, Snowshoe Gulch, Powell County, Montana, F. L. Glineski, are being prepared and will be forwarded to you when received.

Copies of the other two maps referred to in our draft are enclosed herewith for attachment to the final draft of the proposed contract.

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

Attachments

FARutledge/ls

Copy to: Docket
Code 400

FILE COPY
SURNAME:

400

Rutledge
Martin
AEKane
Britzius
Hechtendorf

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

AUG 7 1953

Mr. Florian L. Glineski
511 North Rodney
Helena, Montana

Re: Docket No. DMEA 2973 - Tungsten
Florian L. Glineski
Arnold Copper mine (Flagstaff mine and Old Lady Smith mine)
Powell County, Montana

Dear Mr. Glineski:

This will acknowledge receipt of your letter of July 29, 1953, transmitting the additional Owner's Consent to Lien forms required in processing the above-docketed application for exploration assistance.

In further review of your application, it was noted that the Copper Queen Lode claim, U. S. Survey No. 10025, is not included in the Mining Lease and Option of October 8, 1952, from Gayle Burleson, Ernest Ecklesdafer, and Ed. C. Hughes to Florian L. Glineski. To expedite the processing of the application, it is suggested that an amendment adding the Copper Queen Lode claim to the referenced lease be executed retroactive to the date of the lease. Four copies of said amendment should be transmitted to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, South 157 Howard Street, Spokane 4, Washington, for use by the Government.

Sincerely yours,

SIGNED

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

FARutledge:foc
8-6-53
cc: Docket
Code 400
FT. Reg. 2
Adm. Reading File
R. W. Geehan, USBM
D. M. Lemmon, USGS

R.C.S.
8-7-53

Docket

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 31 1953

MEMORANDUM July 30, 1953

TO: W. S. Martin, DMEA

FROM: D. M. Lemmon, USGS

SUBJECT: Exploration application DMEA 2973
Florian L. Glineski Tungsten
Arnold Copper mine
Secs. 27 and 28, T. 11 N., R. 7 W.
Snowshoe mining district
Powell County, Montana

A report by R. A. Weeks, Geological Survey, and E. W. Buel, Bureau of Mines, recommends a 2-stage exploration project costing $35,350. Stage 1 ($4,600) involves bulldozer trenching, sampling and geologic mapping. Stage 2 ($30,750) includes additional trenching and sampling, 1,000 feet of core drilling, 300 feet of drifts and cross cuts and 100 feet of raise.

The work will be done in search of scheelite and copper minerals in small irregular tactite bodies. Exposures are poor and there are no ore reserves.

I concur with the Field Team's favorable recommendation. I suggest that decision to approve Stage 2 be made only after careful consideration of the chances of developing commercial ore. Bodies of a few hundred or even a few thousand tons of 0.5 percent WO_3, with difficult metallurgy because of copper contamination, may not be commercial at this locality.

Dwight M. Lemmon

Dwight M. Lemmon

cc: Mr. Martin (3)

Copy retained 400

For return when contract executed

J. A. R.

Deer Lodge
Jan - 10 - 53

Rec'd from J. H. Glinski
$50.00 as down payment
on sale of the Snow
Bird Pat Claim on
Snow Shoe Cr
Powell Co Mont
Bal of $450.00 to be
paid on or before
June 1st 1953.

C M Bielenberg

Sur # 8526

Mr. [illegible]
This is the original (print from
you recorded) that your letter of
you had no copy of - Item (5). We
have since purchased and paid
for this claim and received the
deed for it - copies attached. Please
have surveyed for
Not recorded & must be returned

Return to
J. H. Glinski
511 N. Rodney St
Helena, Mont.

Docket

SNOWSHOE TUNGSTEN MINES
511 N. RODNEY ST.
HELENA, MONTANA

(140)

JULY 29, 1953

MR. C. O. MITHENDORF, ADMINISTRATOR
U. S. DEPT. OF INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

RE. DOCKET NO. DMEA - 2973 (TUNGSTEN AND COPPER)
POWELL COUNTY, MONTANA

DEAR MR. MITHENDORF,

IN ANSWER TO YOUR LETTER OF JULY 21, 1953 REQUESTING ADDITIONAL OWNERS CONSENT OF LIEN SIGNATURES FOR GAYLE B. BURLESON (MR. E. C. ECKLESDAFERS SISTER), ALSO AM AMENDING STATEMENT AUTHORIZING EXPLORATION OR MINING FROM MR. CLAUDE N. BIELENBERG TO MY OPTION TO PURCHASE CONTRACT WITH HIM DATED JANUARY 14, 1953 AND ALSO WITH REGARD TO AN OPTION CONTRACT TO PURCHASE THE SNOWBIRD PAT. SURVEY #8526.

I CAN READILY RECOGNIZE THE NECESSITY OF YOUR REQUEST FOR THESE PAPERS AND AM SORRY THAT I OVERLOOKED TAKING CARE OF THEM IN THE BEGINNING. I HAD TO MAKE A 400 MILE TRIP FOR ITEMS 1 AND 2 AND WAS INDEED FORTUNATE TO CATCH BOTH MR. ECKLESDAFER AND MR. BIELENBERG AT THEIR HOMES.

WITH REGARD TO ITEM #1, MR. ECKLESDAFER HAS THE POWER OF ATTORNEY TO SIGN FOR HIS SISTER, GAYLE B. BURLESON, WHO LIVES IN THE SOUTH. I AM ENCLOSING THE SEVEN COPIES OF OWNERS CONSENT TO LIEN, SIGNED BY HIM FOR HER.

WITH REGARD TO ITEM #2, MR. CLAUDE N. BIELENBERG KINDLY CONSENTED TO MAKE UP AND SIGN AN AMENDING STATEMENT GRANTING ME THE RIGHT TO PROSPECT AND EXPLORE FOR AND MINE ORE ON THE 7 UNPATENTED CLAIMS I AM PURCHASING FROM HIM. HIS THOUGHT WAS THAT THE CLAUSE "WITH TEN PERCENT ROYALTY ON NET SMELTER RETURNS ON ALL MINERAL TAKEN FROM PROPERTY" AUTOMATICALLY GRANTED THIS RIGHT - HOWEVER, THE ENCLOSED AMENDMENT SHEET TO HIS CONTRACT OF JANUARY 14, 1953 NOW DEFINITELY MAKES THIS CLEAR.

IN REFERENCE TO ITEM #3, THE SNOWBIRD PAT. #8526, I HAVE, SINCE APPLICATION FOR THE LOAN, FINISHED PAYING FOR THIS CLAIM (ON JUNE 1ST) AND AM ENCLOSING SEVEN PRINTS OF A QUIT CLAIM DEED FOR IT SIGNED BY DONALD D. BIELENBERG, WHO HAD PREPARED THE DEED PRIOR TO HIS DEPARTURE FOR GREENLAND. HE IS THE SON OF CLAUDE N. BIELENBERG.

I DO HOPE SINCERELY, THAT EVERYTHING ELSE IS IN ORDER AND THAT APPROVAL ON THE LOAN WILL BE FORTHCOMING VERY SHORTLY. I WENT ALL OUT TO TRY AND GET AN APPROVAL AS QUICKLY AS POSSIBLE AND THOUGHT THAT IF I HIRED THE VERY REPUTABLE ENGINEER THAT I DID, (AN EXPENSE WHICH

I COULD ILL AFFORD) TO MAKE UP A REPORT ON THE AREA, DO THE MAPPING AND HELP ME WITH THE APPLICATION, THEREBY SAVING THE BUREAU THIS EXPENSE AND ASSOCIATE HEADACHES, THAT THERE WOULD BE NO DELAYS. THE APPLICATION AND ALL PERTINENT DATA WAS TURNED IN MARCH 18, 1953 AS COMPLETE AS WE KNEW HOW TO MAKE IT AND I RECEIVED SOME VERY NICE COMPLIMENTS ON THE WAY IT HAD BEEN MADE UP FROM THE SPOKANE OFFICE. I HAD HOPED TO START WORK BY JUNE 1ST AND TAKE EVERY ADVANTAGE OF SUMMER WEATHER AS THE MINE IS IN A MOUNTAINOUS AND HEAVY SNOW AREA, AND MADE COMMITTMENTS TO MEN WHOM I KNEW WERE GOOD MINERS HOPING TO SECURE THEM FOR THE EXPLORATION WORK. HOWEVER THEY WERE FORCED TO SECURE WORK ELSEWHERE. I DO HOPE THAT I DON'T ALSO LOSE THE DOZING CONTRACTOR, WHO IS EXCEPTIONAL, AND WHO HAS BEEN STANDING BY READY TO BEGIN AT THE FIRST SIGN THAT THE LOAN HAS BEEN APPROVED.

FROM ALL I CAN GATHER IT APPEARS THAT WE HAVE A VERY FINE PROSPECT FOR HIGH GRADE SHEELITE ON OUR GROUND. OF 8 ENGINEERS (4 GOVT. - 4 CIVILIAN) WHO HAVE EXAMINED THIS PROPERTY, ALL HAVE STATED THEY THOUGHT IT 'TOPS' AND THE FINEST DEPOSIT OF SHEELITE THEY HAD SEEN.

SINCE APPLICATION (MARCH 18TH) SUBSTANTIAL PAYMENTS HAVE BEEN MADE TO ALL THREE FORMER OWNERS OF THE CLAIMS LEAVING AS A BALANCE A PAYMENT OF $3,000 TO BE PAID EACH TO ED HUGHES AND E. C. ECKLESDAFER AND $5,000 TO CLAUDE N. BIELENBERG, ALL ON JANUARY 10, 1954 - TOTALING $11,000 WHICH WHEN PAID WILL GIVE ME COMPLETE OWNERSHIP OF ALL 15 CLAIMS LISTED IN THE APPLICATION PAPERS PLUS THREE MORE PLACER CLAIMS ALONG THE CREEK BED ASSURING A GOOD MILL LOCATION.

SO PLEASE BE ASSURED MR. MITHENDORF, THAT WHATEVER YOUR DEPARTMENT MIGHT DO TO HASTEN APPROVAL OF THE LOAN, WILL GAIN OUR DEEPEST APPRECIATION. THANKING YOU, I AM -

SINCERELY YOURS

F. L. Glineski

F. L. GLINESKI

FILE COPY
SURNAME:

UNITED STATES 140
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Rewritten by

Rutledge
Martin
Martin
Martin

JUL 21 1953

Mr. Florian L. Glineski
511 North Rodney
Helena, Montana

Re: Docket No. DMEA-2973
(Tungsten and Copper)
Powell County, Montana

Dear Mr. Glineski:

In reviewing your application for exploration assistance under the subject docket, it was noted that the "Mining Lease and Option" dated October 8, 1952, was between Gayle Burleson, Ernest Ecklesdafer, and Ed C. Hughes, parties of the first part, and Florian L. Glineski, party of the second part. This instrument was signed by Ernest Ecklesdafer, Ed C. Hughes, and Gayle Burleson by Ernest Ecklesdafer, ~~her~~ Attorney-in-Fact. However, the Owner's Consent to Lien covering this property was signed only by Ernest Ecklesdafer and Ed C. Hughes. Therefore, we are returning the Owner's Consent to Lien for the signature of Gayle Burleson or someone authorized to sign for ~~him~~ Gayle Burleson. Of course, if the property interest of Gayle Burleson has been transferred to Ernest Ecklesdafer or Ed C. Hughes, or both, prior to March 18, 1953, the date when the Owner's Consent to Lien was executed, then the Owner's Consent to Lien is proper as executed, but in that case, we require a copy of the instrument effecting such transfer.

It was also noted that the Option Contract executed January 14, 1952, by Claude N. Bielenberg does not authorize any exploration or mining. Therefore, you do not have a sufficient interest in the property covered by the Option Contract for the purposes of an exploration project. Accordingly, we require that you furnish us with a copy of a lease or some other agreement (such as amendment of your Option Contract) which grants you an interest in this property for a period of 10 years for the purposes of the Exploration Project Contract.

Finally, it was noted that an Owner's Consent to Lien signed by Donald D. Bielenberg, was submitted to cover

one claim held under an Option Contract. We do not have a copy of this Option Contract. If this Option Contract does not authorize exploration and mining, then the comments in the previous paragraph also apply to this claim.

As soon as we receive the evidence required, as outlined above, we shall continue processing your application.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

FARutledge/HCRubin/ema
7-17-53
cc: Mails & Files
Adm. R. File
C. O. Mittendorf
W. S. Martin
Field Team Reg. II (2)
Op. Comm.
D. M. Lemmon, USGS
R. W. GEEHAN, USBM
H. C. Rubin
J. L. Hofflund
Chron.
Pending

FILE COPY
SURNAME:

Martin

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

JUL 9 1953

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My dear Mr. Metcalf:

Reference is made to Mr. Merrill W. Englund's telephone call of July 9 to our Iron and Ferro-Alloys Division to inquire about the status of the application of Mr. Florian L. Glineski for exploration assistance for tungsten at the Arnold Copper Mine, Powell County, Montana, our Docket No. DMEA-2973.

A report covering our Field Team's examination of the above-mentioned property is now being reviewed here in Washington and the applicant will be advised of our conclusions at an early date.

Because of your indicated interest in the matter, we will advise you at the same time that we inform Mr. Glineski what action we can take regarding his project.

Sincerely yours,

C. O. Mittendorf

Administrator

WSMartin/ls
7/9/53

Copy to: Field Team, Region 2
Docket
Code 400
Adm. Read. File
D. M. Lemmon, USGS
R. W. Geehan, USBM

R.C.J. 7-9-53

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 7, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Docket No. DMEA 2973 (Tungsten)
F. L. Glineski Property
Powell Co., Montana

Dear Mr. Selfridge:

Reference is made to the Field Team letter of June 17, 1953, which accompanied a report on the subject property made by R. A. Weeks, U. S. Geological Survey and E. W. Buel, U. S. Bureau of Mines.

We have recently found that when the report was assembled, copies of the map of the Snowshoe Gulch Tungsten-Copper Deposits, which showed the proposed exploration work of Stage I of the program, were overlooked. We are, therefore, submitting six copies of this map and suggest that they be attached to copies of the subject report now on file in Washington DMEA offices.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

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
JUN 26 1953

June 17, 1953

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

Re: Docket No. DMEA-2973 (tungsten)
F. L. Glineski property
Powell County, Montana

Dear Mr. Selfridge:

Enclosed are four copies of a report by R. A. Weeks, U. S. Geological Survey, and E. W. Buel, U. S. Bureau of Mines, describing field examinations of the F. L. Glineski property, Powell County, Montana.

The Glineski holdings cover an area in which quartz monzonite has intruded Mississippian limestone. At the contact is a tactite zone of varying thickness which locally contains scheelite. The outcrop of tactite is widespread and in a great many places appears to be mineralized; for this reason it is difficult to lay out an exploration program that will adequately explore the area and at the same time stay within the financial means of the applicant. To best explore the property it has been deemed advisable to set up the program on a stage basis in which much of the work will consist of bulldozing and sampling the more promising outcrops. It is hoped that by using this method the least promising areas will be by-passed with a minimum of work and the greater amount of exploration devoted to those areas of greater promise.

The Glineski holdings are regarded by our field men as a "sleeper" and much is expected of future exploration on the property.

Mention is made in the report of several grab samples taken from the mine dump near the principal workings of the Arnold Copper claims but that assay returns on these samples had not been received. These samples were received in the morning mail and are as follows:

Copy retained 400

Reviewed by
DMEA OPERATING COMMITTEE
7-3-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 7/1/53

REFERRED TO:
1. ~~Operating Committee~~
2. ~~Miss Birmingham - Rm. 4539~~
3. Code 400 Room 3538
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: ~~Field Report~~ For Agenda 7/3/53

Check (X) before the items needing attention.

George C. Selfridge
Initials of sender.

GPO 16—63815-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 6/26/53

REFERRED TO:
1. ~~Hazel Berry~~ Room 4624
2. Code 400 Room 3538
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS:

Check (X) before the items needing attention.

ilb
ROBERT E. ADAMS
Initials of sender.

GPO 16—63815-1

Merrill W. Englund 7-9-53 11:20 am

Mr. Martin:

Mr. Englund of Congressman Metcalf's office (Montana) called and wants to talk with you re Docket DMEA 2973.

O'C

Answering letter written to 400 on 7/9/53.

MR. MARTIN:

The geologic maps are not attached to this report—referred to on page 5 of report.

I called you re this so when you ask Field for copies sufficient number could be requested to supply USBM & USGS.

Mr. Hedges asked me about this on 7/2/53.

Hazel

Sample No.	Au/oz.	Ag/oz.	Cu%	WO_3 %
B-110	Tr	0.7	1.32	0.63
B-111	Tr	0.7	1.83	0.06
B-112	Tr	1.3	3.38	0.14
B-106	Tr	0.1	--	0.38

The examining team recommends that a contract be granted to the subject applicant and the Field Team concurs.

By DMEA 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)

Enclosures

cc: USBM (2)
Weeks

Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

May 28, 1953

Memorandum

To: DMEA Field Team, Region II

From: R. A. Weeks, Geologist, U. S. Geological Survey
and E. W. Buel, Mining Engineer, U. S. Bureau of Mines

Subject: Docket No. DMEA-2973 (tungsten), Field examinations,
F. L. Glineski, Powell County, Montana

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

The applicant proposes exploration for tungsten of a garnet tactite contact metamorphic zone in limestone adjacent to a granitic stock. Past production has been largely limited to small shipments of copper ore, but a shipment of about 220 tons of tungsten ore was made in 1943. The property appears, geologically, to warrant further exploration, and it is recommended that an exploration contract in the amount of $35,350 be drawn up to cover the suggested exploration program as outlined in the body of this report.

GENERAL

The applicant's property has been visited several times in the past by representatives of the U. S. Geological Survey and U. S. Bureau of Mines.

The first examination was made on April 2, 1953, in company with Mr. Glineski when snow drifts made it impossible to examine the entire Arnold mine area. However, a cursory examination was made on this date of the principal adit and workings on the Arnold Copper claim. The present writers examined the property on May 6, 1953, in company with A. B. Campbell, U. S. Geological Survey, and E. C. Ecklesdafer, representative of the applicant.

Only one sample was taken because of mineral lamp failure. Assay returns have not yet been received. Samples taken by representatives of the U. S. Geological Survey in 1944 for tungsten ore are in accord with assays submitted by applicant.

Several grab samples were taken from the mine dump near the principal workings on the Arnold Copper claim. No assay returns have been received to date. F.L.
See letter of June 17

Reviewed by
DMEA OPERATING COMMITTEE
7-3-53
(date)

The nearest supply center and local source of labor is at Helena, Montana, which is 30 miles east of Avon.

The Arnold mine area is situated on the lower ridges and gulches of the mountains lying to the north of the Little Blackfoot Valley. The area is unglaciated and generally the soil mantle is thin.

DESCRIPTION OF PROPERTY

The applicant's property includes several patented and unpatented mining claims in sections 27 and 28, T. 11 N., R. 7 W., Powell County, Montana (see accompanying map). The claims are located along Snowshoe Creek and at the head of Basin Creek, both tributary to the Little Blackfoot River. North-facing slopes are timbered and south-facing slopes are grassed.

PHYSICAL FEATURES AND CLIMATE

Suitable timber and water for mining and milling needs are found in and about the area. A creek through the property would supply ample water for drilling purposes.

The deposits are at elevations ranging between 5,500 and 6,500 feet above sea level.

Snowfalls are not too heavy, their average depth being 4 feet. The snow remains on the ground from November through April. During severe winters as much as 30 days of subzero weather commonly occurs.

Winter mining operations would not be seriously hampered as the property is 4 miles from the county road which is kept clear of snow. Keeping the remaining 4 miles of road cleared of snow should not be too prohibitive for the mining operations.

LOCATION AND ACCESSIBILITY

The property is in secs. 27 and 28, T. 11 N., R. 7 W., Powell County, Montana.

The deposit is about 41 miles from Helena and 11 miles from Avon. The property is readily accessible by conventional type motor vehicles. It is reached from Avon over U. S. Highway 10-N, a paved road, by traveling in a southeasterly direction for 2.5 miles; then up the graveled Snowshoe Gulch county road for about 4.5 miles; and the last 4 miles up Snowshoe Gulch over an unimproved road of moderate grade.

Diesel power is suggested for mining needs during development, but an electrical power line at Avon could be extended 6 miles to the property when it becomes feasible.

PROPERTY

The applicant has 13 patented and unpatented claims under lease from several owners. Two unpatented claims, owned by the applicant, have also been incorporated in the group of claims to be explored (see attached map of Snowshoe Gulch by F. L. Glineski).

The patented mining claims owned by E. C. Ecklesdafer, Missoula, Montana, and E. C. Hughes, Butte, Montana, and situated in secs. 27 and 28, T. 11 N., R. 7 W., Powell County, Montana, are listed as follows:

Arnold Copper Lode,	Sur. No. 941
Flagstaff Lode,	Sur. No. 10025
Copper Queen Lode,	Sur. No. 10025
Montana Lode,	Sur. No. 10026
Shamrock Lode,	Sur. No. 10027

The Snowbird Lode, Sur. No. 8526, patented mining claim, is owned by D. D. Bielenberg, Deer Lodge, Montana, and is in sec. 27, T. 11 N., R. 7 W., Powell County, Montana.

Unpatented mining claims owned by C. N. Bielenberg, Deer Lodge, Montana, and located in secs. 27 and 28, T. 11 N., R. 7 W., Powell County, Montana, are given as follows:

Friday No. 1 Lode,	Book 8, page 100
Strategic Lode,	Book 8, page 146
Tungstate Lode,	Book 8, page 147
Coppertung Lode,	Book 8, page 151
Mollytung Lode,	Book 8, page 159
Harmony Lode,	Book 8, page 191
Dozer Lode,	Book 8, page 634

Unpatented mining claims owned by F. L. Glineski, the applicant, and situated in sec. 27, T. 11 N., R. 7 W., Powell County, Montana, are given as follows:

Portal Lode	Book 9, page 3
Arnold Fraction Lode,	Book 9, page 1

All of the claims are under lease with option to purchase by the applicant, except for two unpatented claims owned by him.

Owner's Consent to Lien and Option Contract to Purchase agreements have been obtained from the applicant and are attached hereto.

MINE WORKINGS

The Arnold mine area has been extensively explored by a number of small adits, trenches, and prospect pits. Many of the adits are caved at the portals leaving some of them accessible only from glory holes or air raises.

The accessible mine workings were dry at the time of the examination and it is believed that the workings remain dry throughout the year. Water for drilling operations will probably have to be pumped from a nearby creek that flows the year around.

An examination of several of the underground workings shows that the ground would require very little timbering.

METAL CONTENT OF ORE

According to the applicant and to a report furnished by the applicant, shipments of unknown size made from the Arnold mine in the period 1916-1917 assayed 4.76 percent Cu, 1.7 ounces Ag, and 0.028 ounce Au; four shipments from the Flagstaff mine in 1910 averaged 9.79 percent Cu, 3.35 ounces Ag, and 0.07 ounce Au. Tungsten, although certainly present in these shipments, was not recovered. In 1943, a shipment of 223 tons of ore averaged 0.533 percent WO_3; Cu was not recovered from this ore.

According to a memorandum report dated February, 1944, by S. W. Hobbs of the U. S. Geological Survey, samples from various mines assayed as follows:

		Percent WO_3
Flagstaff Mine	dump	0.72
Arnold Mine	reported by Operator	0.55-1.72
Ladysmith	dump	1.2 -3.25 (probably high)

FINANCIAL AND ADMINISTRATIVE COMPETENCE OF APPLICANT

The applicant proposes to meet the major share of the costs with personal capital. The applicant has had considerable gold dredging and some hard rock mining experience. He intends, however, to hire competent supervision for the DMEA project.

A list of the equipment owned by the Operator is attached to the application.

GEOLOGY

The applicant's property is on the margin of a quartz monzonite stock which has intruded the Mississippian Mission Canyon limestone. The quartz monzonite, a tongue of which cuts across part of the property, has contact-metamorphosed the limestone to a quartz-epidote-garnet tactite that locally contains scheelite. In a report submitted by the applicant, the tactite zone is reported to average about five feet in thickness and to have a maximum thickness of about 30 feet; the applicant states there is an apparent relationship between zones of maximum tactite thickness and maximum scheelite occurrence, the thinner tactite zones generally being barren. The report submitted by the applicant suggests the scheelite occurs disseminated or in small pods in the tactite, and denies

the possibility of any bedding control of mineralization. The writer feels that the pattern of scheelite distribution is as yet obscure, and that no mineralization controls are apparent. Stage I of the proposed exploration program is designed to furnish additional geologic information on the mineralized tactite zones in the Snowbird, Arnold Copper, Montana, and Arnold Fraction claims in order to guide the continued exploration under Stage II.

Mineralogy of the ore is relatively complex. Scheelite is the only reported tungsten mineral, and is accompanied by sparse molybdenite and powellite. The only sulfide mineral reported is chalcopyrite which is largely altered to malachite and tenorite. The gangue material is tactite composed of quartz, epidote, garnet, and calcite.

ORE RESERVE

The only ore reserve present is an estimated 300 tons of tungsten ore indicated, with possibly 3,000 tons of inferred reserves in the Arnold mine; the average grade of this ore is probably about 0.5 percent WO_3.

The applicant believes that mining the deposit would not be excessively costly, and has suggested that shrinkage stoping would be most efficient.

Too little is known of the other tungsten showings to permit reserve calculations, but the widespread distribution of scheelite mineralization suggests that other deposits similar to the Arnold may exist.

PROPOSED EXPLORATION

The applicant has proposed a two-stage exploration program of bulldozing, diamond drilling, and various types of underground exploration. Details of this proposed work are presented in the application and the location of some of the proposed work is shown on the attached geologic map. Field examiners are in agreement with the applicant that further exploration of the tungsten potentialities of the heretofore largely overlooked tactite zone on the property is warranted. They are also in agreement that the proposed work should be on a stage basis, although they recommend that the second stage should be entered into only if warranted by the findings in the first stage. Agreed unit costs are recommended for work units, while supervision and engineering and attendent costs should be paid for on an actual cost basis inasmuch as they are difficult to define in a program as herein proposed.

It is recommended that Stage I consist of the following work:

(1) 150 hours of bulldozing. This dozing should be on the Arnold Copper, Arnold Fraction, Montana, and Snowbird claims, at sites located approximately on the accompanying geologic map of the Snowshoe Gulch Tungsten-Copper deposits. Any changes in this proposed dozing should first have the concurrence of field examiners. All trenches showing mineralization should be adequately sampled. The objective of this trenching and sampling is to further

expose the mineralized tactite zone in order to further determine the extension and grade of the ore zone.

(2) Sufficient hand labor to make the Arnold mine and the South Arnold winze accessible for sampling and mapping.

(3) Concurrent with the bulldozing operation, the applicant shall engage a consultant to map the geology and sample the more pertinent outcrops on his claims adjacent to those shown on the accompanying map of the Snowshoe Gulch Tungsten-Copper deposits. The claims to be mapped and sampled shall include the following:

Flagstaff Lode, Sur. No. 10025
Copper Queen Lode, Sur. No. 10025
Shamrock Lode, Sur. No. 10027
Friday No. 1 Lode
Strategic Lode
Tungstate Lode
Coppertung Lode
Mollytung Lode
Harmony Lode
Dozer Lode
Portal Lode

The location of the above-listed claims is shown on both the attached claim map of Snowshoe Gulch, and the map of the Arnold Mine Area on which is shown the work to be done in Stage II of the proposed program.

It is recommended that Stage II consist of the following work, to be entered into only if results of Stage I prove additional work is justified:

(1) 300 hours of bulldozing. This work shall consist of trenching to further test the more favorable outcrops at sites to be determined by the applicant and field examiners in the area yet to be mapped. All occurrences showing mineralization should be adequately sampled. In addition, some of the bulldozing should be for the preparation of drill sites and for that preparation for underground workings as might be needed. The objective of the trenching program again is to facilitate geologic appraisal of related tungsten deposits in the area and to aid in planning further exploration.

(2) An aggregate of 1,000 feet of diamond drilling. All drilling is to be at sites approved by field examiners on mineralized zones previously tested by surface work. The drilling will test the downward extension of the mineralized tactite zone.

(3) Underground work at the Arnold mine to further explore the mineralized zone. This work shall include 100 feet of crosscutting, 200 feet of drifting, and 100 feet of

raising. The sites of this proposed work shall be determined on the basis of prior work and shall be done only with the approval of field examiners.

The area to be explored in Stage II of the proposed program is shown very roughly on attached map of the Arnold Mine Area. More exact details will have to await the mapping and sampling which is to be done in Stage I.

Exhibit "A"

Description of the Work

Stage I

Bulldozer trenching and sampling to aggregate 150 hours at sites selected by the Field Team in the Arnold Copper, Arnold Fraction, Montana, and Snowbird claims. Geologic mapping and sampling of the associated claims held by the applicant. Sufficient hand labor to make accessible the Arnold mine and the South Arnold winze.

Stage II

Stage II shall be contingent on the results of Stage I. It shall consist of bulldozer trenching and sampling to aggregate 300 hours at sites selected by the Field Team in the area mapped under Stage I. Diamond drilling to aggregate 1,000 feet at sites selected by the Field Team in the area trenched under Stage I. Drifting 200 feet, raising 100 feet, and crosscutting 100 feet in the Arnold mine at sites determined by the Field Team at that time.

Estimated Costs of Project

Stage I	
Unit Costs	
Bulldozer trenching, 150 hours at $14	$2,100
Agreed unit costs in lieu of all actual costs	
Labor Supervision and Consultant	
Labor - 2 men 10 days making Arnold mine and incline accessible	300
Consultant - 1 month mapping, surveying and sampling, includes assistant	1,000
Assays - 75 at $5	375
New buildings	
Bunkhouse and tool shed	500
Contingency	325
Total Stage I	$4,600
Government amount of participation at 75 percent	$3,450

Providing exposures and results of Stage I would indicate continued exploration was advisable, Stage II would be conducted subject to approval by the Government.

Stage II

Unit Costs

Trench and diamond drill sites by bulldozer 300 hrs. at $14/hr.	$4,200
Agreed unit costs in lieu of actual costs.	
Diamond Drill - 1,000 at $9/ft.	9,000 no
Agreed unit costs in lieu of all actual costs.	
Drift	
200 ft. at $35	7,000
Agreed unit costs in lieu of all actual costs.	
Crosscut	
100 ft. at $35	3,500
Agreed unit costs in lieu of all actual costs.	
Raise	
100 ft. at $35	3,500
Agreed unit costs in lieu of all actual costs.	

Actual Costs

Labor, Supervision and Consultants	
Supervision, 3 mos. at $600	1,800
Consultant for surveys, sampling, ore estimates and reports - 4 weeks at $250	1,000
Assays	
50 at $5 for WO_3	250
50 at $10 ($WO_3$, Ag, Au, Co) Cu	500
Total Stage II	$30,750
Government amount of participation at 75 percent Stage II	23,062.50
Total Stages I and II	35,350.00
Government participation at 75 percent	$26,512.50

COMMENT ON APPLICATION

The winzing requested by the applicant in his proposed Stage II would probably add little information beyond the probable result of diamond drilling and, therefore, should be deleted.

Additional diamond drilling as scheduled in applicant's Stage II cannot be justified until more detailed mapping and sampling is completed in the area.

Applicant's estimated costs for bulldozing of $12.50/hour has been increased to $14/hour to allow for moving the bulldozer at frequent request of the engineer and because $14/hour is now in line with similar dozing in the region.

Drift, crosscut and raise units have been reduced from $40/ft. by the applicant to $35/ft. which is more in line with costs being obtained for like work on other DMEA projects in the region.

Enclosures
Distribution:
DMEA (4) ✓
USBM (5)
USGS (SRO)
Docket
Weeks

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge
Bjornson

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

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2973 - Tungsten and Copper
Florian L. Glinecki
Arnold Copper mine, (Flagstaff mine and Old Lady Smith mine)
Powell County, Montana

Dear Mr. Weissenborn:

This will acknowledge receipt of the subject docket and your letter of April 2, 1953, in which you state that a field examination has been tentatively scheduled. We will, therefore, hold this application in abeyance until the report and recommendations by the Field Team are received.

J.C. 4/14/53

Sincerely yours,

George C. Selfridge (JHB)
Chairman, Operating Committee

APPROVED:

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

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

Copy to: Docket ✓
Field Team, Reg. 2
Code 400
Operating Committee

Administrator Reading File
D. M. Lemmon, USGS
R. W. Geehan
FARutledge/foc
4-13-53

April 7, 1953

Mr. Florian L. Glineski
511 North Rodney
Helena, Montana

Subject: DMEA-2973
Re: Exploration Assistance
Arnold Copper, Flagstaff and
Old Lady Smith Mine

My dear Mr. Glineski:

The receipt of your application dated March 20, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2973 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2973 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operations Control
and Statistics Division

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

April 7, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region II.

DMEA-2973 Florian L. Glineski

ROBERT E. ADAMS

Robert E. Adams,
Chief, Operation's Control
and Statistics Division

38226

dmea 2973

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

April 2, 1953

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application for a DMEA contract submitted by Mr. Florian L. Glineski, Helena, Montana. The application concerns an old copper producing property in the Snowshoe district, Powell County, Montana. One copy of the application has been retained at this office to expedite field examination.

The application and accompanying geologic report have been prepared by Peter H. Toepfer, a mining engineer of considerable experience. The application is complete and well prepared.

Weather permitting, the applicant's property will be examined during the coming week by field engineers. A report on their findings should be available in the near future.

Sincerely yours,

A. E. Weissenborn

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: USBM (2)
Weeks

ARNOLD MINE AREA
SNOWSHOE GULCH TUNGSTEN - COPPER DEPOSITS
POWELL COUNTY, MONTANA

MAP FROM BRUNTON COMPASS (WITH STAFF) AND TAPE SURVEY MADE IN 1943.
MAG. DEC. ASSUMED 21° E. MAP DRAWN: JAN., 1953 ENG'R: P. H. TOEPFER
SCALE: 60 FT = 1 IN.

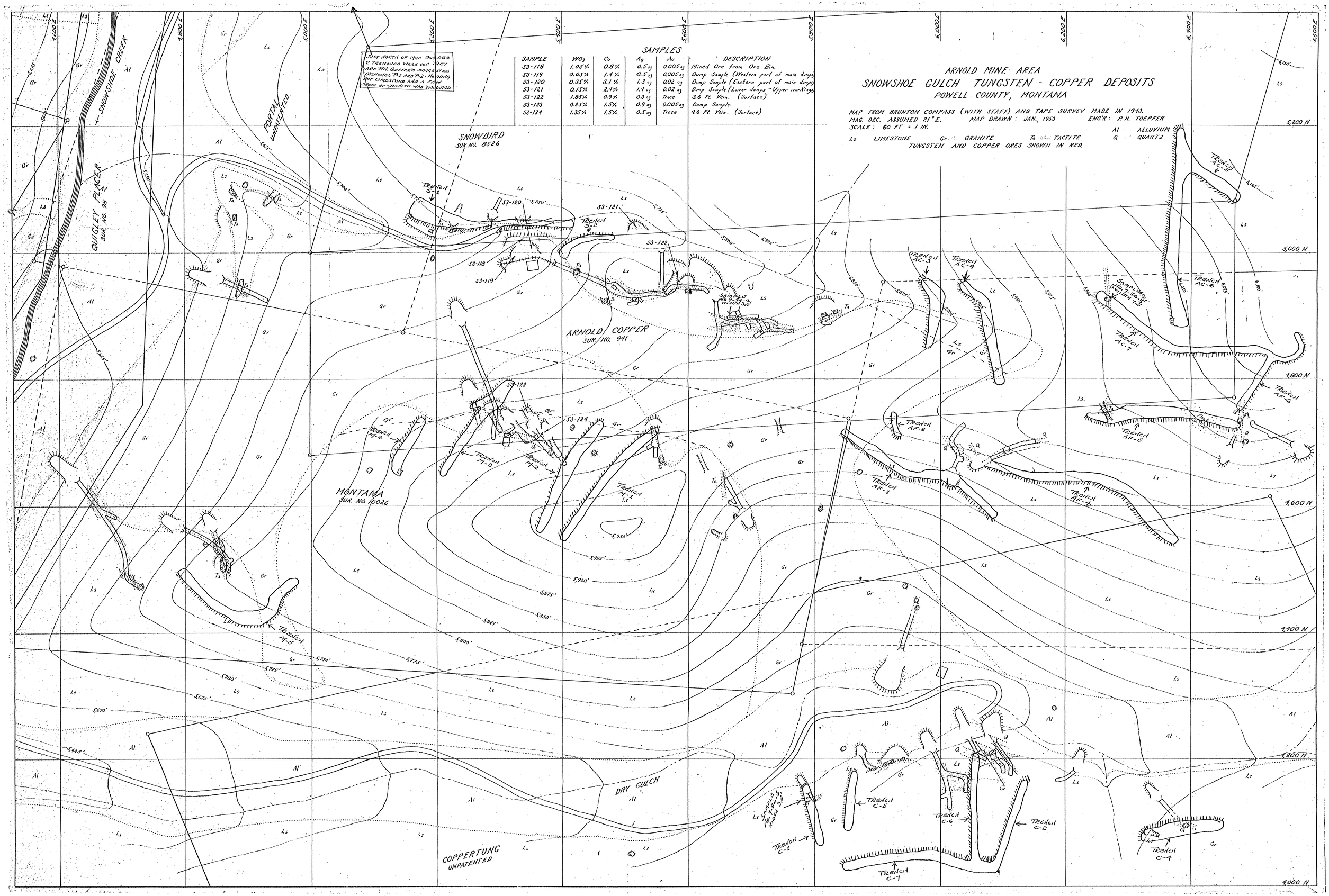
Ls LIMESTONE Gr GRANITE Ta TACTITE Al ALLUVIUM Q QUARTZ

TUNGSTEN AND COPPER ORES SHOWN IN RED.

JUST NORTH OF MAP BOUNDARY 2 TRENCHES WERE CUT. THEY ARE P.H. TOEPFER'S SUGGESTION CROSSES P.1 AND P.2 - HOWLING DUE LIMESTONE AND A FEW SHOTS OF GRANITE WAS DISCLOSED

SAMPLES

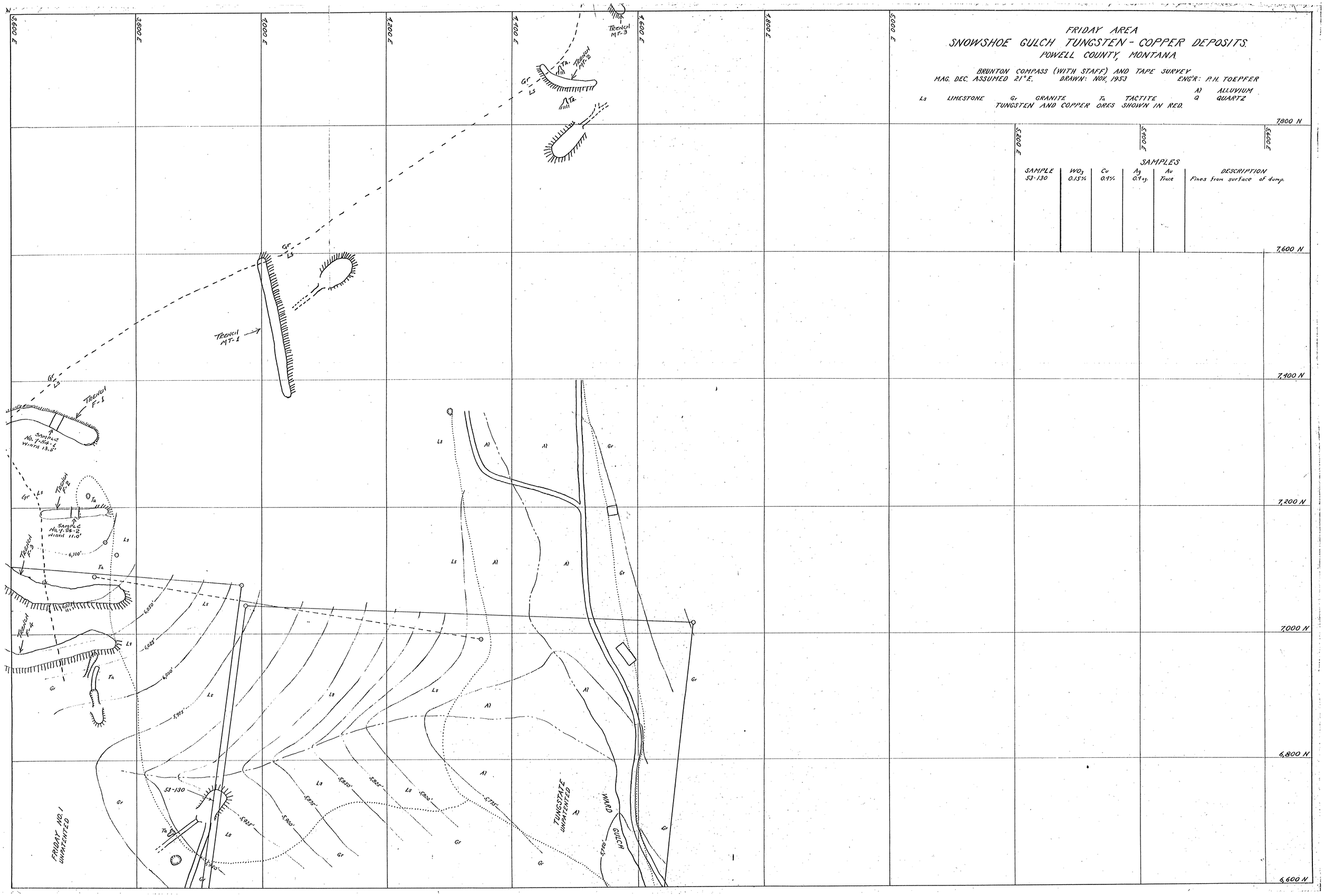
SAMPLE	WO_3	Cu	Ag	Au	DESCRIPTION
53-118	1.05%	0.8%	0.5 oz	0.005 oz	Mined Ore From Ore Bin.
53-119	0.05%	1.4%	0.5 oz	0.005 oz	Dump Sample (Western part of main dump)
53-120	0.35%	3.1%	1.3 oz	0.02 oz	Dump Sample (Eastern part of main dump)
53-121	0.15%	2.4%	1.4 oz	0.02 oz	Dump Sample (Lower dumps - Upper workings)
53-122	1.85%	0.9%	0.3 oz	Trace	3.6 Ft. Vein. (Surface)
53-123	0.25%	1.5%	0.9 oz	0.005 oz	Dump Sample.
53-124	1.35%	1.5%	0.5 oz	Trace	4.6 Ft. Vein. (Surface)



FRIDAY AREA
SNOWSHOE GULCH TUNGSTEN - COPPER DEPOSITS
POWELL COUNTY, MONTANA

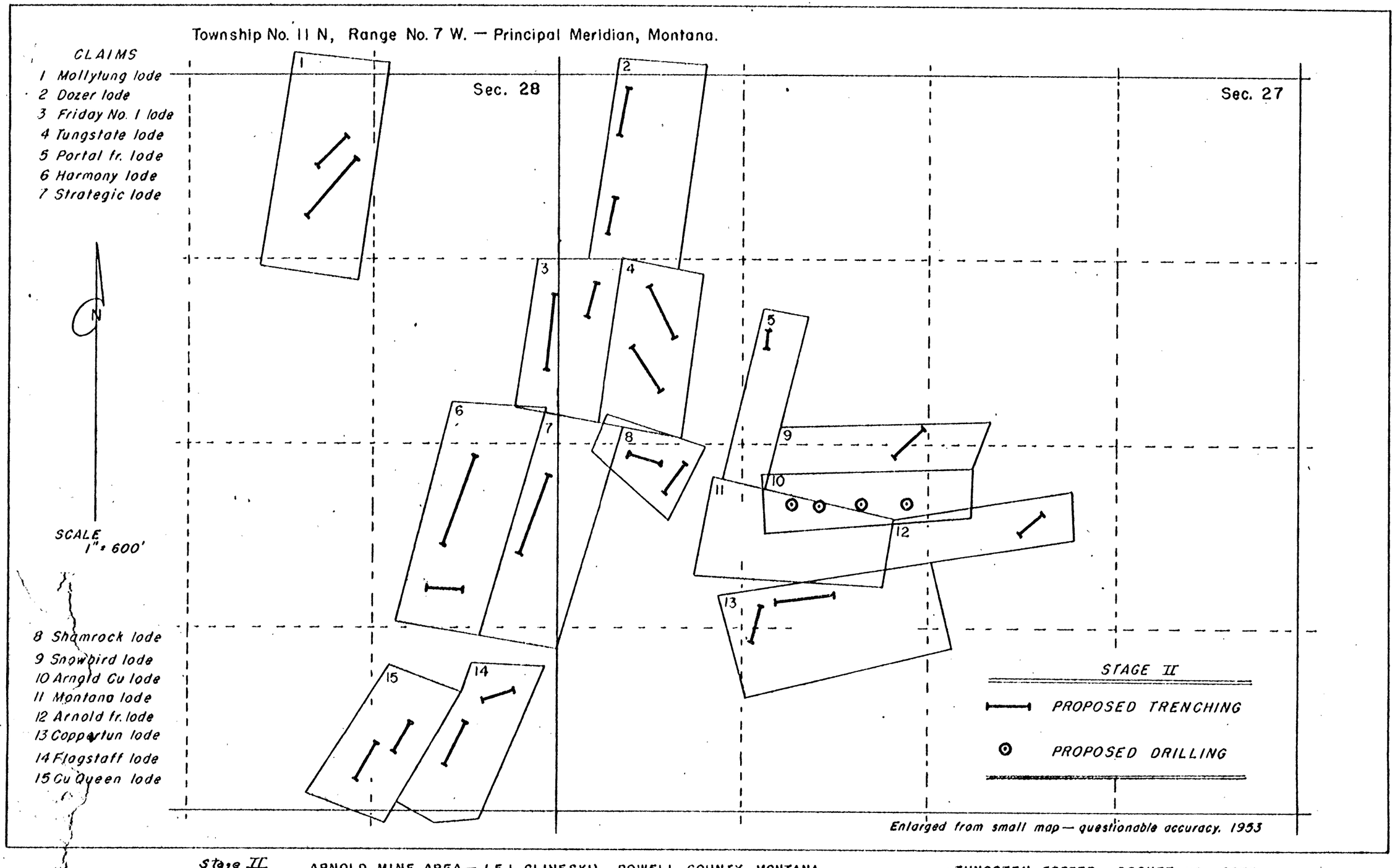
BRUNTON COMPASS (WITH STAFF) AND TAPE SURVEY
MAG. DEC. ASSUMED 21° E. DRAWN: NOV. 1953 ENG'R: P.H. TOEPFER

Ls LIMESTONE Gr GRANITE Ta TACTITE Al ALLUVIUM Q QUARTZ
TUNGSTEN AND COPPER ORES SHOWN IN RED.

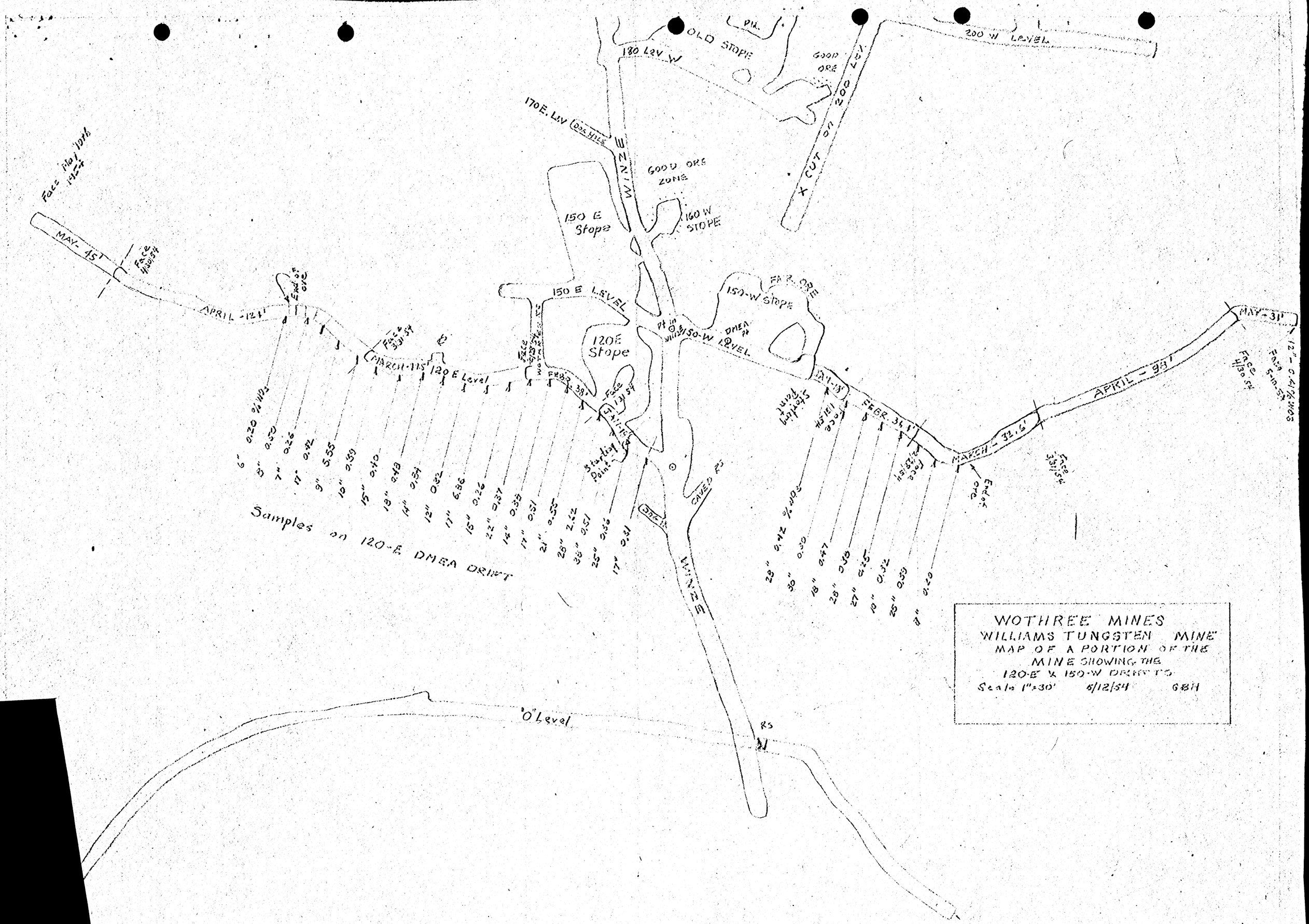


SAMPLES

SAMPLE	WO_3	Cu	Ag	Au	DESCRIPTION
53-130	0.15%	0.1%	0.1 oz.	Trace	Fines from surface of dump.



Stage II ARNOLD MINE AREA — (F. L. GLINESKI) POWELL COUNTY, MONTANA. —— TUNGSTEN COPPER - DOCKET NO. 2973


WOTHREE MINES
WILLIAMS TUNGSTEN MINE
MAP OF A PORTION OF THE
MINE SHOWING THE
120-E X 150-W DRIFTS
Scale 1"=30'
6/12/54
GBH
OLD STOPE
180 LEV W
200 W LEVEL
170E. LEV
GOOD ORE ZONE
150 E Stope
160 W STOPE
X CUT ON 200 W LEVEL
150 E LEVEL
120E Stope
150-W STOPE
150-W LEVEL
MAY - 45'
APRIL - 12.1'
MARCH - 11.5'
120 E Level
FEBR. 38'
FEBR. 34.1'
MARCH - 32.6'
APRIL - 98'
MAY - 31'
Samples on 120-E DMEA DRIFT
'0' Level
WINZE

UNITED STATES
DEPARTMENT OF THE INTERIOR

DOCKET NO DMEA 2973

Samples from the Tungstate-Friday No I area

No.	Width (feet)	Au. oz.	Ag. oz.	Cu. %	WO_3 %	Material
53-130					0.15	fines from dump
54-1	13.5				0.02	tactite
54-2	11.0				0.02	"
54-6	10.5				0.35	quartz
54-7	2.5				0.22	"
54-8	3.2				0.413	"
54-9	1.5				0.526	"
939	8.0				0.196	tactite

Samples from the Strategic-Shamrock area

No.	Width (feet)	Au. oz.	Ag. oz.	Cu. %	WO_3 %	Material
53-125	2.2	Tr.	0.3	0.1	5.15	contact zone
53-126	4.5	Tr.	0.4	Tr.	0.85	tactite from tunnel
53-127	3.8	Tr.	0.4	0.4	1.15	tactite band
53-128	2.2	Tr.	0.3	0.2	0.25	" "
53-129	4.3	0.02	0.6	0.9	0.45	" "
54-10	3.0				0.30	tactite
54-11	6.5				0.146	"
54-12	5.0				0.413	"
54-13	3.0				0.27	"
54-14	6.0				0.85	"
54-15	1.5				1.016	"
54-16	1.5				1.153	"
54-17	5.0				1.163	"
940	4.0				0.14	garnet tactite
941	2.5				0.064	" "
942	grab				0.026	float from chloritic tactite zone
943	4.0				0.014	garnet tactite
944	grab				0.048	chips from garnet tactite outcrop
945	grab				0.208	" " " " "

EXPLANATION

Qal
Alluvium

ta
Tactite
Chiefly garnet, quartz and epidote; in places consists largely of chlorite and epidote. contains scheelite.

gr
Granitic rocks
Medium-to coarse-grained, light gray; probably quartz monzonite or granodiorite.

ls
Limestone
White to light gray; coarsely recrystallized.

Contact
Dashed where inferred

Shaft

Tunnel showing portal

Open cut

Trench

945
Sample location

Samples from Snowbird-Montana-Arnold Copper area

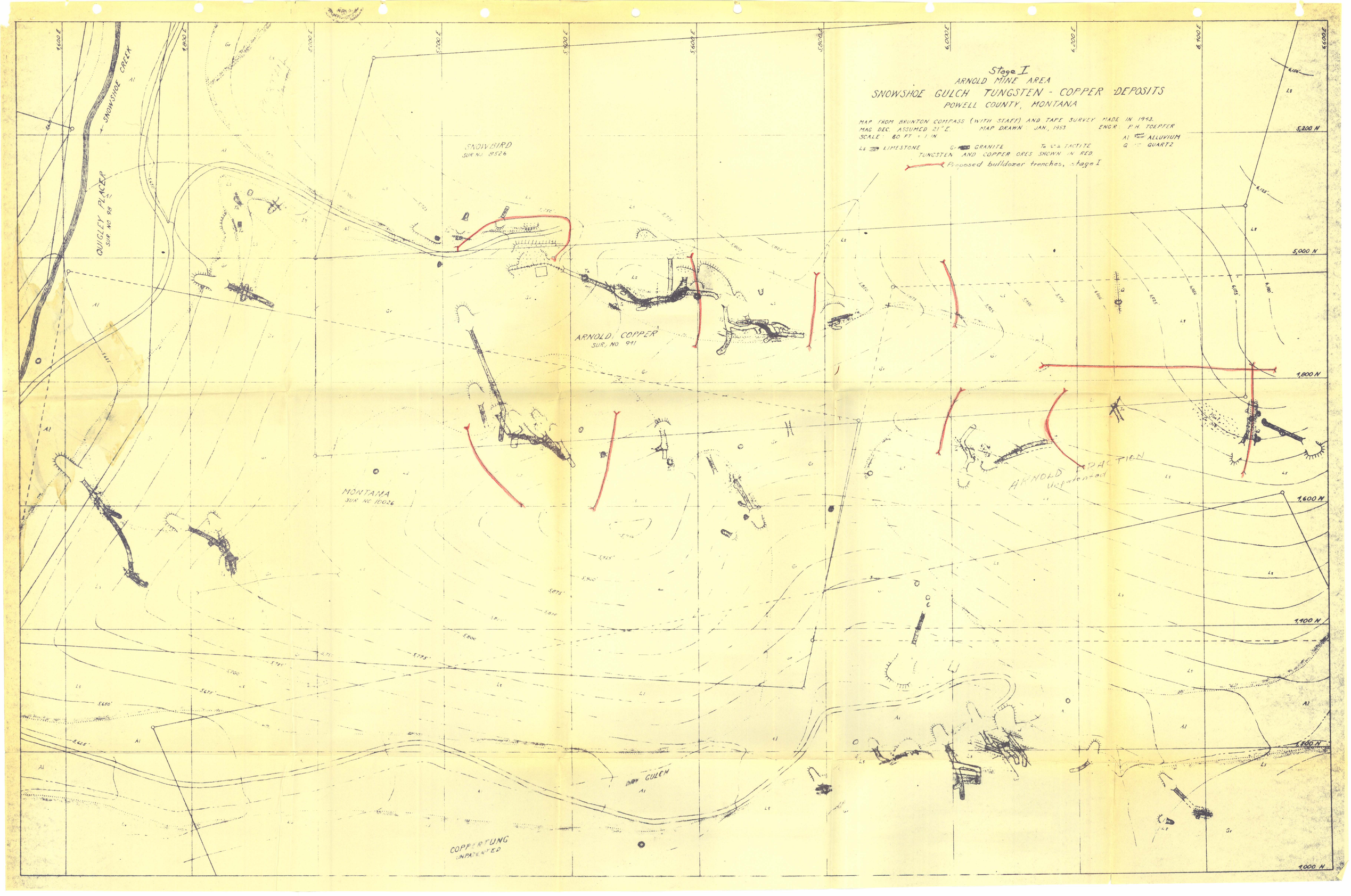
No.	Width (feet)	Au. oz.	Ag. oz.	Cu. %	WO_3 %	Material
53-118		0.005	0.5	0.8	1.05	ore from bin, Arnold Mine
53-119		0.005	0.5	1.4	0.005	dump, Arnold Mine
53-120		0.02	1.3	3.1	0.35	" " "
53-121		0.02	1.4	2.4	0.15	" " "
53-122	3.6	Tr.	0.3	0.9	1.85	vein
53-123		0.005	0.9	1.5	0.25	dump
53-124	4.6	Tr.	0.5	1.5	1.35	vein
54-3	7.5				0.015	quartz vein
54-4	3.0				0.03	tactite
54-5	3.5				0.15	quartz

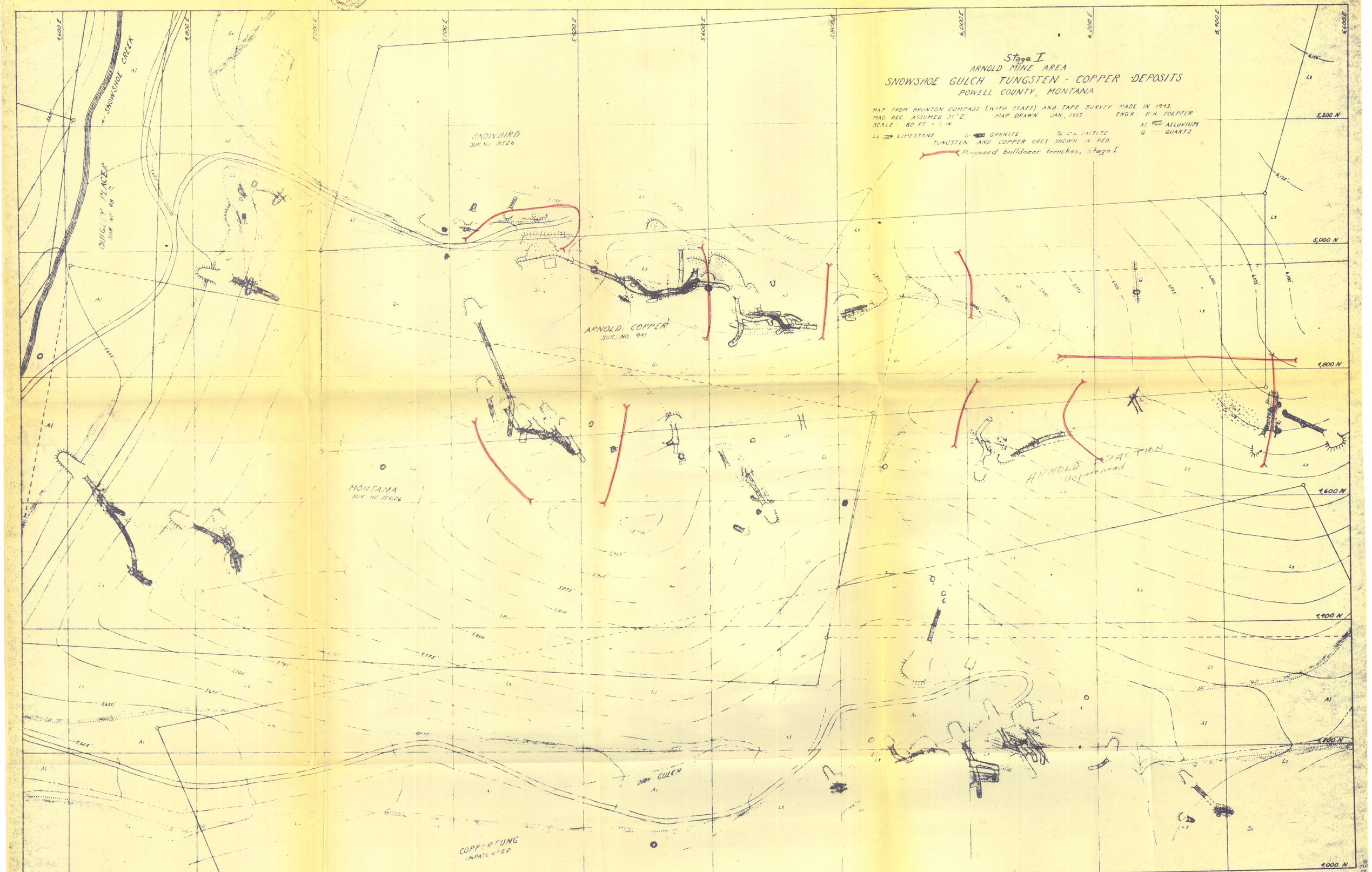
GEOLOGIC MAP OF THE
SNOWSHOE GULCH TUNGSTEN DEPOSITS
POWELL COUNTY, MONTANA

0 200 400 600 800 FEET

PLATE 2

Adapted from Operators maps
D.M. Pinckney, USGS, 1956


Stage I
ARNOLD MINE AREA
SNOWSHOE GULCH TUNGSTEN - COPPER DEPOSITS
POWELL COUNTY, MONTANA
MAP FROM BRUNTON COMPASS (WITH STAFF) AND TAPE SURVEY MADE IN 1993.
MAG. DEC. ASSUMED 21° E.
MAP DRAWN: JAN., 1993
ENGR: P.H. TOEPFER
SCALE: 60 FT = 1 IN.
LS = LIMESTONE
GR = GRANITE
Ta = TACTITE
AI = ALLUVIUM
Q = QUARTZ
TUNGSTEN AND COPPER ORES SHOWN IN RED
Proposed bulldozer trenches, stage I
SNOWSHOE CREEK
QUIGLEY PLACER
SUR. NO. 92
SNOWBIRD
SUR. NO. 8526
ARNOLD COPPER
SUR. NO. 941
MONTANA
SUR. NO. 10026
ARNOLD PATTEN
unpatented
GULCH
COPPER TUNG
UNPATENTED
1,600 E
1,900 E
5,100 E
5,300 E
5,500 E
5,700 E
5,900 E
6,000 E
6,200 E
6,400 E
6,600 E
5,200 N
5,000 N
1,800 N
1,600 N
1,400 N
1,200 N
1,000 N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POWELL COUNTY, MONTANA
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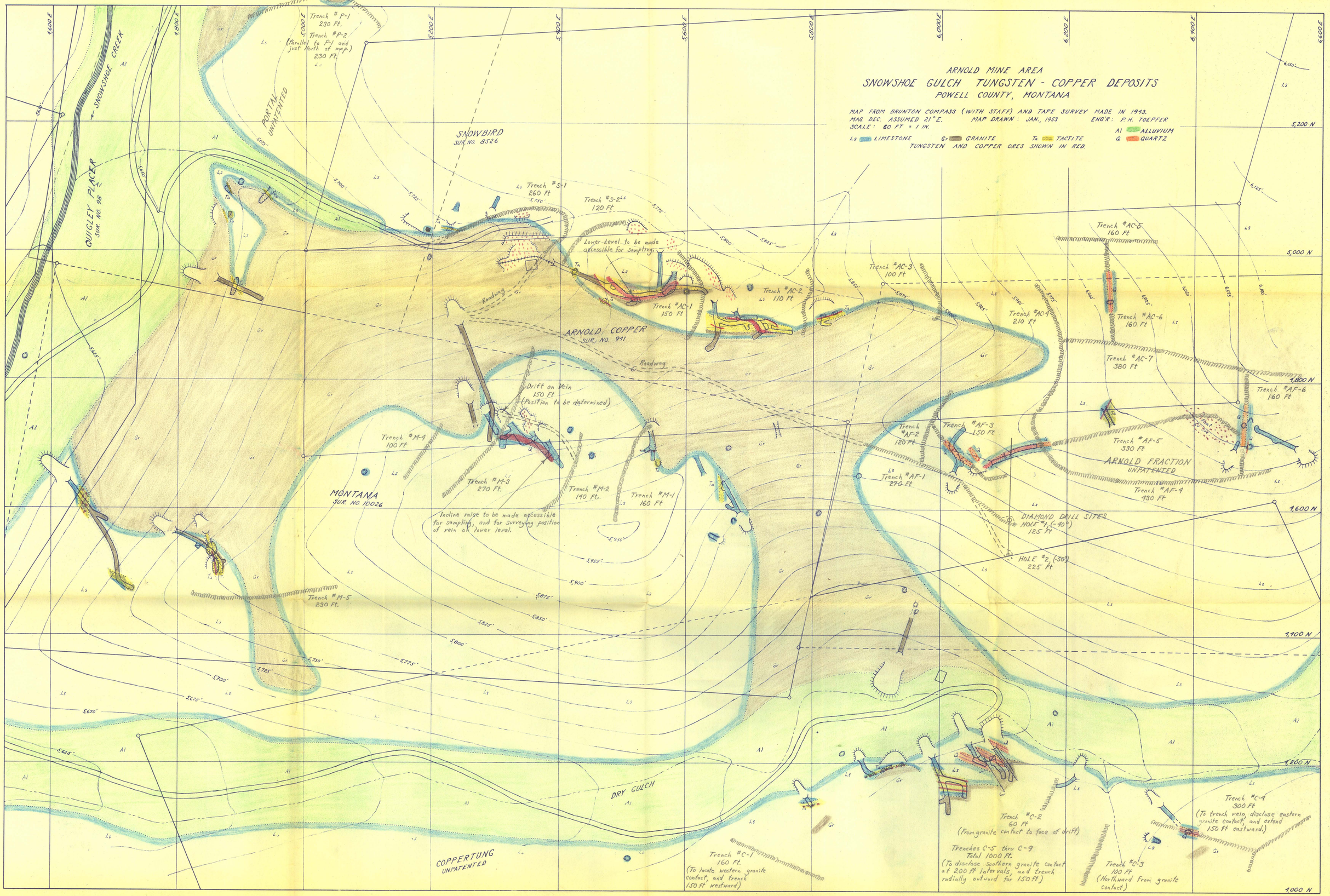
MAG DEC ASSUMED 21° E.
MAP DRAWN JAN, 1953
ENGR. P.H. TOEPFER
SCALE: 60 FT = 1 IN
Al ALLUVIUM
Q QUARTZ
Ls LIMESTONE
G GRANITE
Tg CALCIA TACTITE
TUNGSTEN AND COPPER ORES SHOWN IN RED
Proposed bulldozer trenches, stage I
SNOWSHOE CREEK
QUIGLEY PLACER
SUR NO 98
SNOWBIRD
SUR NO 8526
ARNOLD COPPER
SUR. NO 941
MONTANA
SUR NO 10026
ARNOLD TACTITE
unpatented
SNOWSHOE GULCH
COPPER TUNG
UNPATENTED
1,600 E
1,800 E
5,000 E
5,400 E
5,600 E
5,800 E
6,000 E
6,200 E
6,400 E
6,600 E
5,200 N
5,000 N
1,800 N
1,600 N
1,400 N
1,200 N
1,000 N


ARNOLD MINE AREA
SNOWSHOE GULCH TUNGSTEN - COPPER DEPOSITS
POWELL COUNTY, MONTANA
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MAP DRAWN: JAN., 1953
ENG'R: P.H. TOEPFER
SCALE: 60 FT = 1 IN.
Ls LIMESTONE
Gr GRANITE
Ta TACTITE
Al ALLUVIUM
Q QUARTZ
TUNGSTEN AND COPPER ORES SHOWN IN RED.
SNOWSHOE CREEK
QUIGLEY PLACER
SUR. NO. 98
PORTAL UNPATENTED
SNOWBIRD
SUR. NO. 8526
Trench #P-1
230 Ft.
Trench #P-2
(Parallel to P-1 and just north of map.)
230 Ft.
Trench #S-1
260 Ft
Trench #S-2
120 Ft.
Lower Level to be made accessible for sampling.
Trench #AC-1
150 Ft
Trench #AC-2
110 Ft
Trench #AC-3
100 Ft
Trench #AC-4
210 Ft
Trench #AC-5
160 Ft
Trench #AC-6
160 Ft
Trench #AC-7
380 Ft
Roadway
ARNOLD COPPER
SUR. NO. 941
Drift on Vein
150 Ft
(Position to be determined)
Trench #M-4
100 Ft
Trench #M-3
270 Ft.
Trench #M-2
140 Ft.
Trench #M-1
160 Ft
Incline raise to be made accessible for sampling, and for surveying position of vein on lower level.
MONTANA
SUR. NO. 10026
Trench #M-5
230 Ft.
Trench #AF-1
270 Ft
Trench #AF-2
120 Ft
Trench #AF-3
150 Ft
Trench #AF-4
430 Ft
Trench #AF-5
330 Ft
Trench #AF-6
160 Ft
ARNOLD FRACTION
UNPATENTED
DIAMOND DRILL SITES
HOLE #1 (-40°)
125 Ft
HOLE #2 (-50°)
225 Ft
DRY GULCH
COPPERTUNG
UNPATENTED
Trench #C-1
160 Ft.
(To locate western granite contact, and trench 150 ft westward)
Trenches C-5 thru C-9
Total 1000 Ft.
(To disclose southern granite contact at 200 ft intervals, and trench radially outward for 150 ft)
Trench #C-2
60 Ft
(From granite contact to face of drift)
Trench #C-3
100 Ft
(Northward from granite contact)
Trench #C-4
300 Ft
(To trench vein, disclose eastern granite contact, and extend 150 ft eastward.)
1,600 E
1,800 E
5,000 E
5,200 E
5,400 E
5,600 E
5,800 E
6,000 E
6,200 E
6,400 E
6,600 E
5,200 N
5,000 N
4,800 N
4,600 N
4,400 N
4,200 N
4,000 N