DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 556

DMEA NO. 2820

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [x] 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
- [x] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [x] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

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

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

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

Additional Folders:

Left Side

Folders No. 2 : Reports
- [x] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

Folders No. 3 : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

Inactive all 1960 (v-15-61)

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-E556, Docket DMEA-2820 (tungsten), dated June 25, 1953, with

Abram A., George G., and Edward A. Knowles, Assignees
d/b/a Knowles Bros.
Box 87
Mountain City, Nevada

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 Garnet Tungsten Mine located in Elko County, Nevada, during the period January 1, 1959, through September 26, 1960.

A certification of discovery or development was issued on October 27, 1954, and, in accordance with Article 6 of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 10 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 November 7, 1955, indicated accepted costs under the exploration contract amounting to $21,760.00 with the Government's contribution on a 75 percent basis being $16,320.00.

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 December 31, 1958. The royalty account as of December 31, 1958, was:

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

As of September 26, 1960, the royalty account of this project was found to be:

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

March 14, 1962

E. D. Talbert, OME Auditor

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, or its successor in interest, shall pay to the Government a percentage royalty on all mineral production from the land thereunder. The land consists of the Garnet No. 1 and Garnet No. 2 unpatented lode mining claims in the Alder Mining District. The contract contains the so-called "abandonment" provision.

At the time this contract was executed, the original Operator, Garnet Tungsten Mining Company (a limited partnership of L. D. Wilson and R. E. Summers of John Day, Oregon, and H. A. Culp of Mountain City, Nevada) claimed possession of the property by virtue of a December 17, 1952, assignment by R. E. Summers and H. A. Culp of a September 1, 1952, 18-year lease and option to purchase granted by Price D. Montrose and Abram A., George G., and Edward A. Knowles, as owners. The lease, however, had been assigned by the partnership-company on April 6, 1953, to the Garnet Tungsten Mining Co., Inc., a Nevada corporation, John Day, Oregon.

On August 25, 1953, the lease was assigned to the Sunshine Mining Company, a Washington corporation, Box 1080, Kellogg, Idaho, and on November 4, 1953, the Government consented to the assignment of the contract. Sunshine suspended operations on December 7, 1953, and thereafter relinquished its interest in the property. On November 8, 1954, the Government consented to the assignment of the contract to Abram A., George G., and Edward A. Knowles, three of the four property owners. The other property owner, Price D. Montrose, Mountain City, Nevada, executed an Owner's Consent to Lien in consideration of the assignment. The Government's consents to the assignments provided that the Operator and the Assignors were not released from any of the conditions of the contract.

Work under the contract was completed on September 30, 1955. No ore was produced during the exploration or thereafter through the period covered by this review. The only activity on the property, after completion of the contract work, consisted of additional exploration conducted during 1956 by Union Carbide and Carbon Corporation under an option to purchase dated June 1, 1956.

The owners deeded the property to Union Carbide on December 31, 1956. However, on March 10, 1959, Abram A. Knowles advised that Union Carbide had discontinued all interest in the property and had quit-claimed it back to the original owners. In a September 26, 1960, reply to inquiry on MME Form 63, Mr. Knowles stated neither further change in property rights nor production had occurred.

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 indicate no ores were produced through the period covered by this review;

(2) Except for additional exploration work during 1956, the property has been inactive since completion of the contract work; 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.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files and records of the OME Field Team, Region II, pertaining to Contract No, Idm-E556, Docket No. DMEA-2820 (Tungsten), dated June 25, 1953, including Amendment Nos. 1 and 2, with

Knowles Bros., Assignees
Mountain City, Nevada

for the purpose of determining the amount of royalties due the U. S. Government on sales of tungsten from property known as the Garnet Tungsten Mine, located in Elko County, Nevada, during the period June 25, 1953 to December 31, 1958.

A certification of discovery or development was issued on October 27, 1954 and accordingly royalty is payable on all production from the land described in Article 2 of the contract, for a maximum period of 10 years from date of contract as stipulated under Annex I of the contract. A Report of Review in lieu of final cost audit dated November 7, 1955, indicated acceptable costs under the exploration contract amounted to $21,760.00 with the Government's contribution on a 75 percent basis, being $16,320.00.

No royalties have been paid to date in connection with this contract.

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

(a) According to the Field Team's Semi-Annual Report of Certified Projects for the period July 1, 1958 to December 31, 1958, there was no production during the period covered by this review.

(b) 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.

George Mayor

May 19, 1959

George Mayor, OME Auditor

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Fumich	500
7/8	Talbot	800
	Selfridge	120
7/9	Johnson	110
"	Fumich	1071
		220

JUL 9 1963

Mr. A. A. Knowles
Knowles Bros.
Box 87
Mountain City, Nevada

Re: DMEA-2820 (Tungsten)
A.A., G.G., and E.A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract Idm-E556

Dear Mr. Knowles:

Thank you for returning the completed MME Form 63's mailed to you on June 20, 1963.

By the terms of the subject Exploration Project Contract, as amended, and the certification of discovery or development dated October 27, 1954, all minerals mined or produced from June 25, 1953, to June 25, 1963, were subject to the Government's 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 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.

(ph)

Director

WRGriswold/mm
7/8/63
cc: Director's Reading File
Region II w/copy of Form 63 dated June 20.
CA&A Division
Docket
Code 500
Mr. Price D. Montrose, Mountain City, Nevada
Sunshine Mining Company, ~~XXXXXXXXXXXXXXXXXXXXXXXXXX~~ West 300 Mission Ave., Spokane 1, Wash.

43683

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O P T I O N

AND PURCHASE AND SALES AGREEMENT

THIS AGREEMENT entered into this first day of June, 1956, by and between PRICE D. "TURK" MONTROSE and THELMA MONTROSE, his wife, ABRAM A. KNOWLES and DORIS F. KNOWLES, his wife, EDWARD A. KNOWLES and GERALDINE KNOWLES, his wife, and GEORGE G. KNOWLES, a single man, all of the County of Elko, State of Nevada, parties of the first part, hereinafter referred to as the Sellers, and UNION CARBIDE AND CARBON CORPORATION, a New York corporation, hereinafter referred to as UNION CARBIDE, party of the second part,

W I T N E S S E T H :

WHEREAS, the sellers are the owners of and desire to sell the following described unpatented lode mining claims situate in Elko County, Nevada, to-wit:

NAME OF CLAIM	RECORDED			
Garnet #1	Book	28	page	269
Garnet #2	"	"	"	269
Garnet #3	"	"	"	270
Garnet #4	"	"	"	270
Garnet #5	"	"	"	270
Garnet #6	"	"	"	271
Garnet #7	"	"	"	271
Garnet #8	"	"	"	272
Barium #1	"	"	"	272
Garnet Extension #1	"	"	"	281
Garnet Extension #2	"	"	"	308
Garnet Extension #3	"	"	"	309
Barium #2	"	"	"	309
Garnet Extension #4 (also called Garnet	"	29	"	407
Garnet Extension #5 Extension #4)	"	"	"	408
Garnet Extension #6	"	"	"	409
Garnet Extension #7	"	"	"	410
Garnet Extension #8	"	"	"	411
Garnet Extension #9	"	"	"	412
Garnet Extension #10	"	"	"	413
Garnet Extension #11	"	"	"	414
Garnet Extension #12	"	"	"	415
Garnet Extension #13	"	"	"	416
Garnet Extension #14	"	"	"	417
Garnet Extension #15	"	"	"	418

AND, WHEREAS, UNION CARBIDE desires to acquire said

mining claims for the production of tungsten and other valuable minerals therefrom;

NOW, THEREFORE, in consideration of the premises and other mutual covenants and agreements herein contained it is mutually agreed as follows:

(1) For and in consideration of the sum of FIVE HUNDRED ($500.00) DOLLARS in hand paid by UNION CARBIDE to the sellers, the receipt of which is hereby acknowledged, the sellers grant unto UNION CARBIDE the exclusive right and option to purchase the above mentioned mining claims at any time during the option period for the sale and purchase price as hereinafter defined. This option shall commence on the date hereof and shall end at eleven-fifty-nine P.M. on the 31st day of December, 1956; provided, however, that UNION CARBIDE shall pay to the sellers the sum of FIVE HUNDRED ($500.00) DOLLARS on the first day of July, 1956, and the first day of each month thereafter through and including December 1, 1956. In the event that UNION CARBIDE fails to make any monthly installment on or before the 10th day following the date on which said monthly installment is due, said option shall automatically thereupon terminate and UNION CARBIDE shall be relieved of its obligation to make further monthly payments. All payments shall be made at the place hereinafter provided.

(2) From and after the date of this Agreement and so long as the same shall remain in force and effect, UNION CARBIDE shall have the right and privilegeof exclusive possession of the above-described mining claims including the right to conduct geologic investigations thereon and the right to remove up to fifty (50)tons of ore for testing purposes; provided, however, that all ore so mined or removed from the premises during the option period shall be subject to a ten per cent (10%) royalty as hereinafter defined.

(3) Immediately following the execution of this option

agreement the sellers will execute and deliver to the First National Bank of Grand Junction, Colorado, the original deed, copy of which is attached hereto as Exhibit "A". This option may be exercised by UNION CARBIDE by the payment to said First National Bank during the option period the sum of Thirty-six Thousand ($36,000.00) Dollars. Upon the payment of the sum of Thirty-six Thousand ($36,000.00) Dollars within said option period said bank shall pay such sums to the sellers as they in writing may designate to such bank and said bank shall deliver such deed to UNION CARBIDE. Delivery of such deed shall not depend upon the giving of instructions as to payment by the sellers nor the division and distribution of such sums among the sellers. In the event that said bank shall receive satisfactory proof that UNION CARBIDE did not exercise its option within the option period as above set forth said bank shall return such deed to the sellers. The sellers shall pay one-half and UNION CARBIDE shall pay one-half of such bank's fees as Escrow Agent. All Five hundred ($500.00) Dollar monthly payments commencing with the one due July 1, 1956, shall be made to the First National Bank of Grand Junction, Colorado, and said bank shall pay such sum to the sellers as they may in writing designate to such bank. If UNION CARBIDE exercises its option to purchase by depositing with said bank the sum of Thirty-six Thousand ($36,000.00) Dollars UNION CARBIDE shall not be obligated to pay and the sellers shall not have the right to receive any of the Five Hundred ($500.00) Dollar monthly option payments thereafter being due to the sellers.

(4) In the event that UNION CARBIDE exercises this option it agrees until the sellers have received as a royalty on tungsten ores the total sum of Five Hundred Thousand

($500,000.00) Dollars (being the sales and purchase price of $36,000.00 and $464,000.00 royalties) UNION CARBIDE will pay the royalty for tungsten ore more specifically defined in Exhibit "A" and will pay an advanced annual royalty of Thirty-six Thousand ($36,000.00) Dollars commencing on or before December 1st in each year commencing December 1st, 1957, all as set forth in the provisions of the deed, a copy of which is attached hereto as Exhibit "A", and in this connection the provisions of Exhibit "A" are hereby referred to and incorporated herein; provided that UNION CARBIDE may reconvey the property to the sellers by quit-claim deed and avoid further obligation hereunder and under such deed except that UNION CARBIDE shall be obligated to pay all royalties due the sellers hereunder or under such deed for ore mined and removed from the premises prior to such conveyance.

In addition to the tungsten royalty referred to above UNION CARBIDE agrees that it will pay a royalty more specifically defined in Exhibit "A" until the sellers have received as royalties upon uranium and vanadium ores the total sum of Two Hundred Fifty Thousand ($250,000.00) Dollars, provided, however, that said royalty interest insofar as it concerns uranium and vanadium ores shall cease and terminate twenty-five (25) years from the date hereof even though sellers shall not have received said Two Hundred Fifty Thousand ($250,000.00) Dollars in uranium and vanadium ores. UNION CARBIDE may, by reconveyance of the property to the sellers as provided above, terminate its obligation to pay uranium and vanadium royalties in the same manner as it may terminate its obligation to pay tungsten royalties.

(5) In the event this option is exercised and until UNION CARBIDE shall make a reconveyance to the sellers as above-mentioned, UNION CARBIDE will perform and record the performance of all assessment work required by the laws of the State of Nevada

and of the United States with respect to such mining claims. After reconveyance by UNION CARBIDE to the sellers as above-mentioned. UNION CARBIDE shall be under no further duty to perform assessment work except that, in the event of reconveyance between April 1 and June 30 of any year, UNION CARBIDE shall be obligated to perform and record the performance of assessment work for the particular year in which the reconveyance is made.

(6) In the event that this option is exercised, any claims or fractions of claims located by UNION CARBIDE within the exterior limits of the exterior claims of those described in Exhibit "A" shall be subject to the provisions of this agreement and of such deed to the same extent as if such claims and fractions had been specifically described herein and included in such deed.

(7) The Sellers warrant jointly and severally for themselves and for all persons claiming by, through and under them that they have not made any disposition of any kind of any interest in said mining claims and that the same are free from all liens, encumbrances, royalty interests and leasehold interests and Sellers warrant jointly and severally that during the continuance of this option they will make no disposition of said claims except to UNION CARBIDE nor cause or permit any such liens, encumbrances, royalty interests or leasehold interests to attach against the property. The Sellers further warrant jointly and severally that said claims were located in compliance with the laws of the United States and of the State of Nevada and that all acts necessary to perfect a valid claim have been performed with respect to each said claim.

(8) It is understood and agreed between the parties hereto that, except as provided in section number 5 hereof, UNION CARBIDE is in no way obligated to perform any work upon said claims

or to develop the same, and UNION CARBIDE shall be the sole judge as to whether or not said claims shall be developed.

(9) To the extent permitted by law the Sellers, by a representative acceptable to UNION CARBIDE, shall have the right to inspect all maps, assays, drill records, gross ore receipts and pertinent data of UNION CARBIDE relating to the determination of the gross value of ore mined and removed from the premises, but the said representative shall not have the right to inspect any records of UNION CARBIDE relating to mining costs nor method of treatment of ores. Said representative shall have the right to enter upon said mining claims for the purpose of inspection, all at the risk and expense of such representative.

(10) In the event that UNION CARBIDE shall not exercise this option, it covenants and agrees that it will furnish to the Sellers, upon request, a copy of all maps, assays, drill records and other pertinent data obtained by UNION CARBIDE during the 6-months option term and relating to said mining claims, but Sellers shall not be entitled to receive such information prior to expiration of the term of this option.

(11) In the event that this option is exercised, and until any reconveyance as above-mentioned, UNION CARBIDE shall perform all covenants and conditions with respect to royalty payments by it to be performed under the terms of such deed, a copy of which is attached hereto as Exhibit "A".

(12) Any and all written notices to be given hereunder to UNION CARBIDE may be given by mailing the same by United States Registered Mail, return receipt requested, to UNION CARBIDE and CARBON CORPORATION in care of its division, Union Carbide Nuclear Company, Post Office Box 1169, Grand Junction, Colorado; and to all the Sellers notice may be given by mailing the same by United

States Registered Mail, return receipt requested, to Grant Sawyer at Box No. 831, Elko, Nevada.

(13) The provisions hereof shall inure to the benefit of and be binding upon the successors, representatives, heirs and assigns of the parties hereto.

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

ATTEST:

(SEAL) T. A. MOORE
Asst. Secretary

UNION CARBIDE AND CARBON CORPORATION

By W. E. REMMERS
Vice President

PRICE D. "TURK" MONTROSE
Price D. "Turk" Montrose

THELMA MONTROSE
Thelma Montrose

ABRAM A. KNOWLES
Abram A. Knowles

DORIS F. KNOWLES
Doris F. Knowles

EDWARD A. KNOWLES
Edward A. Knowles

GERALDINE KNOWLES
Geraldine Knowles

GEORGE G. KNOWLES
George G. Knowles

[illegible]

[illegible]

[illegible] 30th [illegible]
[illegible] F. [illegible]

[illegible]

[illegible]

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[illegible]

appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

Grantors, jointly and severally, warrant that they are the owners of said claims, free and clear of all liens, leases, royalty interests, encumbrances and adverse claims of any nature whatsoever except a royalty interest due and payable to the United States Government under AEC Contract No. [illegible]-556 dated June 25, 1953, reserving to the Government the sum of Sixteen Thousand Three Hundred Twenty Dollars ($16,320.00) to be paid as an overriding royalty, that said claims were located in compliance with the laws of the United States and the laws of the State of Nevada, and that all acts necessary to perfect and maintain a valid claim have been performed with respect to each of said claims.

[illegible], all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said grantee, its successors and assigns forever.

[illegible], to Grantors a royalty interest of ten percentum (10%) of the gross value of the tungsten content of ore mined and removed from such claims. "Gross value" as used above shall mean the market value, based solely upon tungsten content, of ore of like grade and quality prevailing in the area of the claims at the time of removal of such ore. Determination of tungsten content for purposes of determining the market value on which royalty shall be paid shall be made on a calendar monthly basis using a weighted arithmetic average of tungsten content of all lots of ore mined and removed from such claims during said calendar month. No royalty shall be payable with respect to any other mineral or thing of value which may be found in such ore, except as hereinafter provided with respect to uranium and vanadium.

Such royalty interest shall expire and terminate at the time Four Hundred Sixty-Four Thousand Dollars ($464,000.00) in aggregate shall have been paid therefor and by reason thereof, and thereafter Grantors, their heirs, representatives and assigns shall have no right, title or interest in said claims nor the proceeds derived therefrom, subject to the reservation of royalty for the purpose of uranium and vanadium as contained hereafter.

[illegible] to the Grantors a royalty interest of ten percentum (10%) of the gross value of the uranium and vanadium content of ore mined and removed from such claims. "Gross value" of ore, as used above, shall include any premiums and bonuses paid for such ore by reason of uranium and vanadium content by the United States of America or any agency thereof, but shall not include development or transportation allowances. So long as ore prices shall be established for such ore by Atomic Energy Commission Domestic Uranium Circular, or circulars, "gross value" shall be the amount applicable according to any such circular at the time the ore is removed from the claims; and if such commission's rates for ore shall cease to be in effect, "gross value" of ore removed from the claims thereafter shall be the market value of ore of like grade and quality for uranium and vanadium, as the case may be, contained therein and prevailing in the area of the claims at the time of removal. No royalty shall be payable with respect to any other mineral or thing of value which may be found in such ore except as hereinbefore provided for tungsten, uranium and

vanadium. Determination of uranium and vanadium content for purposes of determining the market value on which royalty shall be paid shall be made on a calendar monthly basis using a weighted arithmetic average of uranium and vanadium content of all lots of ore mined and removed from such claims during said calendar month.

Such royalty interest shall expire and terminate at the time Two Hundred Fifty Thousand Dollars ($250,000.00) in aggregate shall have been paid therefor and by reason thereof; provided, however, that said royalty interest shall cease and terminate twenty-five (25) years from the date hereof, even though Grantors shall not have received the total sum of Two Hundred Fifty Thousand Dollars ($250,000.00) in royalties hereunder, and thereafter Grantors, their heirs, representatives and assigns shall have no right, title or interest in said claims nor to the proceeds derived therefrom.

Payment of all royalties hereunder shall be made to the First National Bank at Elko, Nevada, or any successor to such bank, as agent of the Grantors, their heirs, representatives and assigns. If such bank and any successor thereof shall cease to exist, such royalties shall be paid thereafter to such bank within the United States as the holders of a majority of such royalty interest shall designate in a notice given to the Grantee at Grand Junction, Colorado, and recorded in the public records of Elko County, Nevada. Grantee shall not be responsible for the division and distribution of royalty payments among and to those entitled thereto and said bank is authorized to withhold the disbursement of royalty payments until Grantors have executed such division orders as the bank may require.

Royalties hereunder shall be paid as follows:

(a) An annual advanced tungsten royalty in the amount of Thirty-six Thousand Dollars ($36,000.00) shall be paid to such bank for each year, commencing on December 1st and ending on the subsequent November 30th, hereinafter referred to as a fiscal year. Such annual advanced royalty shall be paid on or before December 1st of each year, commencing on or before December 1, 1957, for the fiscal year then ensuing. No annual advanced royalty shall be paid for uranium or vanadium ores, and said tungsten advanced royalty shall cease after the tungsten royalty shall have expired.

(b) Royalties shall be computed monthly and royalty payable for ores mined and removed during any month shall be paid on or before the 20th day of the succeeding month; provided that the annual advanced royalty for any fiscal year shall be credited against monthly royalties payable during that fiscal year and monthly royalty payments shall be made only for the excess of royalties payable above the amount of annual advanced royalty paid.

(c) Anything herein to the contrary notwithstanding, the obligation of the Grantee to make payments of royalty and of annual advanced royalty shall cease and terminate at the time the grantee delivers to grantors or places of public record in Elko County, Nevada, a quit claim deed conveying said claims to the herein named grantors; provided that upon such reconveyance the grantee shall not be entitled to any repayment of royalties or annual advanced royalty theretofore paid by it and the grantee shall be liable for any unpaid royalties payable or which may be payable by reason of removal of ore from the claims prior to the time of such reconveyance. Upon such reconveyance

[illegible]

[illegible]

[illegible]

/S/ PRICE D "TURK" MONTROSE

/S/ THELMA MONTROSE

/S/ ABRAM A. KNOWLES

/S/ DORIS F. KNOWLES

/S/ EDWARD A. KNOWLES

/S/ GERALDINE KNOWLES

/S/ GEORGE G. KNOWLES

[illegible]

[illegible]

[illegible] 30TH [illegible] JUNE [illegible]

[illegible]

(SEAL)

/S/ F. GRANT SAWYER

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DATE	INITIALS	CODE

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT entered into this [illegible] day of December, 1956, by and between PAUL D. "TOM" MONTROSE and THELMA MONTROSE, his wife, [illegible] A. KNOWLES and [illegible] F. KNOWLES, his wife, EDWARD A. KNOWLES and GERALDINE KNOWLES, his wife, and GEORGE G. KNOWLES, a single man, all of the County of Elko, State of Nevada, parties of the first part, hereinafter referred to as the Sellers, and UNION CARBIDE AND CARBON CORPORATION, a New York corporation, hereinafter referred to as UNION CARBIDE, party of the second part,

W I T N E S S E T H :

WHEREAS, the parties hereto entered into an OPTION AND PURCHASE AND SALES AGREEMENT dated June 1, 1956, concerning the following described unpatented lode mining claims situate in Elko County, Nevada, to-wit:

NAME OF CLAIM	RECORDED
Garnet #1	Book 26 page 269
Garnet #2	" " " 2[illegible]
Garnet #3	" " " 27[illegible]
Garnet #4	" " " 270
Garnet #5	" " " 270
Garnet #6	" " " 271
Garnet #7	" " " 271
Garnet #8	" " " 272
Barium #1	" " " 272
Garnet Extension #1	" " " 301
Garnet Extension #2	" " " 308
Garnet Extension #3	" " " 30[illegible]
Barium #2	" " " 309
Garnet Extension #4 (also called Garnet	" 23 " 407
Garnet Extension #5 Extention #4)	" " " 408
Garnet Extension #6	" " " 409
Garnet Extension #7	" " " 41[illegible]
Garnet Extension #8	" " " 411
Garnet Extension #9	" " " 412
Garnet Extension #10	" " " 413
Garnet Extension #11	" " " 414
Garnet Extension #12	" " " 415
Garnet Extension #13	" " " 416
Garnet Extension #14	" " " 417
Garnet Extension #15	" " " 41[illegible]

AND, WHEREAS, UNION CARBIDE has determined through exploratory drilling and evaluation that said unpatented lode mining claims do not contain adequate ore reserves to justify the payment of the sum set out in said Agreement; and

WHEREAS, the parties hereto desire to amend said Agreement to provide for reduction in the payments by UNION CARBIDE to the Sellers,

NOW, THEREFORE, in consideration of the premises and of the covenants herein contained it is mutually agreed as follows:

1. The deed locked with the First National Bank of Grand Junction, Colorado, and called Exhibit A in said Agreement is hereby withdrawn from the escrow holder, the First National Bank of Grand Junction, Colorado, and a new deed, attached hereto and called Exhibit 2 is substituted in lieu thereof. The parties hereto agree that the First National Bank of Grand Junction, Colorado, may deliver the deed, a copy of which is attached to said Agreement and entitled Exhibit A, to the Sellers and the parties hereto further agree that they waive all rights that they may have against the First National Bank of Grand Junction, Colorado, for failure to deliver said deed as provided by said Agreement.

2. Paragraph numbered 3 of said Agreement is amended to read as follows: Immediately following the execution of this option agreement the sellers will execute and deliver to the First National Bank at Grand Junction, Colorado, the original deed, copy of which is attached hereto as Exhibit "B". This option may be exercised by UNION CARBIDE by the payment to said First National Bank during the option period the sum of Six Thousand ($6,000.00) Dollars. Upon the payment of the sum of

Six Thousand ($6,000.00) Dollars within said option period said bank shall pay such sum to the sellers as they in writing may designate to such bank and said bank shall deliver such deed to UNION CARBIDE. Delivery of such deed shall not depend upon the giving of instructions as to payment by the sellers nor the division and distribution of such sum among the sellers. In the event that said bank shall receive satisfactory proof that UNION CARBIDE did not exercise its option within the option period as above set forth said bank shall return such deed to the sellers. The sellers shall pay one-half and UNION CARBIDE shall pay one-half of such bank's fees as Escrow Agent. All Five Hundred ($500.00) Dollar monthly payments commencing with the one due July 1, 1958, shall be made to the First National Bank of Grand Junction, Colorado, and said bank shall pay such sum to the sellers as they may in writing designate to such bank. If UNION CARBIDE exercises its option to purchase by depositing with said bank the sum of Six Thousand ($6,000.00) Dollars UNION CARBIDE shall not be obligated to pay and the sellers shall not have the right to receive any of the Five Hundred ($500.00) Dollar monthly option payments thereafter being due to the sellers.

3. Paragraph numbered 4 of said Agreement is amended to read as follows: In the event that UNION CARBIDE exercises this option it agrees until the sellers have received as a royalty on tungsten ores the total sum of Two Hundred Fifty Thousand ($250,000.00) Dollars (being the sales and purchase price of $6,000.00 and $244,000.00 royalty) UNION CARBIDE will pay the royalty for tungsten ores more specifically defined in Exhibit B and will pay an advanced annual royalty commencing on or before December 1 in each year, commencing December 1, 1957, all as set forth in the provisions of the deed, a copy

of which is attached hereto as Exhibit B, and in this connection the provisions of Exhibit B are hereby referred to and incorporated herein; provided that UNION CARBIDE may reconvey the property to the sellers by quitclaim deed and avoid further obligation hereunder and under such deed except that UNION CARBIDE shall be obligated to pay all royalties due the sellers hereunder or under such deed for ore mined and removed from the premises prior to such conveyances.

In addition to the tungsten royalty referred to above UNION CARBIDE agrees that it will pay a royalty more specifically defined in Exhibit B until the sellers have received as royalties upon uranium and vanadium ores the total sum of Two Hundred Fifty Thousand ($250,000.00) Dollars, provided, however, that said royalty interest insofar as it concerns uranium and vanadium ores shall cease and terminate twenty-five (25) years from the date hereof even though the sellers shall not have received said Two Hundred Fifty Thousand ($250,000.00) Dollars in uranium and vanadium royalties. There shall be no annual advanced royalty paid to the sellers in lieu of actual royalties for uranium and vanadium ores. UNION CARBIDE may, by reconveyance of the property to the sellers as provided above, terminate its obligation to pay uranium and vanadium royalties in the same manner as it may terminate its obligation to pay tungsten royalties.

4. Except as amended herein said Agreement dated June 1, 1956 between the parties hereto shall be and remain the same.

IN WITNESS WHEREOF the parties hereto have set their

hands and seals the day and year first above written.

UNION CARBIDE AND CARBON CORPORATION

ATTEST: By _____

_____

_____ _____
Price D. "Turk" Montrose Thalma Montrose

_____ _____
Abram A. Knowles Doris F. Knowles

_____ _____
Edward A. Knowles Geraldine Knowles

_____
George G. Knowles

STATE OF NEW YORK }
} ss
COUNTY OF NEW YORK }

On this _____ day of December, 1956, before me appeared _____ to me personally known, who being by me duly sworn, did say that he is the _____ of Union Carbide and Carbon Corporation, and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors and said _____ acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and seal this _____ day of December, 1956.

My commission expires:

_____
Notary Public

STATE OF NEVADA }
COUNTY OF ELKO } ss

On this _____ day of December, 1[illegible], personally appeared before me, a Notary Public in and for said County and State, PATCH D. "TEX" MONTROSE, DELLA MONTROSE, his wife, JESSE A. KNOWLES, DORIS F. KNOWLES, his wife, EDWARD A. KNOWLES, GERALDINE KNOWLES, his wife, and GEORGE C. KNOWLES, a single man, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

_____
Notary Public in and for
the County of Elko, State of Nevada

OFFICIAL FILE COPY
D M E A
RECEIVED APR 1 1957
DATE | INITIALS | CODE

[illegible]

THIS INDENTURE, [illegible] 1957, between [illegible] [illegible]

[illegible]

[illegible]	[illegible]	[illegible]
Garnet #1	[illegible]	[illegible]
Garnet #2	[illegible]	[illegible]
Garnet #3	[illegible]	[illegible]
Garnet #4	[illegible]	[illegible]
Garnet #5	[illegible]	[illegible]
Garnet #6	[illegible]	[illegible]
Garnet #7	[illegible]	[illegible]
Garnet #8	[illegible]	[illegible]
Garnet #9	[illegible]	[illegible]
Garnet Extension #1	[illegible]	[illegible]
Garnet Extension #2	[illegible]	[illegible]
Garnet Extension #3	[illegible]	[illegible]
Garnet #4	[illegible]	[illegible]
Garnet Extension #4 (also called [illegible])	[illegible]	[illegible]
Garnet Extension #5	[illegible]	[illegible]
Garnet Extension #6	[illegible]	[illegible]
Garnet Extension #7	[illegible]	[illegible]
Garnet Extension #8	[illegible]	411
Garnet Extension #9	[illegible]	[illegible]
Garnet Extension #10	[illegible]	[illegible]
Garnet Extension #11	[illegible]	[illegible]
Garnet Extension #12	22	[illegible]
Garnet Extension #13	[illegible]	[illegible]
Garnet Extension #14	20	417
Garnet Extension #15	[illegible]	41[illegible]

TOGETHER with all the dips, spurs, and angles, and all the metals, ores, gold and silver-bearing quartz, [illegible] therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand

whatsoever, as well in law as in equity, of the said parties of the first part, of, in or to the said premises, and every part and parcel thereof, with the appurtenances.

Grantors, jointly and severally, warrant that they are the owners of said claims, free and clear of all liens, leases, royalty interests, encumbrances and adverse claims of any nature whatsoever except a royalty interest due and payable to the United States Government under DMA Contract No. 10X-E-550 dated June 25, 1951, securing to the Government the sum of Sixteen Thousand Three Hundred Twenty Dollars ($16,320.00) to be paid as an overriding royalty, that said claims were located in compliance with the laws of the United States and the laws of the State of Nevada, and that all acts necessary to perfect and maintain a valid claim have been performed with respect to each of said claims.

TO HAVE AND TO HOLD, all and singular, the said premises, together with the appurtenances and privileges thereto incident, unto the said grantee, its successors and assigns forever.

THERE IS RESERVED, HOWEVER, to Grantors a royalty interest of ten percentum (10%) of the gross value of the tungsten content of ore mined and removed from such claims. "Gross value" as used above shall mean the market value, based solely upon tungsten content, of ore of like grade and quality prevailing in the area of the claims at the time of removal of such ore. Determination of tungsten content for purposes of determining the market value on which royalty shall be paid shall be made on a calendar monthly basis using a weighted arithmetic average of tungsten content of all lots of ore mined and removed from such claims during said calendar month. No royalty shall be payable with respect to any other mineral or thing of value which may be found in such ore, except as hereinafter provided with respect to uranium and vanadium.

Such royalty interest shall expire and terminate at the time Two Hundred Forty-Four Thousand Dollars ($244,000.00) in aggregate shall have been paid therefor and by reason thereof, and thereafter Grantors, their heirs, representatives and assigns shall have no right, title or interest in said claims nor the proceeds derived therefrom, subject to the reservation of royalty for the purpose of uranium and vanadium as contained hereafter. Provided, however, in the event that the grantee shall mine and remove in excess of 250,000 tons of tungsten ore there is reserved a ten percentum (10%) royalty interest of the gross value of the tungsten content of ore mined and removed from such claims, as above described, in excess of 250,000 tons, until such time as the grantors have received an additional sum of Two Hundred Fifty Thousand Dollars ($250,000.00).

THERE IS RESERVED to the Grantors a royalty interest of ten percentum (10%) of the gross value of the uranium and vanadium content of ore mined and removed from such claims. "Gross value" of ore, as used above, shall include any premiums and bonuses paid for such ore by reason of uranium and vanadium content by the United States of America or any agency thereof, but shall not include development or transportation allowances.

so long as ore prices shall be established for such ore by Atomic Energy Commission Permanent Uranium Circular, or circulars, "gross value" shall be the amount applicable according to any such circular at the time the ore is removed from the claims; and if such commission's rates for ore shall cease to be in effect, "gross value" of ore removed from the claims thereafter shall be the market value of ore of like grade and quality for uranium and vanadium, as the case may be, contained therein and prevailing in the area of the claims at the time of removal. No royalty shall be payable with respect to any other mineral or thing of value which may be found in such ore except as hereinafter provided for the uranium and vanadium. Determination of uranium and vanadium content for purposes of determining the market value on which royalty shall be paid shall be made on a calendar monthly basis using a weighted arithmetic average of uranium and vanadium content of all lots of ore mined and removed from such claims during said calendar month.

Such royalty interest shall expire and terminate at the time Two Hundred Fifty Thousand Dollars ($250,000.00) in aggregate shall have been paid thereafter and by reason thereof; provided, however, that said royalty interest shall cease and terminate twenty-five (25) years from the date hereof, even though Grantors shall not have received the total sum of Two Hundred Fifty Thousand Dollars ($250,000.00) in royalties hereunder, and thereafter Grantors, their heirs, representatives and assigns shall have no right, title or interest in said claims nor to the proceeds derived therefrom.

Payment of all royalties hereunder shall be made to the First National Bank of Elko, Nevada, or any successor to such bank, as agent of the Grantors, their heirs, representatives and assigns. If such bank and any successor thereof shall cease to exist, such royalties shall be paid thereafter to such bank within the United States as the holders of a majority of such royalty interest shall designate in a notice given to the Grantee at Grand Junction, Colorado, and recorded in the public records of Elko County, Nevada. Grantee shall not be responsible for the division and distribution of royalty payments among and to those entitled thereto and said bank is authorized to withhold the disbursement of royalty payments until Grantors have executed such division orders as the bank may require.

Royalties hereunder shall be paid as follows:

(a) An annual advanced tungsten royalty in the amounts hereinafter set forth shall be paid to such bank for each year, commencing on December 1st and ending on the subsequent November 30th, hereinafter referred to as a fiscal year:

DATE	AMOUNT
December 1, 1957	$ 6,000.00
December 1, 1958	12,000.00
December 1, 1959	12,000.00
December 1, 1960	12,000.00
December 1, 1961	12,000.00
December 1, 1962	12,000.00

Thereafter such annual advanced royalty shall be in the amount of

Twenty-Four Thousand Dollars ($24,000.00) until such time as the total royalty payments hereunder shall equal Two Hundred Forty-Four Thousand Dollars ($244,000.00). Such annual advanced royalty shall be paid on or before December 1st of each year commencing on or before December 1, 1957 for the fiscal year then ensuing. No annual advanced royalty shall be paid for uranium or vanadium ores, and said tungsten advanced royalty shall cease after the tungsten royalty shall have expired, subject to the provisions hereof relating to the mining and recovering of tungsten ores in excess of 240,000 tons.

(b) Royalties shall be computed monthly and royalty payable for ores mined and removed during any month shall be paid on or before the 20th day of the succeeding month; provided that the annual advanced royalty for any fiscal year shall be credited against monthly royalties payable during that fiscal year and monthly royalty payments shall be made only for the excess of royalties payable above the amount of annual advanced royalty paid.

(c) Anything herein to the contrary notwithstanding, the obligation of the Grantee to make payments of royalty and of annual advanced royalty shall cease and terminate at the time the grantee delivers to grantors or places of public record in Elko County, Nevada, a quitclaim deed conveying said claims to the herein named grantors; provided that upon such reconveyance the grantee shall not be entitled to any repayment of royalties or annual advanced royalty theretofore paid by it and the grantee shall be liable for any unpaid royalties payable or which may be payable by reason of removal of ore from the claims prior to the time of such reconveyance. Upon such reconveyance the grantee shall have the right and privilege within a reasonable time to remove from the premises of said mining claims all machinery, equipment, supplies and improvements, including without limitation underground and surface facilities, mine rails, ore bins, structures, timbers not in place and fixtures; provided that said mining property shall be left by grantee in a good and orderly condition with due regard to the safety of the premises, its pits, tunnels, shafts and drifts.

IN WITNESS WHEREOF the said parties of the first part and grantors have hereunto set their hands and seals the day and year first above written.

Peter M. "Sam" Montrose	Amelia Montrose
Elias A. Knowles	Doris K. Knowles
Edward A. Knowles	Geraldine Knowles
George C. Knowles	

DOCKET
SURNAME

Rutledge
Martin
Guhan
Newcomb
Talbot
Kiilsgaard
Hedges
Selfridge
Johnson
Hoffman

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Sunshine Mining Company
Box 1080
Kellogg, Idaho

Assignee-Operator under Exploration Project Contract No. Idm-E556, Docket No. DMEA 2820, Garnet Tungsten Mining Company, dated June 25, 1953.

Pursuant to the provisions of Exploration Project Contract No. Idm-E556, dated June 25, 1953 (Docket No. DMEA 2820), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

A considerable tonnage of marginal-grade tungsten ore in tactite has been indicated by bulldozer trenching and diamond drilling at the Garnet Tungsten mine. The tungsten, present in the form of scheelite, is distributed along bedding planes, in garnet and epidote seams, and as disseminations in the tactite which occurs at the contact of granite and sedimentary rocks.

THE UNITED STATES OF AMERICA

Dated: OCT 27 1954

By C. Mittenthorp
Administrator, Defense Minerals Exploration Administration

cc: DOCKET
FT, REGION III
CODE 400--Mr. Martin
CODE 800--Mr. Chambers
CODE 110--Mr. Johnson
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
FINANCE OFFICE
OPERATING COMMITTEE
ADMIN. READ. FILE

cc: PRICE D. MONTROSE, MTN. CITY, NEV.
GARNET TUNG. MIN. CO., JOHN DAY, OREG.
ABRAM A. KNOWLES, MTN. CITY, NEV.
GEO. G. KNOWLES, ELKO, NEV.
EDW. A. KNOWLES, ELKO, NEV.
IRVING GUMBEL, EPS, GSA, WASH, DC.

FARutledge/ls
10/13/54; 10/28/54

DOCKET
Surname:

Rutledge
Martin
Guhan
Newcomb
Chamber

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Sunshine Mining Company
Box 1080
Kellogg, Idaho

Assignee-Operator under Exploration Project Contract No. Idm-E556, Docket No. DMEA 2820, Garnet Tungsten Mining Company, dated June 25, 1953.

Pursuant to the provisions of Exploration Project Contract No. Idm-E556, dated June 25, 1953 (Docket No. DMEA 2820), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Bulldozer trenching and diamond drilling at the Garnet Tungsten mine have furnished sufficient data to indicate a considerable tonnage of ore above 7300 feet in altitude and estimated to contain an average of 0.315 percent WO_3.

THE UNITED STATES OF AMERICA

Dated: _____ By _____
Administrator, Defense Minerals Exploration Administration

cc: DOCKET
FT, REG. 3
CODE 400-Mr. Martin
CODE 800-Mr.Chambers
CODE 110-Mr.Johnson
J.H.HEDGES, USBM
R.W.GEEHAN, USBM
PRICE D.MONTROSE, MTN.CITY,NEV.
GARNET TUNG. MIN. CO.,JOHNDAY, OREG.

cc: FINANCE OFFICE
OPER. COMMITTEE
ADMIN. READ.FILE
IRVING GUMBEL, EPS,GSA
THOR KIILSGAARD, USGS
ABRAM A. KNOWLES, MTN.CITY,NEV.
GEO. G. KNOWLES, ELKO, NEV.
EDW. A. KNOWLES, ELKO, NEV.

FARutledge/ls
10-13-54

400

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Abram A. Knowles, George G. Knowles, Edward A. Knowles,
(Assignees of Sunshine Mining Company who were assignees
of Garnet Tungsten Mining Company)
Mountain City, Nevada

pertaining to Exploration Project Contract No. Ida-E56, Docket No. DMEA-2820, including Amendment Nos. 1 and 2, for the months of August 1953 to September 1955, inclusive, covering a project for the exploration of tungsten, on property known as the Garnet Tungsten Mine, located in Elko County, Nevada.

WSay

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of costs claimed with the contract and pertinent schedules, consultation with the Executive Officer in charge of 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 reason:

All 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, and during the performance of the contract, an interim Report of Review was issued under date of July 13, 1954 by George Mavor, DMEA Auditor for units of work completed, in amount of $5,760.00.

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

Total cost as billed by contractor	$21,760.00
Exceptions	-0-
Total Accepted Cost	$21,760.00

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 Sixteen Thousand Three Hundred Twenty and 00/100 Dollars:

$16,320.00

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.

George Mavor
George Mavor
Auditor

November 7, 1955

Audit

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Sunshine Mining Company
Box 1080
Kellogg, Idaho
Assignees for
Garnet Tungsten Mining Company,
a Nevada limited partnership composed
of L. D. Wilson and R. E. Summers, of
John Day, Oregon: and H. A. Culp, of
Mountain City, Nevada.

pertaining to Exploration Project Contract No. Idm-E 556, Docket No. DMA-2820, including Amendment No. 1, for the months of August 1953 to December 1953, inclusive, covering a project for the exploration of tungsten, on property known as the Garnet Tungsten Mine, located in Elko County, Nevada.

My review included an examination of the Monthly Reports (Forms DF-104) and supporting documents attached thereto, comparison of costs claimed with the contract and pertinent schedules, consultation with the Executive Officer in charge of 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 reason:

> All of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated 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	$9,669.18
Exceptions (schedule attached):	
Costs in excess of contract	3,909.18
Total accepted costs	$5,760.00

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 amount of Four Thousand Three Hundred Twenty and 0/100 Dollars:

$ 4,320.00

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.

July 13, 1954

George Mavor
George Mavor
Auditor

Schedule of Exceptions

Sunshine Mining Company [illegible]A-2820 Idaho-[illegible]556

Stage I

Total costs as billed by contractor		
Drilling	1,765.90	
Bulldozing	1,176.00	
Labor	55[illegible].00	
Supervision	3,177.28	$9,669.18
Less: Allowable costs based on Amendment No. 1 of Contract at agreed unit rates.		
Bulldozing 6[illegible] hrs. at $12.50 hr.	800.00	
Diamond Drilling 620 ft. at [illegible].00 ft.	4,960.00	5,760.00
Excess costs disallowed		$3,909.18

Docket copy

ASSIGNMENT OF CONTRACT

THIS ASSIGNMENT by Sunshine Mining Company, a Washington Corporation (hereinafter called the "Assignor"), in favor of Abram A., George S., and Edward A. Knowles all of Elko County, Nevada (hereinafter called the "Assignee"),

WITNESSETH THAT:

WHEREAS, the Garnet Tungsten Mining Company, a partnership (hereinafter called the "Operator"), and the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration (hereinafter called the "Government"), entered into Exploration Project Contract No. Idm-2556 (Docket No. DMEA-2520) dated June 25, 1953 (hereinafter called the "Contract"); and

WHEREAS, on September 1, 1953, the Operator assigned the Contract to the Assignor, and the Government approved the Assignment; and

WHEREAS, the Operator and the Assignor have surrendered their interests in the land which is the subject of the exploration project, after completing the first of two stages of the project, and the Assignee, consisting of three of the four lessees, wish to complete the project.

NOW THEREFORE, the Assignor, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration received from the Assignee, does hereby assign, transfer and convey to the Assignee all of its right, title, and interest in the Contract. The Assignor consents to all future amendments to the Contract, and hereby releases the Government from all claims, past, present, and future, arising out of the Contract.

This assignment is subject to the written acceptance by the Assignee of the terms, provisions, and conditions of the Contract, and to the written consent of the Government.

Dated Oct. 22, 1954.

SUNSHINE MINING COMPANY

By R. W. Leick

ASSIGNEE'S ACCEPTANCE

THE ASSIGNEE, this 22nd day of October, 1954, hereby accepts the above Assignment and assumes and

agrees to be bound by the terms, provisions, and conditions of the Contract.

Abram R. Knowles
Abram A. Knowles

George G. Knowles
George G. Knowles

Edward R. Knowles
Edward A. Knowles

GOVERNMENT'S CONSENT

The Government, this 8th day of November, 1954, hereby consents to the above assignment without releasing the Operator or the Assignor from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

By C. Mattesday
Administrator, Defense Minerals Exploration Administration

Martin
Rutledge
Ruth
Hoffland
Chamberlin
Selfridge

DEPARTMEN
Defense Min

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

OCT 27 1954

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

Lode mining claims in the Alder Mining District, County of Elko, State of Nevada, being Garnet No. 1 and Garnet No. 2

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/ George G. Knowles, E. A. Knowles and Abram A. Knowles

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production 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.

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.

(OVER)

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 _____ day of _____, 195___.

Bruce D Montrose [Seal]

_____ [Seal]

_____ [Seal]

Docket Copy

30 1954

ASSIGNMENT OF CONTRACT
ASSIGNEES' ACCEPTANCE
GOVERNMENT'S CONSENT

WHEREAS, the Garnet Tungsten Mining Company, a partnership composed of L. D. Wilson, R. E. Summers, and H. A. Culp (hereinafter called the "Operator"), entered into an Exploration Project Contract dated June 25, 1953, Contract No. Idm-E556, Docket No. DMEA-2820, with the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration (hereinafter called the "Government"); and

WHEREAS, the land referred to in Article 2 of the said contract was leased to Ray E. Summers and Harold A. Culp from Abram A. Knowles, George G. Knowles, and Price Montrose by an instrument dated September 1, 1952, as amended August 31, 1953; and

WHEREAS, the aforesaid lease was duly assigned by an instrument dated August 25, 1953 to Sunshine Mining Company, a corporation duly organized and existing under and by virtue of the State of Washington and having an office located at Kellogg, Idaho (hereinafter called the "Assignee").

NOW THEREFORE, the Operator in consideration of the sum of One Dollar ($1.00) lawful money of the United States and other good and valuable consideration received from the Assignee, does hereby assign, transfer, and convey to the Assignee all its right, title, and interest in and to the aforesaid Exploration Project Contract including any and all property purchased for, and the right to use any and all property devoted to the exploration work under this Exploration Project Contract, and hereby consents to any and all future amendments to the said contract; Provided, however, That the Government shall pay to the Operator all monies which may be or become due and payable to the Operator for work performed during August 1953, and upon payment thereof, the Operator agrees to release and hereby releases the Government from any and all claims, past, present, or future arising out of the said Exploration Project Contract.

This Assignment is subject (1) to the written consent of the Government; (2) to written acceptance by the Assignee; and (3) assumption by the Assignee of the terms, provisions, and conditions of said Exploration Project Contract binding upon the Operator.

Dated September 1, 1953

GARNET TUNGSTEN MINING COMPANY

By [illegible]

By R. E. Summers

By L. D. Wilson

The Assignee, this 1st day of September, 1953, hereby accepts the above Assignment, and assumes and agrees to be bound by the terms, provisions, and conditions of said Exploration Project Contract that are binding on the Operator.

SUNSHINE MINING COMPANY

By J. B. Cox
J. B. Cox, Vice President

On this 1st day of September, 1953, before me Ruby A. Denney, the undersigned officer, personally appeared J. B. Cox who acknowledged himself to be the Vice President of the Sunshine Mining Company, a corporation, and that he as Vice President, being duly authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as Vice President.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Ruby A. Denney
Notary Public

The Government, this 4th day of November, 1953, without releasing the Operator from any of the terms, provisions, and conditions of the said Exploration Project Contract, hereby consents to the above Assignment.

THE UNITED STATES OF AMERICA

By C. A. Mittendorf
Administrator, Defense
Minerals Exploration
Administration

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ASSIGNMENT OF LEASE AND OPTION TO PURCHASE

THIS AGREEMENT made and entered into as of the 25th day of August, 1953 by and between Ray E. Summers and Harold A. Culp, both of the town of John Day, State of Oregon and hereinafter called, Lessees, and the Sunshine Mining Company, a Washington Corporation, hereinafter called, Sunshine.

W I T N E S S E T H:

The Lessees hold a Lease and Option to Purchase Agreement made and entered into the first day of September, 1952 by and between themselves as Lessees and Abram A., George G., and Edward A. Knowles, and Price D. Montrose, all of Elko County, State of Nevada as Lessors, covering certain mining claims located in the Alder Mining District, Elko County, State of Nevada and named Garnet #1 to #8 inclusive, Garnet Extension #1 to #15 inclusive and Barium #1 and #2.

On August 25, 1953 the Lessees agreed to assign the above described Lease and Option to Purchase to the Sunshine Mining Company in consideration for an operating agreement as outlined in a Joint Letter of Intent between Garnet Tungsten Mining Company, Incorporated, a Nevada Corporation, and Sunshine.

NOW THEREFORE, in consideration of the premises and the covenants herein made and to be kept by Sunshine and in consideration of other valuable and sufficient consideration received, the Lessees hereby jointly and severally assign to Sunshine all of their right, title and interest in the aforementioned Lease and Option to Purchase.

1. In consideration for this assignment, a specific reference is made to the provisions outlined in the Joint Letter of Intent dated August 25, 1953 referred to above.

2. Sunshine will prepare the initial draft of the formal operating agreement between the Lessees, Garnet Tungsten Mining Company and Sunshine, and will forward it to the Lessees for their approval and execution, and will cause the same to be executed by Sunshine.

3. Sunshine shall have the right and option, after completion of the program as called for under the DMEA contract with the Garnet Tungsten Mining Company, identified as Idm-E556, to withdraw from the project in which case Sunshine agrees to reassign the Lease and Option to Purchase referred to above to the Lessees.

4. For purpose of notices between the parties to this agreement, notice is deemed to have been received five days after deposit by registered mail, one to the other. Sunshine's address shall be Box 1313, Yakima, Washington and the Lessees official address shall be John Day, Oregon.

5. The parties to this assignment specifically covenant and agree that they will do such things as are necessary to keep the property covered by this assignment in good standing.

6. This assignment shall remain in force throughout the life of the Lease and Option to Purchase referred to above.

This Agreement will be binding upon and inure to the benefits of the heirs, executors, administrators, successors, and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the Lessees have subscribed their respective names this _____day of November, 1953.

LESSEES:

Ray E. Summers

Ray E. Summers

Harold A. Qulp

Harold A. Qulp

SUNSHINE:

R. D. Leisk

R. D. Leisk
General Manager

Library
REC'D
3 0 1954

STATE OF WASHINGTON }
COUNTY OF SPOKANE }

On this 25th day of November, 1953, personally appeared before me, a Notary Public in and for said County and State, R. D. Leisk, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Ruby A. Denney
Notary Public in and for the said County and State

My Commission expires March 17, 1957.

STATE OF Nevada
COUNTY OF Elko

On this 31st day of ~~November~~ December, 1953, personally appeared before me, a Notary Public in and for said County and State, Ray E. Summers, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

G. R. Lucewell
Notary Public in and for the said County and State

My Commission expires 1/3/56.

STATE OF Colorado
COUNTY OF San Miguel

On this 12th day of ~~November~~ December, 1953, personally appeared before me, a Notary Public in and for said County and State, Harold A. Culp, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Estil D. Bittum
Notary Public in and for the said County and State

My Commission expires My Commission expires March 21, 1955.

Docket Copy

Rutaw 1-5-5

EXPLORATION PROJECT CONTRACT NO. IDA-E556
GARNET TUNGSTEN MINING COMPANY
KNOWLES BROS., ASSIGNEE
DOCKET NO. DMEA-2820

AMENDMENT NO. 2

It is agreed this 1st day of December, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Abram A., George G., and Edward A. Knowles, Assignees, that Exploration Project Contract No. Ida-E556, Docket No. DMEA-2820, dated June 25, 1953, and Amendment No. 1 thereto, dated November 4, 1953, be further amended, effective February 25, 1954, as follows:

In Article 3 of the contract the completion date is set at eight months from the date of the contract. This completion date is hereby extended to October 1, 1955.

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, nor the agreed unit cost of any item of work.

Executed in sextuplicate the day and year first above written.

KNOWLES BROS., ASSIGNEE

By A. A. Knowles

By E. A. Knowles

By George G. Knowles

THE UNITED STATES OF AMERICA

By S. Ricker
S. Ricker
Executive Officer
DMEA Field Team, Region III

AMENDMENT NO. 2

Docket No. DMA-2[illegible]

Mineral Tungsten

Exploration Project Contract 1[illegible]-[illegible]

Date of Contract June 25, 1953

Date of Amendment December 1, 1953

Operator Knowles Bros., Assignee

JUSTIFICATION

The assignment of contract to Knowles Bros. has just recently been consummated. Owing to severe winter conditions existing in the area during the winter months, it is believed the completion date should be extended whereby field work need not be resumed until the early spring of 1955. Operation will be more efficiently done and at less expense.

S. Ricker, Executive Officer
DMEA Field Team, Region III

Docket Copy

MAILED

EXPLORATION PROJECT CONTRACT
GARNET TUNGSTEN MINING COMPANY
SUNSHINE MINING COMPANY, ASSIGNEE
DOCKET NO. DMEA-2820

AMENDMENT NO. 1

It is agreed this 4th day of November, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Sunshine Mining Company, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that effective August 13, 1953, the Exploration Project Contract No. Idm-E556, Docket No. DMEA-2820, dated June 25, 1953, be amended as follows:

1. In Exhibit "A" under "Description of the Work", "Stage I", delete everything and substitute:

a. Expose by bulldozer trenching the scheelite-bearing tactite at approximately the locations shown on the attached map - "Plan, Garnet Tungsten." The bulldozer trenching is not to exceed 64 hours.

b. Drill diamond-drill holes at locations B, D, and 50 feet northeast of A as shown on Fig. "A". The bearings, inclinations, and approximate lengths of holes B and D are shown on Figs. "A" and "B". The bearing of hole A is as shown on Fig. "A" but the inclination shall be minus 60 degrees and the approximate length 380 feet. Aggregate length of the three drill holes is not to exceed 620 feet.

2. In Exhibit "A" under "Estimated Cost of Project, "Agreed Unit Costs," "Stage I," delete everything and substitute:

a. Trench by bulldozer not less than D-6 in size 64 hours @ $12.50/hr. $ 800.00

b. Diamond drill 620 feet @ $6.00/ft. $4,960.00

$5,760.00

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, nor the agreed unit cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense
Minerals Exploration
Administration

SUNSHINE MINING COMPANY

By J. B. Cox Vice President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 30 1954

AMENDMENT NO. 1

Docket No. DMEA-2820 Mineral Tungsten

Exploration Project Contract Idm-E556

Date of Contract June 25, 1953

Date of Amendment November 4, 1953

Operator Garnet Tungsten Mining Company, Sunshine Mining Company, Assignee

JUSTIFICATION

After the Sunshine Mining Company took over the Garnet Tungsten Mine, the drift referred to in Paragraph 1, of Stage I of the contract, was extended at no cost to the Government without revealing any tungsten mineralization. It was felt by the Operator that no useful information would be obtained by further extension of the drift.

To get the most out of the funds provided, Amendment No. 1 was drawn up, abandoning further work under this part of Stage I and permitting remaining funds to be used for work which engineers believe had better promise of yielding information as to a possible occurrence of an orebody.

H. C. Miller, Executive Officer
DMEA Field Team, Region III

MF-200 (A)
(February 1952)

DOCKET NO. DMEA - 2020

COMMODITY Tungsten

Docket Copy
IDM-E 556

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

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 25th day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Garnet Tungsten Mining Company, a Nevada limited partnership composed of L. D. Wilson and R. D. Summers, of John Day, Oregon; and H. A. Culp, of Mountain City, Nevada,

hereinafter called the "Operator," as follows: and as set forth in Annex I 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 Nevada, County of Elko, described as follows:[3]

Two unpatented lode mining claims in the Alder Mining District known as Garnet No. 1 and Garnet No. 2, and recorded in the office of the County Recorder of Elko County, Nevada, in Book 28, p. 281, and Book 29, p. 308, respectively,

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner in possession and entitled to possession, and that the property is subject only to the following claims, liens or encumbrances, or to a lease or sub-lease or other agreement, of which a copy is attached:~~

(b) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 45 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 eight 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. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. 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 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $16,320.00 which is 75 percent of $21,760.00 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 check or 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. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed 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 units of work performed 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.

[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*) *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 the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, 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 and statement of work performed to accompany his final report.

ARTICLE 6. *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 I, substituted for that part of 6(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 the 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 7. *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 8. *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.

ARTICLE 9. *Changes and added provisions* .....

Executed in sextuplicate the day and year first above written.

GARNET TUNGSTEN MINING COMPANY

By Harold G. Cup (Partner)

By Ray E. Summers (Partner)

By R. N. Wilson (Partner)

THE UNITED STATES OF AMERICA

By O. Meitzenberg

Administrator, Defense Minerals Exploration Administration

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—66329-1

Doctor's Copy

EXPLORATION PROJECT CONTRACT
GARNET TUNGSTEN MINING COMPANY
DOCKET NO. DMEA-2820

ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

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 required by the exploration project contract, 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 which is the subject of the exploration project contract, 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 (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:

EXPLORATION PROJECT CONTRACT
GARNET TUNGSTEN MINING COMPANY
DOCKET NO. DMEA-2820

EXHIBIT "A

Description of the Work

The exploration work on this project is indicated on the maps attached hereto, entitled "Fig. A, Plan Map, Garnet Tungsten, Elko County, Nev., May 8, 1953," and "Fig. B, Garnet Tungsten, Elko County, Nev., May 8, 1953.

Stage I

Time Schedule: 0 - 2 months.

1. Drift 40 feet to the southeast from the present face of the main drift. The drift shall be not less than 4 feet by 6 feet in the clear and timbered where necessary.

2. Drill three diamond-drill holes at locations A, B, and D shown on Fig. "A." The bearings, inclinations, and approximate lengths of the drill holes are shown on Figs. "A" and "B." Aggregate length of the three drill holes is not to exceed 520 feet.

Stage II

Time Schedule: 3 - 9 months

Stage II is to be undertaken only after the completion of Stage I if, in the opinion of the Government, the results of Stage I warrant it.

1. Drive 400 feet of adit to explore the mineralized zone indicated by diamond-drill holes A and B. The location and direction of the adit is to be determined by the results of Stage I and be subject to the prior written approval of the Government. The adit shall be not less than 4 feet by 6 feet in the clear and timbered where necessary.

Estimated Cost of Project

Agreed Unit Costs

Stage I		
Drift 40 feet @ $40.00/ft.	$1,600.00	
Diamond drill 520 feet @ $8.00/ft.	4,160.00	$5,760.00
Stage II		
Drive adit 400 feet @ $40.00/ft.		16,000.00
Total Agreed Unit Costs for Project		$21,760.00
Government Participation at 75%		$16,320.00

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

December 18, 1952

Memorandum

To: DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Loan Application - Tungsten - Garnet Tungsten Mining Company, Mountain City, Nevada, Harold A. Culp

Attached are three copies of a loan application received in this office on December 15, 1952 from Mr. Harold A. Culp, Garnet Tungsten Mining Company.

One copy of the application is being retained in this office for our use.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

This same Ray E. Summers filed DMEA 2553 on cobalt claim in Grant County, Oregon -- which was denied 6/12/52.

ls

Critt is working something.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

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

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-2820
Metal or Mineral
Date Received 12/22/52
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:

Garnet Tungsten Mining Co.
Mountain City, Nevada.

(*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

On attached sheets

(*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

Lessee with option

(*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.

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

(*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 60 days and be completed within 18 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)?

(*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 accompanying 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 December 10, 1952

Garnet Tungsten Mining Co.
(Applicant)

By Ray E. Summers
R. A. Wilson
Harold A. Culp

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

Garnet Tungsten Mining Co.
Mountain City, Nev.

Information for M-103

1. (a) Garnet Tungsten Mining Co.
Mountain City, Nevada.

(b) Limited Partnership in Nevada.

(d) L. D. Wilson, John Day, Oregon
R. B. Summers, John Day, Oregon
H. A. Culp, John Day, Oregon.

3. (a) Garnet #1 and #2.
Legal description in enclosed lease and map.

(b) Knowles-Montrose - Knowles Bros. - Garnet Tungsten.

(c) Lessee with option.

(d) Copies of lease enclosed.

(e) None

(f) Garnet #1 - Book 28 - Page 281 - Elko, Nevada.
Garnet #2 - Book 28 - Page 308 - Elko, Nevada.

4. (a) The former owners, Knowles and Montrose, drilled 16 diamond drill holes, totaling approximately 1750 feet, at a cost of about $18,000.00. The cores are available for visual examination only as they wish to reserve them for possible future use if the present lessees should return the property to them. The drilling was done without a definite plan and can be used only to indicate what possibly may be encountered at depth. Due to the method of locating the holes and incomplete drill logs, very little factual information can be derived from the drilling.

The present lessees (Garnet Tungsten Mining Co.) have made about 1500 feet of bulldozer trenches on the probable ore bodies. Several of these cuts have exposed Tactite containing Scheelite in commercial quantities if these values continue with depth. Currently, a prospect crosscut (underground) is being driven across the lower ore zone with the intention of then drifting on the best showing of Scheelite. The location of these holes, cuts and other workings are shown on the enclosed map. Weather permitting, the above bulldozer trenches and tunnel will be open for inspection at anytime.

(b) None.

(c) Contact metamorphic deposit. Granitic intrusive intruding limestone. The Scheelite occurs mostly in large irregular tactite bodies roughly parallel to the main contact. These bodies are cut in several places by granitic dikes and sills. Some Scheelite occurs in quartz and hornfels and rarely in relatively unaltered banded limestone. The typical ore is banded with high grade layers separated by bands of lower grade material. The Scheelite varies from coarse crystals (.) to finely disseminated crystals throughout the matrix of the rock, in places it occurs in layers on the fracture planes of the tactite. The Tactite bodies vary in dip from 45 to 60 degrees. The general dip is southwest with the slope of the surface.

The surface showings of the ore, together with their size and widespread distribution along the contact, indicate that if these bodies have sufficient depth and continue to carry Scheelite in commercial quantities, the proposed underground exploration work could result in the discovery of a large deposit of commercial grade tungsten ore. The U. S. Bureau of Mines made a mill test on the ore. The results indicate the ore is amenable to concentration with good recovery. This test also indicates the concentrate would be of commercial grade and would contain no other minerals in harmful concentrations. The enclosed maps show the location and approximate size of the probable ore bodies, together with the proposed exploration work and the surface assays. Reports on this property by the U. S. Bureau of Mines and the U. S. Geological Survey should be available about the same time that this application is submitted.

(d) The county road from Wildhorse, Nev. to Jarbidge, Nev. passes within one mile of the property and a road has been built from there to the mine. This road would require some repair and rebuilding. The property is 12 miles from a from a paved road that goes from Elko to Wildhorse and on to Mountain City, Nevada. The claims are about 76 miles from the railroad at Elko, Nev.

(e) Experienced miners are available from the Mountain City area to carry out the outlined program. These men have already been contacted and have expressed their willingness to work on the project. There is a small crew working on the property at this time. Water is available on the property in sufficient quantities for milling and a camp. The water rights are now in the process of being filed upon. A 69,000 volt power line with sufficient power for a large mill and camp passes 1½ miles from the proposed mill site on the property.

COPY

Supplies can be obtained at Elko (76 miles) or Mountain City (25 miles). As all camp will be constructed on the property for the prospecting crew.

5. (a) Tungsten.

(b) The proposed project consists of the driving of about 2300 feet of drifts, crosscuts and raises, together with 100 feet of winze. Repairing and maintenance of necessary roads. Preparing building and tunnel sites and building the camp. This proposed work is shown on the enclosed map which also shows the ore zones to be prospected.

(c) The project would be started within 60 days (sooner if the weather will permit) and would be finished within 18 months.

(d) A. E. Summers has been successfully engaged in business for himself for approximately 20 years. This time has included about four years mining, both hard rock and placer. The rest has been with heavy equipment, logging, road construction and other general contracting. Recently he has been engaged in the logging and lumber business.

L. D. Wilson attended University of Oregon for three years (1916-20) then transferred to North Pacific College of Pharmacy for two years graduating in 1924. Successfully operated Drug business 1930-47 at John Day, Oregon. Operated lumber log and timber business (Dean Valley Pine Co. and Valley Lumber Co., John Day, Oregon) from Feb. 1946 to present time. During this later 15 years has handled numerous real estate deals as well as financed lumber and logs for other operators.

E. A. Culp (will supervise the operation)
Graduate of Oregon State College in Economic Geology. (1942)
Four years mining both hard rock and placer.
Five years geophysical prospecting.
1. Three years oil geophysics.
A. One year party chief gravimeter and seismograph.
B. Two years regional supervisor.
2. Two seasons geophysical prospecting for ore deposits. Party chief on electric resistivity and natural potential crew.
Two years surveying road and property lines, estimating timber for lumber company.

Garnet Tungsten Mining Co.
Mountain City, Nevada

6. (a) The drifting, crosscutting, raising and winzing will be contracted. Men to do the contracting are available and have been contacted.

Estimated cost for the contractor.

Labor	$13.00 ft.	
Insurance & Taxes	1.95	
Powder, fuse and caps	3.20	
Drill steel and bits	2.00	
Compr. operation and supplies	3.00	
Repairs and maintenance	1.75	
Misc. supplies	1.60	
		$26.50

Garnet Tungsten Mining Co. will either furnish or allow for the following on the costs per foot.

Timber	~~2.00 ft.~~	
Vent. pipe and hangers	1.70	
Compressed air pipe	1.75	
Water pipe	0.65	
Rails, spikes and fishplates	1.40	
		7.50
Use allowance for vehicles	0.32 ft.	
Operation and maintence of vehicles	2.20	
		2.52
Labor, supervision accounting etc.		8.28
Total cost per foot (Drift, crosscutting & Raising)		$44.80
Cost per foot winze. based on less footage per shift.		$75.00

COPY

Garnet Tungsten Mining Co.
Mountain City, Nevada

First Step - Lower ore zone.
Upper tunnel.
400 feet drifting and crosscutting
400' @ 44.80 $17,920.00

Second Step - Lower ore zone.
Lower tunnel.
1100 feet drifting, crosscutting and raising.
1100' @ 44.80 49,280.00
100 feet winze.
100' @ 75.00 7,500.00

Third Step - Middle ore zone.
400 feet drifting and crosscutting.
400' @ 44.80 17,920.00

Fourth Step - Upper ore zone.
400 feet drifting and crosscutting.
400' @ 44.80 17,920.00

Bulldozer work, building roads and road maintenance.
Snow removal, preparing building and tunnel sites.
Moving heavy equipment. (D-8 Caterpiller)
400 hrs. @ $20.00 hr. 8,000.00

(b) Superintendant, geology, sampling and engineering. $700.00 month
Assistant (assist with surveying sampling, office work) 475.00 "
Accounting 75.00 "
Truck driver and mechanic 500.00 "
Insurance, taxes and compensation 270.00 "
$2,070.00

= $8.28 per foot.

(c) Vehicles assigned to the project.
GMC Pickup $1875.00
Willys Jeep 1900.00
$3775.00

$\frac{3775}{60}$ = $62.92 month = $0.32 ft.
Operation and maintenance of vehicles and 4WD truck 2.20 ft.
$2.52 ft.

Operating materials and supplies.
10 gasoline lanterns @ 7.50 75.00
Fuel for lights and heating
5 months @ $300.00 month 1,500.00

Garnet Tungsten Mining Co.
Mountain City, Nevada.

(d) Operating equipment to be purchased.

Office equipment		
Combination safe and file	$250.00	
Typewriter	179.50	
Desk, chairs, drafting table	200.00	
Drafting and office supplies	120.00	
First aid, stretcher and fire extinguishers	200.00	
Stove	75.00	
		$1,024.00
One Four wheel Drive Truck		3,500.00
Sampling equipment		250.00

(e) None

(f) Buildings to be erected - Rough lumber, ~~tin roofs~~ etc.
Building to house compressor, shop ~~change roo~~ and office.
Size - 32' x 32'

Material	$1,290.00	
Labor	860.00	
Stoves	120.00	
		2,270.00

Bunk house for crew
Size - 16' x 24'

Material	800.00	
Labor	600.00	
Stove	60.00	
		1,560.00

~~Dining~~ and cook house
Size - 16' x 24'

Material	1,200.00	
Labor	600.00	
Stoves	350.00	
		2,150.00

(g) Miscellaneous.

Analytical work	2,500.00
Consulting and surveying	500.00
Freight and insurance on equipment	500.00
	$134,369.50
(h) Contingencies - because of possible changes in labor and operating costs and weather conditions, 10% is being added to the cost.	13,466.95
TOTAL ESTIMATED COST OF PROJECT	$147,836.45

7. (a) yes
(b) Money. Will furnish 25% of actual cost in cash.

Log of Diamond Drill Holes as given by Knowles-Montrose.

No. 1 setup - 4 holes.

No. 1 hole drilled at 45 degrees. Seventeen ft. to scheelite, sixteen feet of scheelite, hole fifty five feet deep ending in felsite or altered granite.

No. 2 hole drilled at 60 degrees. Thirteen feet to scheelite, 25 feet of scheelite, hole 95 feet deep.

No. 3 hole drilled at 90 degrees. 25 feet to scheelite, 24 feet of scheelite, hole 54 feet deep.

No. 4 hole drilled at 110 degrees, 41 feet to scheelite, 47 feet of scheelite. Pulled out of hole while still in good ore. This core if taken at right angles to the deposit would be approximately 25 feet thick.

No. 2 setup - 1 hole.

No. 5 hole drilled at 45 degrees, trace of scheelite at 5[illegible] feet, hole 125 feet deep, no good.

No. 3 setup - 1 hole.

No. 6 hole drilled at 45 degrees, 7[illegible] feet to scheelite, one 8 ft. lead of scheelite, one 4 foot lead and several 2 to 3 foot leads between the 8 foot lead and end of hole at 125 feet.

No. 4 setup - 1 hole.

No. 7 hole drilled at 50 degrees, 64 feet to scheelite. Approximately 40 feet of the 7[illegible] feet too soft to core, last 3[illegible] feet poor core recovery but exposed 3 fairly good lead 3 to 4 feet thick. Scheelite came up with cuttings thru out most of the 7[illegible] feet. Unable to determine grade of scheelite here.

No. 5 setup - 1 hole.

No. 8 Hole drilled at 70 degrees, 180 feet to scheelite, about 4 leads 3 to 4 feet with waste 3 to 8 feet between them a 6 feet lead of scheelite with about 6 feet waste, at this point a 40 foot deposit occurred which was 50 foot at angle drilled, at right angle crosscut would be about 40 feet. After going this 40 feet of scheelite the drill entered lime again, in which the drill was pulled out because of more urgent drilling farther up the mountain before the freeze up. This hole should carry more scheelite beyond the lime. The drill passed thru 110 feet of lime here to bottom of hole at 367 feet.

No. 7 setup - 1 hole

No. 10 hole drilled at 50 degrees, 115 feet of lime to granite. Granite continued to bottom of hole at 205 feet, no sign of scheelite.

No. 5 setup - 1 hole-
No. 8 hole drilled at 45 degrees, drilled to 142 feet w th no sign of scheelite. Granite horse protruded thru contact deposit new to a point about 250 ft. blow a general line of contact.

No. 8 setup - 1 hole
No. 11 hole drilled at 50 degrees, 70 feet to scheelite, 15 feet of scheelite. Hole 142 feet to bottom.

No. 9 setup - 1 hole
No. 12 hole drilled at 50 degrees, 35 feet to scheelite, 24 ft. altered limeand granite carrying 6 ft. of fair grade of scheelite.

No. 10 setup - 1 hole.
No. 13 hole drilled at 50 degrees, 45 feet to scheelite, 31 feet altered lime and granite carrying 6 feet fair grade scheelite.

No. 11 setup - 1 hole
No. 14 hole drilled at 45 degrees, 166 feet to altered lime and garnet carry ng one lead of 4 feet poor scheelite, hole 182 feet deep.

No. 12 setup - 1 hole
No. 15 hole drilled at 45 degrees, 67 feet altered lime and granite carrying one 4 foot lead of scheelite, low grade, hole 117 feet deep.

No. 13 setup - 1 hole
No. 16 hole drilled at 40 degrees, 17 feet to scheelite, 42 feet of scheelite, hole 82 feet deep. Good scheelite.

The entire core of the first four holes drilled, that showed any scheelite was ground up by them. Enough of this pulp was obtained for assays with the following results:

Hole No. 1	-	0.34 %	Tungstic Oxide
Hole No. 2	-	0.45 %	" "
Hole No. 3	-	0.12 %	" "
Hole No. 4	-	0.42 %	" "

Assays were by Abbot A. Marks, Inc.
624 Sacramento Street
San Francisco, Calif.

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 Nevada, County of Elko, described as follows:1/ Garnet #1 - Alder Mining District, Elko County, Nevada. Book 28 - Page 281 - Recorders office, Elko, Nevada.

Garnet #2 - Alder Mining District, Elko County, Nevada. Book 29 - Page 308 - Recorders office, Elko, Nevada.

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/ Garnet Tungsten Mining Co.

Mountain City, Nevada.

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/$ 110,854.83, 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 10 day of December, 195 2.

Price D Montrose [Seal]

E. A. Knowles [Seal]

George G Knowles [Seal]

Adelam A. Knowles

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 22 1952

DMEA 282

ASSIGNMENT OF LEASE AND OPTION TO PURCHASE

WHEREAS, ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, all of the County of Elko, State of Nevada, as Owners, and RAY E. SUMMERS and HAROLD A. CULP, of John Day, Oregon, as Lessees, did, on the 1st day of September, 1952, enter into an Agreement to Lease and Purchase certain mining claims, hereinafter described with more particularity; and

WHEREAS, in consideration of the covenants and agreements therein contained on the part of the said RAY E. SUMMERS and HAROLD A. CULP, to be kept and performed, the said Owners did make and execute an instrument proposed to convey all right, title and interest in said mining claims over to the said RAY E. SUMMERS and HAROLD A. CULP; and

WHEREAS, said Deed of conveyance and Lease and Option Agreement were deposited with the First National Bank of Nevada, Elko Branch, at Elko, Elko County, Nevada, as escrow holder; and

WHEREAS, on the 17th day of December, 1952, the said RAY E. SUMMERS and HAROLD A. CULP did sell, transfer, assign and set over unto the GARNET TUNGSTEN MINING CO., a limited partnership, that certain Lease and Option to Purchase said mining claims; and

WHEREAS, the said HAROLD A. CULP, RAY E. SUMMERS and L. D. WILSON, the partners comprising said limited partnership, have this date entered into an agreement to sell, transfer, assign and set over unto the GARNET TUNGSTEN MINING CO. INC., a Nevada corporation, all of their right, title and interest in and to said Lease and Option to Purchase Agreement;

NOW, THEREFORE, for and in consideration of the premises and for other good and valuable consideration, the said HAROLD A. CULP, RAY E. SUMMERS and L. D. WILSON, do by these presents sell, transfer, assign and set over unto the said GARNET TUNGSTEN MINING CO. INC., a Nevada corporation, all of their right, title and

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

interest in and to that certain Lease and Option to Purchase certain mining claims, more particularly described as follows, to-wit:

GARNET NO. 1
GARNET NO. 2
GARNET NO. 3
GARNET NO. 4
GARNET NO. 5
GARNET NO. 6
GARNET NO. 7
GARNET NO. 8
GARNET EXTENSION NO. 1
GARNET EXTENSION NO. 2
GARNET EXTENSION NO. 3
GARNET EXTENSION NO. 4
GARNET EXTENSION NO. 5
GARNET EXTENSION NO. 6
GARNET EXTENSION NO. 7
GARNET EXTENSION NO. 8
GARNET EXTENSION NO. 9
GARNET EXTENSION NO. 10
GARNET EXTENSION NO. 11
GARNET EXTENSION NO. 12
GARNET EXTENSION NO. 13
GARNET EXTENSION NO. 14
GARNET EXTENSION NO. 15
BARIUM NO. 1
BARIUM NO. 2

all of which are located in the Alder Mining District, in the County of Elko, State of Nevada, which said Lease and Option to Purchase Agreement was made and executed by RAY E. SUMMERS and HAROLD A. CULP, as Lessors, and ABRAM A. KNOWLES, GEORGE G. KNOWLES,

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

EDWARD A. KNOWLES and PRICE D. MONTROSE, as Owners, and which bears date September 1, 1952, and was thereafter assigned by the said HAROLD A. CULP and RAY E. SUMMERS to the GARNET TUNGSTEN MINING CO., a limited partnership, on or about the 17th day of December, 1952;

TO HAVE AND TO HOLD the same unto the said GARNET TUNGSTEN MINING CO., INC., a Nevada corporation, and their successors and assigns forever, subject, nevertheless, to the covenants, conditions and payments therein mentioned.

We hereby fully authorize and impower the said GARNET TUNGSTEN MINING CO., INC., a Nevada corporation, upon its performance of the said covenants and conditions contained in said Lease and Option to Purchase to demand and receive of the said Owners, the Deed covenanted to be given in the said contract in the same manner, to all intents and purposes as we ourselves might or could do were these presents not executed.

IN WITNESS WHEREOF, We have hereunto set our hands in seal on this the 6th day of April, 1953.

Ray E. Summers

Harold A. Culp

L. D. Wilson

STATE OF NEVADA)
) SS
COUNTY OF ELKO)

On this 6th day of April, 1953, personally appeared before me, a Notary Public in and for said County and State, HAROLD A. CULP, RAY E. SUMMERS and L. D. WILSON, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

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

A. L. Puccinelli
NOTARY PUBLIC

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, namely ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, as the Owners of the lode mining claims hereinabove described with more particularity, hereby do fully acknowledge that on or about the 1st day of September, 1952, we did enter into a Lease and Option to Purchase Agreement, concerning said mining claims with HAROLD A. CULP and RAY E. SUMMERS, of John Day, Oregon;

That thereafter, and on or about the 17th day of December, 1952, the said HAROLD A. CULP and RAY E. SUMMERS did assign said Lease and Option Agreement to L. D. WILSON, HAROLD A. CULP and RAY E. SUMMERS, as a limited partnership;

That we, the undersigned, namely ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, as said Owners, for and in consideration of the premises, and other good and valuable consideration, do hereby consent to the foregoing assignment to the GARNET TUNGSTEN MINING CO. INC., a Nevada corporation, therein named, of our contract with the said HAROLD A. CULP, RAY E. SUMMERS and L. D. WILSON, subject, however, to the covenants, conditions and terms set forth in said contract.

IN WITNESS WHEREOF, We have hereunto set our hands in seal on this the 6th day of April, 1953.

Price D. Montrose
E. A. Knowles
George G. Knowles
A. A. Knowles

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

STATE OF NEVADA)
) SS
COUNTY OF ELKO)

On this 6th day of April, 1953, personally appeared before me, a Notary Public in and for said County and State, ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

A. L. Puccinelli
NOTARY PUBLIC

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

ASSIGNMENT OF LEASE AND OPTION

KNOW ALL MEN BY THESE PRESENTS: That We, HAROLD A. CULP of John Day, Oregon, and RAY E. SUMMERS of John Day, Oregon, for and in consideration of the sum of One Hundred and no/100 ($100.00) Dollars, lawful money of the United States of America, to us in hand paid by the GARNET TUNGSTEN MINING CO., a limited partnership with its principal place of business at Mountain City, Elko County, Nevada, do by these presents sell, transfer, assign and set over unto the said GARNET TUNGSTEN MINING CO., that certain Lease and Option to Purchase certain mining claims, more particularly described as follows, to-wit:

GARNET NO. 1	GARNET EXTENSION NO. 1
GARNET NO. 2	GARNET EXTENSION NO. 2
GARNET NO. 3	GARNET EXTENSION NO. 3
GARNET NO. 4	GARNET EXTENSION NO. 4
GARNET NO. 5	GARNET EXTENSION NO. 5
GARNET NO. 6	GARNET EXTENSION NO. 6
GARNET NO. 7	GARNET EXTENSION NO. 7
GARNET NO. 8	GARNET EXTENSION NO. 8
BARIUM NO. 1	GARNET EXTENSION NO. 9
BARIUM NO. 2	GARNET EXTENSION NO. 10
	GARNET EXTENSION NO. 11
	GARNET EXTENSION NO. 12
	GARNET EXTENSION NO. 13
	GARNET EXTENSION NO. 14
	GARNET EXTENSION NO. 15

all of which are located in the Alder Mining District, in the County of Elko, State of Nevada, which said contract was made and executed by RAY E. SUMMERS and HAROLD A. CULP as Lessees, and ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE as Owners, and which bears date, the 1st day of September, 1952; to have and to hold the same unto the said GARNET TUNGSTEN MINING CO. and their heirs and assigns; subject, nevertheless, to the covenants, conditions and payments therein mentioned.

We hereby fully authorize and impower the said GARNET TUNGSTEN MINING CO., upon its performance of the said covenants and conditions contained in said Lease and Option to Purchase, to demand and receive of the said Owners the deed covenanted to be given in the said contract in the same manner, to all intents

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

and purposes, as we ourselves might or could do were these presents not executed.

IN WITNESS WHEREOF, we have hereunto set our hands on this the 17th day of December, 1952.

Ray E. Summers

Harold A. Culp

STATE OF NEVADA)
) SS
COUNTY OF ELKO)

On this 17th day of December, 1952, personally appeared before me, a Notary Public in and for said County and State, HAROLD A. CULP and RAY E. SUMMERS, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

A. L. Puccinelli
NOTARY PUBLIC

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

LEASE AND OPTION TO PURCHASE

THIS MINING LEASE AND OPTION AGREEMENT made and entered into on this the 1st day of September, 1952, by and between ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, all of the County of Elko, State of Nevada, hereinafter referred to as the Owners, and RAY A. SUMMERS and HAROLD A CULP, both of the Town of John Day, State of Oregon, hereinafter called the Lessees.

WITNESSETH

That WHEREAS, the said Owners have heretofore located, discovered and otherwise acquired title to the following described lode mining claims in the ALDER mining disctict, in the County of Elko, State of Nevada, to-wit:

Garnet No. 1

Garnet No. 2

Garnet No. 3

Garnet No. 4

Garnet No. 5

Garnet No. 6

Garnet No. 7

Garnet No. 8

Garnet Extension No. 1

Garnet Extension No. 2

Garnet Extension No. 3

Garnet Extension No. 4

Garnet Extension No. 5

Garnet Extension No. 6

Garnet Extension No. 7

Garnet Extension No. 8

Garnet Extension No. 9

Garnet Extension No. 10

Garnet Extension No. 11

Garnet Extension No. 12

Garnet Extension No. 13

Garnet Extension No. 14

Garnet Extension No. 15

Barium No. 1

Barium No. 2

WHEREAS, the said Leessees desire to lease and operate a mine or mines on said mining claim and to develop the same and to obtain an option to purchase said mining claims, and

WHEREAS, said Owners have heretofore taken the necessary steps to perfect their title and ownership in and to said lode mining claims, and the same are now in good standing, and the notices of location are on file and of record in the office of the County Recorder of Elko County, Nevada;

NOW THEREFORE, in consideration of the premises and the covenants herein made to be kept and performed by the Lessees, and in consideration of other valuable and sufficient consideration, the receipt whereof is hereby acknowledged, the said owners joint and severally lease unto the said Lessees, all of the above lode mining claims and mining properties with all improvements and appurtenances;

TO HAVE AND TO HOLD unto the said Lessees and their heirs, personal representatives and assigns, for a term of eighteen years, beginning with the 1st day of September, 1952, and expiring at twelve o'clock noon on the 31st day

of August, 1970; subject to the rights on the part of the Lessees to exercise the option and privileges herein contained and granted, unless this lease and agreement shall be sooner terminated through the violation of any covenant hereof, required to be kept and performed by the Lessees; and in consideration of this lease, demise and option to purchase, the Lessees hereby covenant and agree as follows:

1. Said Lesses hereby and agree to enter the above-described lode mining claims and mining properties and commence work upon the same or some part and portion thereof, without any unnecessary delay, consistent with the provisions hereinafter made, in a miner-like fashion, and to do and perform the necessary assessment work, and to take out as much commercial ore as possible with due regard to the development and preservation of said property as a workable mine.

2. The Lessees hereby covenant and agree to enter upon said property and to commence work upon the same or some part and portion thereof, to the end that the production of commercial ore will sommence not later than the first day of September, 1953.

3. The said Lessees hereby covenant and agree that they will enter upon said property and commence work upon the same or some part and portion thereof, without unnecessary delay and to develop the same to the end that said properties may be put into production, and that during that period of the time that the said Lessees are performing the work necessary for the development of said properties, that they shall expend not less than FIVE HUNDRED ($500.00) DOLLARS per month toward the development of said properties in making the same ready for production of commercial ore.

4. The said Lessees hereby covenant and agree that when the production of commercial ore shall begin, the said Lessees shall then pay to the said Owners a ten per cent (10%) royalty upon the net proceeds from the sale of all ores mined on said premises, said royalty percentage to be calculated on any or all ore taken from said premises in any way treated on or off the said premises; it being understood that the said proceeds shall be deemed to be the gross mint smelter or

bullion returns, after the deduction only of transportation costs and the smelter treatment or bullion charges.

5. The said Lessees hereby covenant and agree that all ores shipped from the premises and/or all concentrates or other products shipped from the said premises, under the terms of this agreement, shall be shipped in the name of the said Lessees with instructions to the mint or smelter or purchaser of said ores. To make the said royalty payments due to said Owners, to the First National Bank of Nevada, Elko Branch, in the City and County of Elko, State of Nevada; it being specifically understood and agreed, however, that all costs hereinabove defined shall be first deducted by said processing agent or purchaser of said ores.

6. The said Lessees hereby covenant and agree that the said royalty percentages to be paid by said Lessees to said Owners, all as hereinabove provided, shall at no time aggregate less than the sum of FIVE HUNDRED ($500.00) DOLLARS per month.

7. It is specifically covenanted and understood by and between all of the parties to this agreement that if the said Lessees should, at any time, cease production of commercial ores as hereinabove specifically provided, for any reason other than an act of God, market condition, or for some reason which would make production inconsistent with good mining practice and operation, then, and in that event, the said Lessees agree to pay to said Owners the sum of FIVE HUNDRED ($500.00) DOLLARS per month for each and every month that said premises shall be non-productive.

8. It is specifically understood and agreed by and between the parties to this agreement that all royalty and monthly payments to be made by said Lessees to said Owners, all as hereinabove provided for, shall be credited upon the option price for the sale of the above-described mining claims, all as is hereinafter set forth.

9. It is understood and agreed by and between the parties to this agreement that the said Lessees shall have the option of purchasing from said Owners the aforementioned mining claims and properties for the total purchase price of

FIVE HUNDRED THOUSAND ($500,000.00) DOLLARS, and in that connection, it is further understood and agreed that all moneys received by said Owners from said Lessees, by way of royalty or monthly payments, all as hereinabove provided for shall be by said Owners credited to the total purchase price of FIVE HUNDRED THOUSAND ($500,000.00) DOLLARS.

10. The said Owners hereby agree that upon the execution of this agreement the Owners hereinabove named agree to make, execute and place in escrow with the First National Bank of Nevada, Elko Branch, in the City and County of Elko, State of Nevada, a good and sufficient deed of conveyance to the above-described mining properties conveying title to the above-named mining properties to said Lessees. An executed copy of this agreement shall be delivered to said excrowee to be its escrow instructions. All payments to be made hereunder by said Lessee shall be made to the said escrowee, to the credit of said Owners, and upon the full payment of the purchase price as herein contained, the said escrowee is authorized and directed to deliver to said Lessee said deed of conveyance; provided, however, that in the event of a forfeiture said deed of conveyance shall be delivered to said Owners, and in this connection, it is understood and agreed that said escrowee shall assume no liability under the terms of this agreement, other than for the purpose of handling of any funds which may be paid to it.

11. The Lessees shall pay all state and county real estate taxes that may be levied or assessed against the property; the Lessees shall pay all state and county taxes levied or assessed against the structures and other improvements, machinery, equipment, tools, supplies and any other and all personal property whatsoever, placed upon the leased premises by the second party; and provided, that all taxes levied and assessed against the net proceeds of the products taken from said property shall be pro-rated according to the respective percentages resulting to the parties hereto based upon the above-described division. The said net proceeds tax shall be payable by the respective parties hereto, and the Lessees shall not pay the net proceeds tax for and on behalf of the Owners.

12. In the event either of the parties hereto shall fail to pay the said taxes on their part to be paid, as aforesaid, either realty, personal or net proceeds, then the other party to this agreement shall have the right to pay the same, and all sums so paid shall be repaid by the party in default, together with interest thereon at the rate of 6% from date of payment to the date of repayment of the same.

13. The Lessees are to enter upon said premises and work the same in a proper, skillful and miner-like manner, and in a manner necessary to good and economical mining, so as to provide for the extraction of the greatest amount of ore, with due regard to preservation and development of said mining property as a workable mine, at the sole cost of said Lessees and without any cost to said Owners.

14. Said Lessees further covenant and agree well and sufficiently to timber all workings of said premises where proper, in accordance with safe mining practices, and to keep said property timbered at the sole cost of said Lessees.

15. Said Lessees agree to post and keep posted in a conspicuous place on said premises, Notice of the Non-Liability of the said Owners, notifying all persons that said Owners will not be responsible or liable for any labor performed, materials furnished or improvements made upon said premises during the term of this agreement, and to place a copy ofsaid Notice, together with an Affidavit that the same has been posted, on file in the Recorder's Office of Elko County, Nevada, in all respects as required by Section 3743 N. C. L. 1929, as amended, and in all respects as required by the laws of the State of Nevada to assure and guarantee the non-liability of the first party in respect to any liens or claims that might be filed against said property.

16. Such non-liability of the Owners, and such notice of non-liability of the Owners is referred to in the preceding paragraph, shall likewise apply to any injury or damage to third persons or property of any third persons. Neither the Owners nor the property itself, nor any part thereof, shall be liable for any such claims for labor, materials, damage or injury.

17. It is further agreed that with reference to any and all labor performed upon said premises and all materials furnished in connection with this lease, the Lessees are and shall be in no respect whatsoever, the agent of the Owners and the Lessees shall have no right, power or authority as the agent of the Owners, or at all, to bind the Owners, or the said property or any part thereof, to the extent of any liability whatsoever for any labor or materials furnished in connection with operations of the Lessees hereunder.

18. That Lessees agree to carry Workmen's Compensation or Industrial Accident Insurance with the State of Nevada, and said Lessees shall, must and will at their own expense cause all workers, miners or other employed in and about said premises to be insured by the Nevada Industrial Commission, and that said Lessees further covenant and agree to operate said mining property in accordance with the rules and practices prescribed by the State of Nevada and the Nevada State Mine Inspector. That said Lessees agree to pay all fees and costs in connection with the carrying and handling of said industrial insurance.

19. The Lessees shall, on or beofore the 15th day of each calendar month during the term hereof, furnish the Owners with a written report showing as to the preceding calendar month the tonnage of ore shipped or sold, and the tonnage of concentrates or products shipped or sold.

20. The Lessees shall also cause to be promptly furnished to the Owners duplicate copies of smelter, mint or other purchasing agencies, receipts and settlement sheets for all concentrates and products extracted and shipped or sold from the leased premises.

21. The Owners and their authorized agents shall at any and all times be permitted to inspect all books and records, including assay reports, of the Lessees relating to the leased property, in order to ascertain the correct amount of royalties due the Owners, or to determine whether or not the provisions of the lease are being satisfied. The Lessees shall allow the Owners and their agents at any and all times to enter upon and into all parts of said leased premises for purposes of inspection. The Owners shall have the right at any and all times to sample talings, core drillings or churned drillings. It is understood that the Lessees shall assume no responsibility for the safety of the Owners or their agents when and while upon the

leased premises for the purposes herein described.

22. Subject to the Owners' right of inspection and sampling, the Lessees shall have sole possession of the said above-described property from the date hereof, and during the life of this said lease or until the same is terminated.

23. The Owners shall have the right to remove all personal property now belonging to them and situate on the premises, at any time he sees fit.

24. The Lessees shall not mix any ores or products from the leased premises with the ores or products derived from any other property.

25. The Lessees promise and agree promptly and punctually to pay all bills for labor and materials furnished to the said property during the life of this agreement and particularly not to permit any liens to accrue or to be filed against said property, and in the event of the filing of any such liens and the failure of the Lessees to discharge the same within thirty days thereafter, or in the event the Lessees become insolvent or suffer their properties to be attached or otherwise assessed by process, then the Owners may at their option declare this agreement c cancelled and terminated and may forthwith re-enter and take possession.

26. It is mutually agreed and understood that in case of forfeiture, surrender or other termination of this lease, all underground timberings, shaft linings and other fixtures necessary for the preservation of amy mines and all rails and head frames upon or the said leased premises shall be and remain a part of the realty and shall revert to the Owners. All personal property of the Lessees located within the leased premises, including machinery, equipment and tools, shall, in the case of forfeiture, surrender or other termination of this lease, remain the property of the Lessees.

27. All houses and buildings of any name, nature and description, constructed upon the premises by the Lessees shall become a part of the realty and revert to the Owners in the event of forfeiture or termination.

28. The Lessees may at any time surrender and terminate this lease upon giving thirty days notice in writing and paying to the Owners all royalties as

rentals hereunder to the effective date of such surrender.

29. The parties hereby mutually agree that the Owners will make and have the sole and exclusive right to make such further locations as are necessary to protect water rights, and tunnel sites, and that such locations will become incorporated in and a part of this lease and option. The Lessees agree to expend any sums necessary for the perfection of such additional claims, and the Lessees may make any additional locations or claims, exclusive of those granted to the Owners, which they feel are necessary to protect themselves under this agreement.

30. In consideration of the premises, the Owners hereby grant unto the Lessees, the right and option to purchase all of the right, title and interest of the Owners in and to hte said premises, together with the appurtenances as hereinabove described during the life of this agreement, and while the Lessees are not in default in the performance of any of their covenants herein contained, for the sum of $500,000.00 hereinabove referred to. It being understood that all of the said royalties that shallhave been paid by the Lessees to the Owners shall be applied upon the purchase price.

31. The Owners shall sign a letter of instructions to the First National Bank of Nevada, Elko Branch, advising said bank as to the terms of payment and distribution as herein provided, and said Bank shall be held harmless from any and all liability to the Owners when making distributive payments according to said letter of instructions.

32. The Owners represent that they have located the said mining claims, the subject hereof, and retained title at all times since said location, and accordingly, it is understood that the Lessees must pay for any abstract or title search which in his judgment is deemed essential to establish the status of the title. In the event title errors are found to exist, the Lessees shall advise the Owners of the same by written title report at any time during the life of this said lease and option, and the Owners hereby agree to cure such title defects at their own expense within six months

from the date of final payment of the balance of said option purchase agreement, provided, however, that said title report must be delivered prior to the date of any final payment on the purchase price hereunder, and if not so delivered by such date, then Lessees shall be deemed to have accepted the title as the same exists.

33. It is further agreed and understood that time is the essence of this agreement, and upon violation of any covenant or covenants herein reserved against the Lessees, said lease and option shall terminate and become void at the option of the Owners, provided, however, that such option must be evidenced by thirty days notice in writing given to the Lessees by registered mail from the Owners. Said thirty days notice is intended to apply to any and all covenants, including the covenant for the payment of royalties hereunder.

During said thirty-day notice period, the Lessees shall have the right to perform all necessary things to restore the lease and option to good standing under the terms hereof, or to remove all personal property belonging to them under the terms of this agreement should the lease and option not be restored.

In the event of forfeiture or termination for any cause, all sums of money paid to the Owners by the Lessees as royalties shall be retained by said Owners as rentals hereunder.

This agreement is to be binding upon and inure to the benefits of the heirs, executors, administrators, successors and assigns of the respective parties.

the benefits of the heirs, executors, administrators, successors and assigns of the respective parties.

IN WITNESS WHEREOF, the parties hereunto have subscribed their respective names this 1st day of September, 1952.

Abram A. Knowles

George G. Knowles

Edward A. Knowles

Price D. Montrose

OWNERS

Ray C. Summers

Ernest A. Rupp

LESSEES

STATE OF NEVADA)
) SS
COUNTY OF ELKO)

On this 1st day of September, 1952, personally appeared before me, a Notary Public in and for said County and State, ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE D. MONTROSE, known to me to be the persons described in and who executed the foregoing instrument, and who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

A. L. Puccinelli

NOTARY PUBLIC

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

STATE OF OREGON)
) SS
COUNTY OF)

On this 1st day of September, 1952, personally appeared before me, a Notary Public in and for said County and State, RAY A. SUMMERS and HAROLD A. CULP, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and foluntarily and for the uses and purposes therein mentioned.

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

NOTARY PUBLIC

A. L. PUCCINELLI
ATTORNEY AT LAW
ELKO, NEVADA

DOCKET
SURNAME
Chapman
Martin

December 5, 1956

MEMORANDUM

To: Administrator

From: Iron and Ferro-Alloys Division, DMEA

Subject: Completion of Contract No. Idm-E556
Docket No. DMEA 2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada

Owners and Lessees: Abram A., George G., and Edward A. Knowles, and Price D. Montrose, Mountain City, Nevada. On September 1, 1952, the property was leased to Ray E. Summers and Harold A. Culp. On July 8, 1953, the lease was assigned to The Garnet Tungsten Mining Company, John Day, Oregon.

Property: The property referred to in Article 2 of the contract form is described as follows:

Claim Name	Unpatented	Book No.	Page No.
Garnet No. 1	"	28	281
Garnet No. 2	"	29	308

located in sections 8, 16 and 17, T. 45 N., R. 56 E., Mount Diablo Base and Meridian, Elko County, Nevada.

Contract: Issued to Garnet Tungsten Mining Company, on June 25, 1953, with date of completion February 25, 1954. Work to be carried out in two stages as follows:

Stage I

Agreed Unit Costs

Adit and Drifting	Diamond Drilling	Cost per ft.	Estimated Cost
40 feet		$40.00	$1,600.00
	520 feet	8.00	4,160.00
	Estimated Total Cost Stage I		$5,760.00

Contract:
(Cont'd)

Stage II

Agreed Unit Costs

Adit and Drifting	Diamond Drilling	Cost per ft.	Estimated Cost
400 feet		$40.00	$16,000.00

Total Estimated Cost of Project	$21,760.00
Government participation 75 percent	$16,320.00

Amendment No. 1 changed Stage I to 64 hours of bulldozer trenching at $12.50 per hour, and 620 feet of diamond drilling.

Amendment No. 2 extended date of completion to October 1, 1955.

On September 1, 1953, the contract was assigned to the Sunshine Mining Company. The Government consented to the assignment on November 4, 1953.

After the completion of Stage I, as per Amendment No. 1, the contract was assigned to Abram A., George G., and Edward A. Knowles, on October 22, 1954. The Garnet Mining Company returned the property to the owners. The Government agreed to assignment on November 8, 1954.

Certification:

On October 27, 1954, a Certification of Discovery or Development was issued to the Sunshine Mining Company.

Work Completed:

The Sunshine Mining Company completed Stage I at a cost of:

		Government Participation
	$5,760.00	$4,320.00
The Knowles Brothers completed Stage II at a cost of	$16,000.00	$12,000.00
Total Cost of Project	$21,760.00	$16,320.00

The completed work consisted of 64 hours of bulldozing, 620 feet of diamond drilling and 400 feet of adit and drifting.

The work was completed on September 30, 1955.

Geology: The mine is on the northwest slope of Tennessee Mountain, which is composed of sedimentaries that have been intruded by granitic rocks. The sedimentaries are highly deformed, interbedded, thin bedded limestones, shales and limey shales.

Geology: (Cont'd) The sedimentaries have been tightly folded and faulted. The granitic intrusions are coarsely porphyritic and with the sedimentaries have been cut by alaskite and aplite dikes.

The sedimentary and granite contacts are irregular and 3 lenses of tactite have been formed. Scheelite, the main ore mineral, is disseminated through the tactite.

Ore Reserves:

The reserves are estimated as follows:

	No. 1 Lens	Nos. 2 & 3 Lens	Total
Measured ore	90,000 tons		90,000 tons
Indicated ore	270,000 tons	45,000 tons	315,000 tons
Inferred ore	240,000 tons	135,000 tons	375,000 tons
Total	600,000 tons	180,000 tons	780,000 tons

Estimated grade of all classes of ore is between 0.30 and 0.50 percent WO_3. By selective mining a moderate tonnage of 0.50 to 1.00 percent WO_3 could be produced.

History and Production:

The Garnet Tungsten property was discovered by the present owners, who explored the property by cuts and diamond drill holes.

No production has been made from the property.

Comments: The ore discovered makes a significant addition to the tungsten reserves of the United States, but the economic aspect will depend on the future price of tungsten.

This Division and the Commodity Divisions concur in the conclusions and recommendations of the Field Team that ore reserves could be increased by further exploration, but further participation by the Government is not warranted.

TLChapman:am 12-5-56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
Mr. Johnson

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

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: Union Carbide and Carbon Corporation, Assignee		Actual Cost	
State: Elko County, Nevada		Agreed Unit Cost $21,760.00	
Final Report of Audit $21,760.00	Commodity	Docket No. DMEA 2820	
Final Report of Review		Contract No. Idr-E556	

Operation	Authorized by Contract and Amendments		Completed		Net cost after sale of Government Property
	Units	Cost	Units	Cost	
Drifting & Crosscutting	400'	$16,000.00	400'	$16,000.00	
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond	620'	4,960.00	620'	4,960.00	
Surface Excavation, Bulldozing		800.00		800.00	
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$21,760.00		$21,760.00	*

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

Prepared by Thos. L. Chapman Date May, 13, 58

31398

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Griswold	800
7/9	Talbert	800
	Selfridge	420
7/9	Johnson	110
7	Smith	100
		230

Sunshine Mining Company
West 300 Mission Avenue
Spokane 1, Washington

Re: DMEA-2820 (Tungsten)
A.A., G.G., and E.A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract Idm-E556

Gentlemen:

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

This correspondence relates to the Assignment of Contract dated September 1, 1953, signed by you as assignee and the subsequent Assignment of Contract dated October 22, 1954, signed by you as assignor.

Sincerely yours,

George Fumich, Jr.
Director

Enclosure

WRGriswold/mm
7/9/63
cc: Director's Reading File
Region II
Docket
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Grunwald	500
7/8	Talbut	800
	Selfridge	120
7/9	Johnson	110
	Fumich	100
		220

JUL 9 1963

Mr. Price D. Montrose
Mountain City
Nevada

Re: DMEA-2820 (Tungsten)
A.A., G.G., and E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract Idm-E556

Dear Mr. Montrose:

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 December 10, 1952, and an undated one received by us on October 27, 1957, under the Defense Minerals Exploration Administration program which has been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George Fumich, Jr.

Director

Enclosure

WRGriswold/mm
7/8/63
cc: Director's Reading File
Region II
Docket
Code 500

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

APR 6 1962

Memorandum

To: Acting Field Officer, Region II

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

Subject: DMEA-2820 (Tungsten)
Knowles Bros.
Garnet Tungsten Mine
Elko County, Nevada
Contract Idm-K556

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 4-6-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

OFFICIAL FILE COPY

Date	Surname	Code
5/25	Alley	800
5/26	a	220
5/26	Martin	400

MAY 25 1959

Memorandum

To: Mr. George Mavor, OME Auditor

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

(Signed) E. D. Talbert

Subject: Docket No. DMEA-2820 (Tungsten)
Knowles Bros., Assignees
Contract No. Idm-E556

Your Report of Royalty Review on the above-cited contract is approved and normal distribution is authorized.

AMAlley/ama
May 25, 1959

Copy to: Docket
Director's Reading File
CA & A Division

43683

7

OFFICIAL FILE COPY

Date	Surname	Code
3/16	Martin	400
3/17	[illegible]	130
	Johnson	110
3/18	C	225
		400

MAR 17 1959

MEMORANDUM

To: Executive Officer, OME Field Team, Region II

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA 2820 - Tungsten
A. A., G. G., and E. A. Knowles, Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Thank you for your letter of March 11, sending to us for our records a copy of letter to you of March 10, 1959, from Mr. A. A. Knowles giving the latest information on the ownership of the subject claims.

/s/ George C. Selfridge

APPROVED:

H. G. Iverson
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

WSMARTIN:foc 3-16-59
cc to: Code 400
Director's Read. File
Oper. Comm.
FT. REG. II
R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

43683

OME

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
1605 Evans Avenue
Reno, Nevada

March 11, 1959

Memorandum

To: Operating Committee, OME, Interior Building
Washington 25, D. C.

From: Executive Officer, OME Field Team, Region II

Subject: Docket No. DMEA-2820 (Tungsten)
Contract No. Idm-E 556
A.A., G.G., & E.A. Knowles, Assigned
Garnet No. 1 and No. 2 Claims
Elko County, Nevada

For your records, enclosed are two copies of a letter dated March 10, 1959 from Mr. A. A. Knowles relative to subject docket.

S. Ricker

Attachments

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 13 1959

DATE	INITIALS	CC
3/13	C	220
3/13	WSM	400

C O P Y

March 10, -59

Mr. S. Ricker -

Dear Sir-

We have recently been advised by "Union Carbide Nuclear" Co- of Grand Junction Colo. that they have discontinued all interest in our tungsten on Tenessee Mtn., (the Garnet - tungsten claims) and First National Bank notified us they received a quit claim deed to all the claims purchased by Union Carbide, holding this for us in Elko.

It realy looks as if mining is going down the river, and that is bad. - Wish you would tell all the fellows there at B. of M. and the D.M.E.A. that we realy appreciate the way they helped us. (we needed it) (sort of dumb in paper work) And if we ever find anything of consequence again will get in touch with you all.

Sincerely -

A. A. Knowles

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 24 1957

DATE	INITIALS	CODE
6/25	C	220
		225

June 19, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2820 (Tungsten)
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E 556

Enclosed are two copies of a letter from the Union Carbide Nuclear Company relative to current status of subject property.

S. Ricker

Encls.

BUREAU OF MINES
WASHINGTON, D. C.

JUN 24 12 49 PM '57

UNION CARBIDE NUCLEAR COMPANY

325 EAST FOURTH STREET, RENO, NEVADA · FAIRVIEW 3-0663

June 18, 1957

Mr. Spangler Ricker
Executive Officer, DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Dear Mr. Ricker:

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. 1 am-5556

Re subject, reference is made to your letter of January [illegible] to A. A. Knowles et al.

As of December 31, 1956, Union Carbide Corporation entered into an agreement with the owners of these claims, whereby Union Carbide acquired the right to purchase them. The instruments are recorded in the office of the Elko County Recorder, Book 28, Page 2-Misc., and Book 71, Page 328 - Deeds.

During 1956 our Company did an appreciable amount of exploration work on the property. However, we have produced no ore from the property and do not contemplate doing so in the near future.

Very truly yours,

UNION CARBIDE NUCLEAR COMPANY

W. H. Kohler
Assistant Manager of Exploration

WHK:ep

cc - Mr. A. A. Knowles
Mountain City, Nevada

Mr. W. H. Nelson
Groves, Dufford & Turner
P. O. Box 1598
Grand Junction, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 24 1957
DATE | INITIALS | CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-8-	Holt	400
5-8	Martin	400
5-8	Chamber	800
	Long	140
	Geyer	800
5/13	Selridge	120
"	Johnson	110
14	Mittendorf	100
		220

INTERIOR DEPT.
MAY 8 - 1957

MAY 14 1957

SOLICITOR

Mr. William H. Nelson
Groves, Dufford and Turner, Attorneys at Law
P. O. Box 1598
Grand Junction, Colorado

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G. and E. A. Knowles, Assignee ← O.K.
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Nelson:

Enclosed is a copy of a letter dated January 3, 1957, to Messrs. Abraham A. Knowles, George G. Knowles and Edward A. Knowles, which answers the questions raised by your letter of April 22, 1957, concerning the certification of the above captioned contract.

Records in this office show that the Operator has submitted an acceptable final report. As you will note from the contract, however, the repayment period is measured from the date of the contract; the period within which DMEA must certify, if it intends to do so, (it has certified in this case) depends on the date of receipt of the Operator's final report.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

SPHolt:am 5-8-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT REG II
Messrs. R. Holliday, USBM
T. Kiilsgaard, USGS

RECEIVED
MAY - 9 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-2	Holt	400
5-2	Martin	400
		140
		140

May 2, 1957

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources

From: Iron and Ferro-Alloys Division, DMEA

Subject: Proposed Letter
Docket No. DMEA 2820 - Tungsten
A. A., G. C. and E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E556

It will be appreciated if you will review the attached draft of a proposed letter to Mr. William H. Nelson, of Groves, Dufford and Turner, Attorneys at Law.

W. S. Martin

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

Attachments

SPHolt:am 5-2-57
cc to: Docket
Code 400

RECEIVED
MAY - 3 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DRAFT

Mr. William H. Nelson
Groves, Dufford and Turner, Attorneys at Law
P. O. Box 1598
Grand Junction, Colorado

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G. and E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Nelson:

Enclosed is a copy of a letter dated January 3, 1957, to Messrs. Abraham A. Knowles, George G. Knowles and Edward A. Knowles, which answers the questions raised by your letter of April 22, 1957, concerning the certification of the above captioned contract.

Records in this office show that the Operator has submitted an acceptable final report. As you will note from the contract, however, the repayment period is measured from the date of the contract; the period within which DMEA must certify, if it intends to do so, ~~certify, as~~ it has certified in this case, ~~can~~ depends on the date of receipt of the Operator's final report.

Sincerely yours,

Administrator

Enclosure

GROVES, DUFFORD & TURNER
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. BOX 1598
GRAND JUNCTION, COLORADO

JAMES K. GROVES
DONALD J. DUFFORD
WARREN L. TURNER
WILLIAM H. NELSON

OFFICIAL FILE COPY
DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	C	220
4/30	WSM	400
		225

April 22, 1957

Mr. C. O. Mittendorf
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. IDM-E556

Dear Mr. Mittendorf:

Reference is made to your letter of April 3, 1957, forwarding to us a copy of a contract between the Defense Minerals Exploration Administration and Garnet Tungsten Mining Company, DMEA Docket 2820, Idm-E556.

Under the terms of Annex 1 of the aforementioned contract it appears that the period of repayment may vary depending upon the date of certification of discovery or development and may also depend upon the date of the rendition of a final report by the operator.

In order to accurately determine what the obligations of Union Carbide and Carbon Corporation are in connection with this contract, it is respectfully requested that you advise us whether or not the final report was submitted by the operator, whether or not a certification of discovery was made, and the date of the expiration of the government's lien for the moneys advanced by it.

Very truly yours,

William H. Nelson

William H. Nelson

WHN:d

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/5	Holt	400
4/5	Martin	400
	Long	140
	Sawyer	140
4/15	Selbridge	120
"	Johnson	110
"	Mittendorf	100
4-16	C	220
	Tungsten	

APR 16 1957

Mr. Grant Sawyer, Attorney-at-Law
Elko County Courthouse
Elko, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Sawyer:

Thank you for your letter of March 29, 1957, enclosing a copy of the Sales Contract between Knowles et al and Union Carbide, which we requested in our letter of March 21, 1957, to Mr. A. A. Knowles.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

SPHolt:am 4-5-57
cc to: Docket
Code 400
Admr. Read. File
FT REG II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/3	Holt	400
4/3	Martin	400
4-3	Chamberlin	300
4/3	Selfridge	120
"	Johnson	110
"	Mittendorf	100
4/4		220
		225

APR 3 - 1957

Mr. William H. Nelson
Groves, Dufford and Turner, Attorneys at Law
P. O. Box ~~656~~ 1598
Grand Junction, Colorado

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G., and E. A. Knowles,
Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Nelson:

In accordance with your request of March 23, 1957, enclosed are two copies each of the above-captioned contract and Annex I, which together contain all the royalty provisions of the contract.

Amendments Nos. 1 and 2 reallocated some of the work, and extended the completion date of the contract, without affecting the repayment provisions, and have, therefore, not been copied for you.

Reference is also made to your letter of March 28, 1957, concerning the same subject, and enclosing additional data, for which we thank you.

Sincerely yours,

C. O. Mittendorf (for)
Administrator

SPHOLT:am/foc
4/3/57
cc to: Docket ✓
Code 400
Admr. Read. File
FT. REG. II

Enclosures

cc to: R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

8623

OFFICIAL FILE COPY
DMEA
RECEIVED APR 5 1957

DATE	INITIALS	CODE
4/5	C	220
4/8	[illegible]	800
		225

1605 Evans Avenue
Reno, Nevada

April 3, 1957

Mr. L. D. Wilson
John Day, Oregon

Re: Docket No. DMEA-2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Wilson:

We would appreciate it if you could advise us of the present address of Mr. H. A. Culp. Last correspondence addressed to him at Mountain City, Nevada was returned marked "Moved Left No Address".

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash., D.C.
R. M. Smith
File
Chron

GRANT SAWYER
Attorney at Law
Elko County Court House
ELKO, NEVADA

OFFICIAL FILE COPY
DMEA
RECEIVED APR 4 1957

DATE	INITIALS	CODE
4/4	C	220
4/4	WSM	400
		225

March 29, 1957

U. S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:-

With reference to your request of Mr. A. A. Knowles under date of March 21, 1957, enclosed please find a copy of the Sales Contract between Knowles et al and Union Carbide. If there is further information required would you please advise?

Sincerely,

Grant Sawyer

GRANT SAWYER
Attorney-at-Law

elc

enc. 1 - filed with Contract

GROVES, DUFFORD & TURNER
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. BOX 1598
GRAND JUNCTION, COLORADO

JAMES K. GROVES
DONALD J. DUFFORD
WARREN L. TURNER
WILLIAM H. NELSON

OFFICIAL FILE COPY
DMEA
RECEIVED APR 1 1957

DATE	INITIALS	CODE
4/2	C	220
2	COM	100
4/2	WSG	400
		225

March 28, 1957

Mr. C. O. Mittendorf
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Mittendorf:

Reference is made to your letter of March 21, 1957 addressed to Union Carbide Nuclear Company, Grand Junction, Colorado.

Union Carbide Nuclear Company is a division of Union Carbide and Carbon Corporation, which corporation purchased the aforementioned mining claims, together with certain other claims, by supplemental agreement dated Decmeber 31, 1956 as evidenced by mining deed dated December 31, 1956, recorded Book 28, page 8, and Book 71, page 328, records of Elko County, Nevada.

According to the terms of Union Carbide and Carbon Corporation's conveyance from A. A. Knowles, et al, the grantors warranted title to said claims except "a royalty interest due and payable to the United States Government under DMEA contract No. Idm-E556 dated June 25, 1953, reserving to the Government the sum of $16,320.00 to be paid as an overriding royalty."

Union Carbide and Carbon Corporation, of course, expects to pay said overriding royalty if and when ores which are subject to the royalty are produced from the mining claims. In that connection, it is respectfully requested that you provide us, if possible, with the necessary documents which we will need to review our obligation in this respect. Most desirable would be copies of the contract itself.

In the event that you deem it necessary to make additional arrangements for the preservation of the Government's right to a percentage royalty, we would appreciate

receiving the appropriate documents for review and execution.

Under date of March 23, 1957, this office directed a letter to the Director, Iron and Ferro-Metals Division, DMEA, a copy of which letter is enclosed. Also, we are enclosing a machine copy of the supplemental agreement by which title was acquired, as well as a machine copy of the deed itself. In addition, the original arrangement between A. A. Knowles, et al., and Union Carbide and Carbon Corporation entitled "Option and Purchase and Sales Agreement" dated June 1, 1956, is enclosed.

Very truly yours,

William H. Nelson

William H. Nelson

WHN:d

Enclosure filed with Contract

GROVES, DUFFORD & TURNER
ATTORNEYS AT LAW
FIRST NATIONAL BANK BUILDING
P. O. BOX 656
GRAND JUNCTION, COLORADO

JAMES K. GROVES
DONALD J. DUFFORD
WARREN L. TURNER
WILLIAM H. NELSON

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 27 195

DATE	INITIALS	CODE
3/27	C	220
3/27	WSM	400
		225

March 23, 1957

Director,
Iron and Ferro-Alloy Division
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Dear Sir:

On behalf of Union Carbide and Carbon Corporation we write to inquire the status of a certain DMEA contract.

Docket 2820 Knowles Bros

The DMEA contract is No. IDM-E-556, dated June 25, 1953, and concerns certain unpatented lode mining claims in Elko County, Nevada, known as the Garnet Hills.

There is apparently a royalty due the Government from production of tungsten from these claims in the amount of $16,320.00.

Union Carbide and Carbon Corporation recently acquired this mining property and desires to obtain the information concerning the aforementioned DMEA contract in order to make repayment of the loan to the Government when and if tungsten is produced therefrom.

If you would kindly provide us with a copy of the agreement we will promptly pay any photostat or reproduction charges necessary to deliver such copy to us.

If you cannot possibly provide us with the necessary documents we would appreciate knowing the scope and terms of the royalty repayment or the appropriate office to which correspondence should be directed to acquire this information.

Very truly yours,

William H. Nelson

William H. Nelson

WHN:d

Dmea 2820

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/19	Martin	400
		130
3/20	[illegible]	110
"	[illegible]	100
		220

MAR 21 1957

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Ricker:

Our letter to Mr. H. A. Culp, Mountain City, Nevada, of February 20, 1957, identical copies of which were sent to Mr. L. D. Wilson and Mr. R. E. Summers, has been returned to us with the following reason for nondelivery checked: "Moved Left No Address." It would be appreciated if you will advise us whether you are able to obtain a correct address for Mr. Culp.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)

APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JB)
Member, Geological Survey

WSMartin:foc 3/19/57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Chapman	400
	Martin	400
	Rubin	140
	Dwyer	140
	Chapman	400
	Martin	400
	Member	800
		220
	Johnson	110
	Mulcahy	100
		220
	Lamb	
	Kilgaard	

Rewritten by:

MAR 21 1957

Union Carbide-Nuclear Company

Grand Junction, Colorado

Re: Docket No. DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

130 →

Gentlemen:

We have been notified by Mr. A. A. Knowles that he and his associates have entered into a Sales Contract with you for the purchase of their tungsten property, which includes the above-noted claims.

This is to advise you that the United States of America, acting through the Defense Minerals Exploration Administration, of the Department of the Interior, entered into a contract dated June 25, 1953, with the Garnet Tungsten Mining Company to assist in exploration work on the subject claims. In the process of this work, $16,320.00 was advanced by the Government. Under this contract the Government has a lien on the land and on all the minerals mined or produced from the land from June 25, 1953, to June 25, 1963, until the sum of $16,320.00 is repaid to the Government as set forth in its contract.

The exploration contract was assigned to Knowles Bros. by an instrument dated October 22, 1954. Article 7 of the contract further provides that Knowles Bros. may not transfer or convey the land without making suitable provision for the preservation of the Government's right to a percentage royalty on such production and liens for the payment thereof.

We have asked Knowles Bros. for a copy of the Sales Contract.

Sincerely yours,

C. O. Hittendorf (for)

Administrator

TLChapman/HCRubin/emd
3/18/57
Copy to: Docket
Code 400
Code 800
Admr. Read. File
Field Team, Reg. II (2)
R. W. Holliday, USBM
T. H. Kiilsgaard, USGS
R. P. Dwyer
H. C. Rubin
chron. pending

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/15	Chapman	400
3/15	Martin	400
		800
		140
		140
		120
		110
		100
		220

Union Carbide-Nuclear Company
Grand Junction, Colorado

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

We have been notified by Mr. A. A. Knowles, that he and his associates have entered into a Sales Contract with you for the purchase of their tungsten property, which includes the above noted claims.

This is to advise you that the United States of America, acting through the Defense Minerals Exploration Administration, of the Department of the Interior, entered into a contract dated June 25, 1953, with the Garnet Tungsten Mining Company to assist in exploration work on the above noted claims. In the process of this work, $16,320.00 was advanced by the Government. Under this contract the Government has a lien on the land and on all the minerals mined or produced from the land from June 25, 1953, to June 25, 1963, until the sum of $16,320.00 is repaid to the Government as set forth in its contract. ~~Section~~ 7 of the contract further provides that ~~the~~ Knowles Bros. ~~and associate~~ may not transfer or convey the land without making suitable provision for the preservation of the Government's right to a percentage royalty on such production and liens for the payment thereof.

We have asked ~~the~~ Knowles Bros. for a copy of the contract, which as indicated above, must have approval by the Government, as to the suitability of the provision by which the seller and buyer of the land agree on preservation of the Government's rights to royalties and liens.

Sincerely yours,

Administrator

TLChapman:foc 3/15/57
cc to: Docket
Code 400
Code 800
Admr. Read. File
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

[1] The rights and interests assigned to Knowles Bros by an instrument dated Oct. 22, 1954.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Chapman	400
	Martin	400
	Rubin	140
	Dwyer	140
3-19	Chapman	800
3/20	Selfridge	130
	"	110
	Hittendorf	100
3/21		220
	Lamb	
	Kilsgaard	

Rewritten by

MAR 21 1957

Mr. A. A. Knowles
Knowles Brothers
Mountain City, Nevada

Re: Docket No. DMEA-2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

Reference is made to your letter of February 3, 1957, advising of the sale of your tungsten property, including the subject claims, to the Union Carbide-Nuclear Company as of January 1, 1957.

We call attention to your responsibility under Article 7 of the Contract to make suitable provision for the preservation of the Government's right to percentage royalty and liens. You should furnish us with a copy of the sales contract showing that Union Carbide-Nuclear Company has agreed that all minerals mined or produced from the above-noted claims from the date of sale to June 25, 1963, are subject to the Government's percentage royalty as set forth in the DMEA contract until the sum of $16,320.00, which was provided by the Government for the exploration project, is repaid to the Government.

Sincerely yours,

C. O. Hittendorf

Administrator

TLChapman/HCRubin/emd
3/18/57
Copy to: DMEA Docket
Code 400
Admr. Reading File
Field Team, Region II (2)
R. W. Holliday, USBM
T. H. Kilsgaard, USGS
J. L. Chambers
R. P. Dwyer
H. C. Rubin
chron.
pending

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/15	Chapman	400
3/15	Martin	400
		800
		140
		140
		120
		110
		100
		220

Reconstruction

Mr. A. A. Knowles
Knowles Brothers
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

Reference is made to your letter of February 3, 1957, advising of the sale of your tungsten property, including the ~~above noted~~ subject claims, to the Union Carbide-Nuclear Company as of January 1, 1957.

We call ~~your~~ attention to your responsibility under Article 7 of the Contract to make suitable provision for the preservation of the Government's right to percentage royalty and liens. You should furnish us with a copy of the ~~above noted~~ sales contract showing that Union Carbide-Nuclear Company has agreed that all minerals mined or produced from the above noted claims from the date of sale to June 25, 1963, are subject to the Government's percentage royalty as set forth in the DMEA contract until the sum of $16,320.00, which was provided by the Government for the exploration project, is repaid to the Government. When we receive the above noted document or documents and note our acceptance of the same, then you will be relieved of your liability for percentage royalty on minerals mined or produced during that period.

Sincerely yours,

Administrator

TLChapman:foc 3/15/57
cc to: Docket
Code 400
Admr. Read. File
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS
Mr. Chambers

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/14	Chapman	400
2/14	Martin	400
2/18/57	Andrews	~~800~~
2/18/57	Kenyon	~~110~~
2/20	Johnson	~~100~~
2/21	C	220
		~~130~~

2-20 Chambers
Selfridge

FEB 20 1957

RECEIVED
FEB 15 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

Mr. L. D. Wilson
John Day, Oregon

Mr. R. E. Summers
John Day, Oregon

Mr. H. A. Culp
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
A.A., G.G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Reference is made to our letter of November 3, 1954, transmitting a copy of certification of discovery or development issued to the Sunshine Mining Company (executed on October 27, 1954). We also refer to your assignment of above noted contract to the Sunshine Mining Company, dated September 1, 1953. We call your attention to the Government's Consent to this assignment as follows:

GOVERNMENT'S CONSENT

The Government, this 4th day of November, 1953, without releasing the Operator from any of the terms, provisions, and conditions of said Exploration Project Contract, hereby consents to the above assignment.

THE UNITED STATES OF AMERICA

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

We are enclosing copies of our letters of January 3, 1957, to Messrs. Abram A. Knowles, George C. Knowles, and Edward A. Knowles, and to Sunshine Mining Company, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, you and your company remain liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

Frank E. Johnson

ACTING Administrator

Enclosure

cc to: FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

TLChapman:foc 2/14/57
cc to: Docket
Code 400
Code 800
Admr. Read. File

8623

C
O
P
Y

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

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Sunshine Mining Company
Box 1080
Kellogg, Idaho

Assignee-Operator under Exploration Project Contract No. Idm-E556, Docket No. DMEA 2820, Garnet Tungsten Mining Company, dated June 25, 1953.

Pursuant to the provisions of Exploration Project Contract No. Idm-E556, dated June 25, 1953 (Docket No. DMEA 2820), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

A considerable tonnage of marginal-grade tungsten ore in tactite has been indicated by bulldozer trenching and diamond drilling at the Garnet Tungsten mine. The tungsten, present in the form of scheelite, is distributed along bedding planes, in garnet and epidote seams, and as disseminations in the tactite which occurs at the contact of granite and sedimentary rocks.

THE UNITED STATES OF AMERICA

By (s) C. O. Mittendorf
Administrator, Defense Minerals
Exploration Administration

Dated: Oct. 27, 1954

Copy to: L. D. Wilson
R. E. Summers
H. A. Culp

Carbon copy of letter of
Jan. 3, 1957 to
Mr. Abram A. Knowles
Mr. George G. Knowles
Mr. Edward A. Knowles

Marked - "Copy to Mr. H. R. Culp,
Mountain City, Nevada.
removed and sent to Wm. H. Nelson
with letter May — 1957, Q.V.
S.P.H.

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

3 January 1957

Sunshine Mining Company
Box 1080
Kellogg, Idaho

Re: Docket No. DMEA 2820 - Tungsten
A.A., G.G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Reference is made to our letter of October 28, 1954, transmitting a Certification of Discovery or Development (dated October 27, 1954). We also refer to your assignment of above noted contract, dated October 22, 1954, to Abram A., George C., and Edward A. Knowles. We call your attention to the Government's consent to this assignment, as follows:

GOVERNMENT'S CONSENT

The Government this 8th day of November, 1954, hereby consents to the above assignment without releasing the Operator or the Assignor from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

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

We are enclosing a copy of our letter of this date to Messrs. Abram A. Knowles, George C. Knowles, and Edward A. Knowles, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, your company remains liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

Copy to: L. D. Wilson
John Day, Oregon
R. E. Summers
John Day, Oregon

H. A. Culp, Mountain City, Nevada

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

OFFICIAL BUSINESS

NON-DELIVERY
CHECKED

WASHINGTON
FEB 21
3-PM
1957
D.C.

POSTAGE 3¢
LIBERTY

Mr. H. A. Culp

~~Mountain City,~~ Nevada

MOUNTAIN CITY, NEV.
FEB 25 1957
P.M.

MOUNTAIN CITY
MAR 19
P.M.
1957
NEV.

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

FEB 19 1957

Memorandum

To: The Administrator, DMEA
Attention: Chief, Iron and Ferro-Alloys Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-2630, Knowles Brothers, Contract Idm-X556 (Tungsten)

The Knowles brothers should be advised of their responsibility under Article 7 to make suitable provision for the preservation of the Government's right to percentage royalty and liens. They should be asked to furnish DMEA with a copy of the sales contract. If they comply with these requirements, they will be relieved of their obligation under the contract.

In addition, the purchaser of the land should be advised by DMEA of the Government's rights to royalty and lien for the payment thereof.

Robert P. Dwyer

PIndritz/emd
Copy to: Solicitor's Docket (2)
DMEA Docket
W. S. Martin
P. Indritz
R. P. Dwyer
chron.

DMEA

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

1605 Evans Avenue
Reno, Nevada

February 7, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Knowles Brothers (Assignee)
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E 556

Enclosed are two copies of a letter of February 3, 1957, received from the Operator, relating to their sale of subject property to the Union Carbide-Nuclear Company.

S. Ricker

Encls.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE
2/12	C	220
		225

C
o
p
y

Monday Feb. 3, 1957

Mr. S. Ricker

Dear Mr. Ricker -

Re= Docket No. D.M.E.A.=2820
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. idm E 556

We wish to inform you that our contract with Union Carbide-Nuclear Co. on sale of our tungsten property concerning D.M.E.A. contract no. Idm=E 556 amounting to $16 320.00 is now complete. This contract is dated as of Jan. one, 1957.

There will be a delay of one or possibly two years before production starts as they have a new method now being developed for economicaly handling low low grade tungsten ore. Will handle ore too low grade for present method.

On taking our property Union Carbide-Nuclear of Grand Junction Colo. are taking all responsibility in paying back the D.M.E.A. loan of $16, 320.00 and all others such as assessments-recordings on work done.

Sincerely -

Knowles Bros.
by - A.A.Knowles

P.S. sent copy to Mittendorf.

OFFICIAL FILE COPY
D M E A
RECEIVED FEB 11 1957

DATE	INITIALS	CODE

Mr. C. O. Mittendorf

OFFICIAL FILE COPY DMEA RECEIVED FEB 8 1957		
DATE	INITIALS	CODE
2-8	C	220
2/11	WSM	400
		225

Docket
Monday Feb. 3, 1957

Re-Docket No. DMEA-2820
Barnett Nos. 1 and 2 claims
Elko County, Nevada,
Contract No. idm E556

Dear Mr. Mittendorf -

We wish to inform you that our contract with Union Carbide-Nuclear Co. on sale of our tungsten property concerning D.M.E.A. contract No. idm. E556 amounting to $16,320.00 is now complete. This contract is dated as of Jan. one 1957. There will be a delay of one or possibly 2 years before production starts as they have a new method now being developed for economically handling low grade tungsten ore. Will handle ore too low grade for present method.

On taking our property Union Carbide-Nuclear Co. of Grand Junction Colo. are taking all responsibility in paying back the D.M.E.A. loan of $16,320.00 and all others such as assessments recording and work done.

Sincerely -

Knowles Bros.

by - A. A. Knowles.

P.S.
Have sent Mr. Ricker a copy of this

RECEIVED
FEB 14 1957
ASSOC. SOLICITOR
MINERAL RESOURCES

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

JAN 30 1957

Memorandum

To: Administrator, DMEA
Attention: Chief, Iron and Ferro-Alloys Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA 2820 - Tungsten
A. A., G.G., & E. A. Knowles, Assignee
Contract No. Idm-E556

This responds to your question on routing slip dated January 28.

Your letter of January 3, 1957, by which a copy of Certification of Discovery or Development was transmitted to "Garnet Tungsten Mining Company, John Day, Oregon," was returned by the post office with the notation "unknown". The Contract states that the Company is "a Nevada limited partnership composed of L. D. Wilson and R. E. Summers, of John Day, Oregon; and H. A. Culp of Mountain City, Nevada".

Copies of the Certification should now be mailed to each of the named partners. The envelope and letter which were addressed to the Company and returned by the post office should be preserved in the file as evidence of the Government's effort to notify the Company.

Robert P. Dwyer

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

Garnet Tungsten Mining Company
John Day, Oregon

3 JAN 1957

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Reference is made to our letter of November 3, 1954, transmitting a copy of certification of discovery or development issued to the Sunshine Mining Company (executed on October 27, 1954). We also refer to your assignment of above noted contract to the Sunshine Mining Company, dated September 1, 1953. We call your attention to the Government's Consent to this assignment as follows:

GOVERNMENT'S CONSENT

The Government, this 4th day of November, 1953, without releasing the Operator from any of the terms, provisions, and conditions of said Exploration Project Contract, hereby consents to the above assignment.

THE UNITED STATES OF AMERICA

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

We are enclosing copies of our letters of this date to Messrs. Abram A. Knowles, George G. Knowles, and Edward A. Knowles, and to Sunshine Mining Company, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, your company remains liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

C O Mittendorf
Administrator

Enclosure

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

400

Mr. Abram A. Knowles
Mr. George E. Knowles
Mr. Edward A. Knowles
Mountain City, Nevada

5 1957

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Ida-2556

Gentlemen:

Reference is made to our letter of November 3, 1954, enclosing a copy of the certification of discovery or development, issued to the Sunshine Mining Company on October 27, 1954, and to the assignment of the above noted contract on October 22, 1954, to you and the release of the property by the Garnet Tungsten Mining Company to the owners. We also refer to Owner's Consent to Lien of December 10, 1952.

By the terms of the Exploration Project Contract, as amended, and of the certification all minerals mined or produced from June 25, 1953, to June 25, 1963, are subject to the Government's percentage royalty as set forth in the contract until the sum of $16,320.00 is paid.

Payments should be made to Mr. Spangler Richer, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges to be certified by the purchaser.

You are requested to notify Mr. Richer of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Richer at 6-month intervals that no production has been made, when that is the case.

Sincerely yours,

E. O. Mitchell

Administrator

Copy to: Garnet Tungsten Mining Company
John Day, Oregon

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

Sunshine Mining Company
Box 1080
Kellogg, Idaho

3 JAN 1957

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Reference is made to our letter of October 28, 1954, transmitting a Certification of Discovery or Development (dated October 27, 1954). We also refer to your assignment of above noted contract, dated October 22, 1954, to Abram A., George C., and Edward A. Knowles. We call your attention to the Government's consent to this assignment, as follows:

GOVERNMENT'S CONSENT

The Government this 8th day of November, 1954, hereby consents to the above assignment without releasing the Operator or the Assignor from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

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

We are enclosing copies of our letters of this date to Messrs. Abram A. Knowles, George C. Knowles, and Edward A. Knowles, and to Garnet Tungsten Company, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, your company remains liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

Copy to: Garnet Tungsten Company

DOCKET
SURNAME
400 Chapman
Martin
Selfridge

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

3 JAN 1957

Mr. Abren A. Knowles
Mr. George S. Knowles
Mr. Edward A. Knowles
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. IDm-#556

Gentlemen:

Reference is made to our letter of November 3, 1954, enclosing a copy of the certification of discovery or development, issued to the Sunshine Mining Company on October 27, 1954, and to the assignment of the above noted contract on October 22, 1954, to you and the release of the property by the Garnet Tungsten Mining Company to the owners. We also refer to Owner's Consent to Lien of December 10, 1952.

By the terms of the Exploration Project Contract, as amended, and of the certification all minerals mined or produced from June 25, 1953, to June 25, 1963, are subject to the Government's percentage royalty as set forth in the contract until the sum of $16,320.00 is paid.

Payments should be made to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges to be certified by the purchaser.

You are requested to notify Mr. Ricker of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Ricker at 6-month intervals that no production has been made, when that is the case.

Sincerely yours,

C. O. Ellingson

Administrator

cc to: Admr. Read. File
FT. REG. II
Messrs. R. W. Holliday, USBM
T. E. Kilsgaard, USGS

TLCHAPMAN:foc 1/2/57
cc to: Docket
Code 110
Code 800
Code 400

CW

DOCKET
SURNAME
Chapman
Martin
Chambers

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

100

Mr. Abram A. Knowles
Mr. George G. Knowles
Mr. Edward A. Knowles
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Idm-8556

Gentlemen:

Reference is made to our letter of November 3, 1954, enclosing a copy of the certification of discovery or development issued to the Sunshine Mining Company on October 22, 1954, to you and the release of the property by the Garnet Tungsten Mining Company to the owners. We also refer to Owner's Consent to Lien of December 10, 1952.

By the terms of the Exploration Project Contract, as amended, and of the certification all minerals mined or produced from June 25, 1953 to June 25, 1963, are subject to the Government's percentage royalty as set forth in the contract until the sum of $16,320.00 is paid.

Payments should be made to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges to be certified by the purchaser.

You are requested to notify Mr. Ricker of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Ricker at 6-month intervals that no production has been made, when that is the case.

Sincerely yours,

Administrator

TLCHAPMAN;foc 12/5/56 - 12/17/56
cc to: Docket, Admr. Read, File
Code 110 FT. REG. II
Code 800 Messrs. R. W. Holliday, USBM
Code 400 T. H. Kiilsgaard, USGS

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

400

DOCKET
SURNAME
Chapman
Martin
Chambers

Mr. George G. Knowles
Mr. Edward A. Knowles
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-8556

Gentlemen:

Reference is made to our letter of November 3, 1954, enclosing a copy of the certification of discovery or development, issued to the Sunshine Mining Company on October 27, 1954, and to the assignment of the above noted contract on October 22, 1954, to Knowles Brothers and the release of the property by the Garnet Tungsten Mining Company to the owners. We also refer to Owner's Consent to Lien of December 10, 1952.

By the terms of the Exploration Project Contract, as amended, and of the certification all minerals mined or produced from June 25, 1953 to June 25, 1963, are subject to the Government's percentage royalty as set forth in the contract until the sum of $16,320.00 is paid.

Payments should be made to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges to be certified by the purchaser.

You are requested to notify Mr. Ricker of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Ricker at 6-month intervals that no production has been made, when that is the case.

Sincerely yours,

Administrator

cc to: Admr. Read. File
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kilsgaard, USGS

TLChapman:foc 12/5/56
cc to: Docket
Code 110
Code 800
Code 400

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

400

DOCKET SURNAME
Chapman
Martin
~~Champion~~
Selfridge

Mr. Clarence A. Fredell, Acting Director
Technical Services Division
Defense Materials Service
General Services Administration
7th and D Streets, S. W.
Washington 25, D. C.

Re: Docket No. DMSA 2820 - Tungsten
A. A., C.C., & E. A. Knowles, Assignee
Elko County, Nevada
Contract No. Ida-E556

Dear Mr. Fredell:

Reference is made to our letter of November 3, 1954, to Mr. Oumbel, enclosing a copy of certification of discovery or development under the subject contract.

As we agreed, in the last paragraph of our same letter, we are now able to report that the contract was completed at an additional cost of $16,000.00 or a total cost of $21,760.00, of which the Government's participation at 75 percent is $16,320.00. The completed work amounted to 64 hours of bulldozer trenches, 620 feet of diamond drilling and 400 feet of adit.

As a result of the project it is estimated that the reserve of measured, indicated and inferred ore is as follows:

Measured ore	90,000 tons
Indicated ore	315,000 tons
Inferred ore	375,000 tons
Total	780,000 tons

The estimated grade of all classes of ore is 0.30 to 0.50 percent WO_3 (tungsten trioxide).

TLChapman:fec
12/20/56
cc to: Docket
Code 400
Admr. Read. File
Code 800
Code 110
Mr. Selfridge
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. KIILSGAARD, USGS

Sincerely yours,

C. O. Ellendert

Administrator

DOCKET
SURNAME
Chapman
Martin
Chambers

400

Mr. Lawrence A. Prudell, Acting Director
Technical Services Division
Defense Materials Service
General Services Administration
7th and D Streets, S. W.
Washington 25, D. C.

Re: Docket No. DMA 2520 - Tungsten
A. A., Jr., & R. A. Moodie, Assignee
Elko County, Nevada
Contract No. Idm-3556

Dear Mr. Prudell:

Reference is made to our letter of November 3, 1954, and enclosed copy of certification of discovery or development under the subject contract.

As we agreed in the last paragraph of the above noted letter we are now able to report that the contract was completed at an additional cost of $16,000.00 or a total cost of $21,760.00, of which the Government's participation at 75 percent is $16,320.00. The completed work amounted to 64 hours of bulldozer trenches, 620 feet of diamond drilling and 400 feet of adit and drifting.

As a result of the project it is estimated that the reserve of measured, indicated and inferred ore is as follows:

Measured ore		90,000 tons
Indicated ore		315,000 tons
Inferred ore		375,000 tons
	Total	780,000 tons

The estimated grade of all classes of ore is 0.30 to 0.50 percent WO_3 (tungsten trioxide).

Sincerely yours,

Administrator

TLChapman:foc 12/5/56
cc to: Docket
Code 400
Code 110
Code 300
Admr. Read. File
PT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

400
DOCKET
SURNAME
Chapman
Martin
Selfridge

JAN 1957

Sunshine Mining Company
Box 1080
Kellogg, Idaho

Re: Docket No. DMA 2820 - Tungsten
A. A., G. C., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-8556

Gentlemen:

Reference is made to our letter of October 28, 1954, transmitting a Certification of Discovery or Development (dated October 27, 1954). We also refer to your assignment of above noted contract, dated October 22, 1954, to Abram A., George C., and Edward A. Knowles. We call your attention to the Government's consent to this assignment, as follows:

GOVERNMENT'S CONSENT

The Government this 8th day of November, 1954, hereby consents to the above assignment without releasing the Operator or the Assignor from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

By C. O. Wittendorf
Administrator, Defense Minerals
Exploration Administration

We are enclosing copies of our letters of this date to Messrs. Abram A. Knowles, George C. Knowles, and Edward A. Knowles, and to Garnet Tungsten Company, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, your company remains liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

C. O. Wittendorf (cw)

Administrator

Enclosure

cw

Copy to: Garnet Tungsten Company

cc to: R. W. Holliday, USBM
T. H. Kilsgaard, USGS

TLChapman:am:am 12-20-56
cc to: Docket
Code 400
Adm. Read. File
Oper. Comm.
FT. REG. II

400

DOCKET
SURNAME
Chapman
Martin
Chamber

Sunshine Mining Company
Box 1080
Kellogg, Idaho

Re: Docket No. DMEA 2820 - Tungsten
A. A., G. C., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-8556

Gentlemen:

Reference is made to our letter of October 28, 1954, transmitting a Certification of Discovery or Development (dated October 27, 1954). We also refer to your assignment of above noted contract, dated October 22, 1954, to Abram A., George C. and Edward A. Knowles. We call your attention to the Government's consent to this assignment, as follows:

GOVERNMENT'S CONSENT

The Government this 8th day of November, 1954, hereby consents to the above assignment without releasing the Operator or the Assignor from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

By C. O. Wittendorf
Administrator, Defense Minerals
Exploration Administration

We are enclosing a copy of our letter of this date to Mr. Abram A. Knowles, Partner, Knowles Brothers, advising of the amount subject to Government's percentage royalty and the date of termination of this liability.

Sincerely yours,

Administrator

Enclosure

cc to: Messrs. FT. RMG. II
R. W. Holliday, USBM
T. H. Killsgaard, USGS

TLChapman: am 12-6-56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.

400
DOCKET
SURNAME
Chapman
Martin
Chamberlin
Selfridge

3 JAN 1957

Garnet Tungsten Mining Company
John Day, Oregon

Re: Docket No. [illegible] 2020 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Idm-8556

Gentlemen:

Reference is made to our letter of November 3, 1954, transmitting a copy of certification of discovery or development issued to the Sunshine Mining Company (executed on October 27, 1954). We also refer to your assignment of above noted contract to the Sunshine Mining Company, dated September 1, 1953. We call your attention to the Government's Consent to this assignment as follows:

GOVERNMENT'S CONSENT

The Government, this 4th day of November, 1953, without releasing the Operator from any of the terms, provisions, and conditions of said Exploration Project Contract, hereby consents to the above assignment.

THE UNITED STATES OF AMERICA

By C. G. Mittendorf
Administrator, Defense Minerals
Exploration Administration

We are enclosing copies of our letters of this date to Messrs. Abram A. Knowles, George G. Knowles, and Edward A. Knowles, and to Sunshine Mining Company, advising of the amount subject to Government's percentage royalty and the date of termination of this liability. By virtue of your contract and the assignment, your company remains liable for payment of the aforesaid royalty if it is not otherwise paid.

Sincerely yours,

C. G. Mittendorf (fw)

Administrator

Enclosure

Copy to: Sunshine Mining Company

cc to: Messrs. R. W. Holliday, USBM
T. H. Kilsgaard, USGS

TLChapman:foc:am 12-20-56
cc to: Docket
Code 400
Adm. Read. File
Oper. Comm.
FT. REG. II

CW

DOCKET
SURNAME
Chapman
Martin
Chambers

400

Garnet Tungsten Mining Company
John Day, Oregon

Re: Docket No. DGCA 2820 - Tungsten
A. A., G. G., & R. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. Ida-2556

Gentlemen:

Reference is made to our letter of November 3, 1954, transmitting a copy of certification of discovery or development issued to the Sunshine Mining Company (executed on October 27, 1954). We also refer to your assignment of above noted contract to the Sunshine Mining Company, dated September 1, 1953. We call your attention to the Government's consent to this assignment as follows:

GOVERNMENT'S CONSENT

The Government, this 4th day of November, 1953, without releasing the Operator from any of the terms, provisions, and conditions of said Exploration Project Contract, hereby consents to the above assignment.

THE DEPARTMENT OF ARMY

By J. G. Mittendorf
Administrator, Defense Minerals
Exploration Administration

We are enclosing a copy of our letter of this date to Mr. Abram A. Knowles, Partner, Knowles Brothers, advising of the amount subject to Government's percentage royalty and the date of termination of this liability.

TLChapman:foc 12/6/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Sincerely yours,

Administrator

DOCKET
SURNAME
Chapman
Martin
Selfridge

100

3 JAN 1957

Mr. Price C. Montrose
Mountain City, Nevada

Re: Docket No. MMA 2020 - Tungsten
A. A., G. C., & L. A. Knowles, Assignees
Garnet Nos. 1 and 2 claims
Elko County, Nevada
Contract No. Ida-F55C

Dear Mr. Montrose:

Reference is made to the Owner's Consent to Lien of December 10, 1952, and the updated Owner's Consent to Lien, concerning the above referenced project.

For your information we are enclosing a copy of our letter of this date to Messrs. Abram A. Knowles, George A. Knowles and Edward A. Knowles, advising of the amount subject to Government's percentage royalty and the date of termination of this liability.

Sincerely yours,

C. O. Mitchell

Administrator

TT:hapman:foc
12/17/56
cc to: Docket
Code 100
Admr. Head. File
FT. RM. II

Enclosure

R. W. Holliday, OTM
T. H. Kiilsgaard, OGC

CW

DOCKET
SURNAME
Chapman
400 Martin
Chambers

Mr. Price E. Montrose
Mountain City, Nevada

Re: Docket No. DMLA 2020 - Tungsten
A. A., O.C., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Elko County, Nevada
Contract No. I-[illegible]-3556

Dear Mr. Montrose:

Reference is made to the Owner's Consent to Lien of December 10, 1952, and the Owner's Consent to Lien of October 27, 1953, concerning the above referenced project.

For your information we are enclosing a copy of our letter of this date to Mr. Abram A. Knowles, Partner, Knowles Brothers, advising of the amount subject to Government's percentage royalty and the date of termination of this liability.

Sincerely yours,

Administrator

Enclosure

TL:Chapman:fcc
12/5/56
cc to: Docket
Code 800
Code 400
Admr. Read. File
T. REG. II
Messrs. R. W. Holliday, USBM
T. H. Killsgaard, USGS

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

December 11, 1956

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources
Thru: George C. Selfridge, Special Assistant to Administrator, DMEA
From: Iron and Ferro-Alloys Division, DMEA

Subject: Docket No. DMEA 2820 - Tungsten
A. A., G. G., & E. A. Knowles, Assignee
Garnet Nos. 1 and 2 Claims
Contract No. Idm-E556

At the suggestion of Mr. George C. Selfridge, an engineer from this Division consulted to determine whether the subject docket contained any indication that Knowles Bros. constituted a partnership. On the basis of information supplied to us we have to rewrite a number of letters which were prepared in connection with a certification for the subject project.

On consulting the MF-104 at the top of the left hand-side in our latest docket, which was sent up for review in connection with the above described question, I note the payee's signature as follows: Payee: Knowles Bros., Per. A. A. Knowles - Title: Partner.

May I suggest that this might be considered an indication that Knowles Bros. is a partnership.

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

Not sent

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

NOV 26 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Iron and Ferro-Alloys Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-2520 (Tungsten)
Garnet Tungsten Mining Company
Assigned to Sunshine Mining Company
Re-assigned to Knowles Brothers
Garnet No. 1 and No. 2 Claims
Elko County, Nevada
Contract No. Idm-2556

This responds to your memorandum of November 20.

This Contract, providing for work in two stages, was originally executed with Garnet Tungsten Mining Company on June 25, 1953. On November 4, 1953, the Government approved an assignment of the Contract to Sunshine Mining Company "without releasing the Operator from any of the terms, provisions, and conditions of the said Exploration Project Contract ..." On October 27, 1954, the project was certified. On November 8, 1954, the Government approved an assignment of the Contract from Sunshine Mining Company to Abram A., George G., and Edward A. Knowles, "without releasing the Operator [Garnet Tungsten] or the Assignor from any of the terms, provisions, and conditions of the Contract."

According to your memorandum of November 20, Sunshine Mining Company completed Stage I, the authorized cost of which was $5,760.00 (Government participation $4,320.00), and the Knowles brothers completed Stage II at cost of $16,000.00 (Government participation $12,000.00). You ask what amounts should be listed in the letters you propose to write to (a) the owners (Knowles brothers and Price D. Montrose), (b) Garnet Tungsten Mining Company, and (c) Sunshine Mining Company.

In each case, the assignees under the respective assignment agreed that it or they "assume and agree to be bound by the terms, provisions, and conditions of the contract ..."

DMEA Docket

Sec. 6(a) of the Contract, as amended in Annex I, provides:

> "...The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land ... 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 ..."

The Knowles brothers, by virtue of their acceptance of the terms of the Contract, and by virtue of the Contract provisions, are obligated to pay royalty on minerals produced from the land during the period between June 25, 1953 and June 25, 1963, until the total net amount contributed by the Government ($16,320.00) is fully repaid. Since the Sunshine Mining Company was not released from its obligations under the Contract, it remains obligated as a surety for the payment of this sum, if it is not paid by Knowles brothers. Similarly, since the Garnet Tungsten Mining Company was not released from its obligations under the Contract, it remains liable as a surety for the payment of this full sum, if neither Knowles brothers nor Sunshine Mining Company pay it to the Government. The owners, by virtue of their Consent to Lien, have agreed to a lien, in favor of the Government, on the land and the production therefrom for the full sum stated above, which the Government can avail itself of, if neither Knowles brothers, Sunshine Mining Company nor Garnet Tungsten Mining Company pay the full sum to the Government. Each of these parties should be advised accordingly in your proposed letters to them.

Robert P. Dwyer

Robert P. Dwyer

PIndritz/wog
November 26, 1956
Copy to: DMEA Docket
Solicitor's Docket
J.L.Chambers/4448
W.S.Martin (2)
R.P.Dwyer
P.Indritz
Chron.

Dm

Docket
SURNAME
Chapman
Martin

November 20, 1956

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources

From: Iron and Ferro-Alloys Division, DMEA

Subject: Letters pertaining to Certification of Discovery or Development setting forth amount expended on project
Docket No. DMEA-2820, Tungsten
Garnet Tungsten Mining Company, assigned to Sunshine Mining Company, re-assigned to Knowles Brothers
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-3556

Owners of Property: Abram A., George G., and Edward A. Knowles, and Price D. Montrose, Mountain City, Nevada.

Lease and Option: On September 1, 1952, the above noted property was leased to Ray E. Summers, and Harold E. Culp, John Day, Oregon.

Assignment: On July 8, 1953, Summers and Culp requested that lease be assigned to Garnet Tungsten Mining Company

Contract: On June 25, 1953, the DMEA granted a contract to the Garnet Tungsten Mining Company (L. D. Wilson, President, R. E. Summers and H. A. Culp, a partnership), the work to be carried out in two stages.

Stage I	$5,760.00	Government participation	$4,320.00
Stage II	16,000.00	" "	12,000.00
Total	$21,760.00		$16,320.00

Assignment: On August 25, 1953, the lease and contract were assigned to the Sunshine Mining Company.
Government consent to assignment of contract was granted on September 1, 1953.

Work Completed	The Sunshine Mining Company completed Stage I, of the contract and desired to withdraw from the operation.
Assignment	On October 22, 1954, the Sunshine Mining Company assigned the lease and contract to Knowles Brothers. The Garnet Tungsten Mining Company released the property to owners.
Certification	On October 27, 1954, a Certification of Discovery or Development was issued to the Sunshine Mining Company.
	Letters to the Sunshine Mining Company on October 27, 1954, and to L. Wilson, President, and Ray E. Summers, Vice-President, Garnet Tungsten Mining Company, Price D. Montrose, and Alban Knowles, partner on Nov. 3, 1953, do not indicate the amount for which participants are liable.
Completion of Project	The Knowles Brothers completed the project at a cost of $16,000.00. Total expenditures $21,760.00, Government participation $16,320.00

Please advise us what sums we should name when we write letters to owners, the Garnet Tungsten Mining Company, and the Sunshine Mining Company, stating the amounts for which each is liable in royalties if ore is mined and marketed prior to June 25, 1963.

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

Attachment

TLChapman:am 11-20-56
cc to: Docket
Code 400

12 mEa

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

RECEIVED
FEB 15 1956

1605 Evans Avenue
Reno, Nevada

February 13, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Knowles Brothers (assignee)
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Reference is made to your letter of February 2, 1956 requesting additional information on our Semi-Annual Report of December 31, 1956 in respect to ore reserves on subject docket.

In making out our final report, it was questionable in our minds whether the ore reserves, estimated in lenses 2 and 3, should be credited to the DMEA project inasmuch as they had not been explored under the contract. In addition, the grade of the ore was based to a great extent on reported evidence from the Operators. In compiling the ore reserves as of January 1, 1956, I decided arbitrarily to consider all the ore reserves as inferred ore and placed the small 45,000 tons of indicated ore in the inferred ore bracket in order to be on the conservative side. It can be transferred back to the indicated bracket in order to check the final report.

S. Ricker

DOCKET
SURNAME
Clayman
Marston
Talbert
Selfridge
Johnson
Mortenday

FEB - 2 1956

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Knowles Brothers (Assignee)
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Ricker:

Reference is made to the Field Team Final Report, dated December 16, 1955, and the Semi-Annual Report dated December 31, 1955, in which measured indicated and inferred ore tonnages are listed as follows:

By Field Team Report, DMEA Project

	No. 1 Ore Body	Nos. 2 & 3 Ore Bodies	Total
Measured Ore	90,000 tons		90,000 tons
Indicated Ore	270,000 tons	45,000 tons	315,000 tons
Inferred Ore	240,000 tons	135,000 tons	375,000 tons
Total	600,000 tons	180,000 tons	780,000 tons

By Semi-Annual Report, December 31, 1955

	Dmea Project	January 1, 1956
Measured Ore	90,000 tons	90,000 tons
Indicated Ore	270,000 tons	270,000 tons
Inferred Ore	240,000 tons	420,000 tons
Total	600,000 tons	780,000 tons

It is noted that the totals for No. 1 ore body in the Field Team Final Report and the DMEA Project in the Semi-Annual Report agree, but while the estimated reserves as of January 1, 1956, have the same total as the Field Team Report, all the tonnage

R.G.A.

in 2 and 3 ore bodies is listed as inferred ore, with no indicated ore.

Will you please advise us how these totals were calculated.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GHB)

APPROVED:

/s/ Robert W. Geehan (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

TLCHAPMAN/foc
1-30-56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. Reg. II
Messrs. Holliday, USBM
Kiilsgaard, USGS

IN REPLY REFER TO:

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

RECEIVED
FEB - 2 1956

February 1, 1956

Re: DMEA 2820, Idm-E556
Knowles Brothers
Garnet Tungsten Mine
Elko County, Nevada
$21,760.00 - Tungsten

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Final Field Team report.

The Final Report deals with a 2 Stage work program consisting of:

Stage I, Bulldozing	$800.00
Diamond drilling 620'	4,960.00
	$5,760.00
Stage II, Adit 400 feet	$16,000.00
	$21,760.00
Government's share	$16,320.00

As a result of the Stage I work, 225,000 tons of 0.31% WO_3 material was considered indicated in No. 1 ore body as of May 7, 1954. A certificate of discovery was issued October 27, 1954.

Stage II work, a 400-foot adit 150 feet below No. 1 level, makes possible the following estimate:

	Tons		
	No. 1 lens	No. 2 and 3 lens	Total
Measured ore	90,000		
Indicated ore	270,000	45,000	315,000
Inferred ore	240,000	135,000	375,000
Total all classes	600,000	180,000	780,000

Estimated grade of all classes of ore is 0.3 to 0.5 percent WO_3. By selective mining, a moderate tonnage of 0.50 to 1.00 percent WO_3 ore could be produced.

The ore estimate and the certification are accepted.

This Final Report bears on application DMEA 4114 in which assistance in work in Nos. 2 and 3 lenses is requested. See Supplemental memorandum under that number.

N. E. Nelson

N. E. Nelson

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

RECEIVED
JAN 12 1956

1605 Evans Avenue
Reno, Nevada

January 10, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2820 (Tungsten)
Knowles Bros., Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

garnet tungsten Nevada

Attached are four copies of Field Team final report on subject contract by H. W. Jones, Bureau of Mines and Robert G. Reeves, Geological Survey.

S. Ricker

Attach.

FINAL FT rpt.

Reviewed by
DMEA OPERATING COMMITTEE
1-16-56
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
JAN 18 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

FINAL REPORT

DMEA 2820, Contract Idm-E556 (Tungsten)
Knowles Bros.
The Garnet Tungsten Mine, Elko County, Nevada

by

Henry W. Jones
Mining Engineer
U. S. Bureau of Mines

Robert G. Reeves
Geologist
U. S. Geological Survey

December 16, 1955

Reviewed by
DMEA OPERATING COMMITTEE
1-16-56
(date)

RECEIVED
JAN 1 3 1956

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CONCLUSIONS AND RECOMMENDATIONS	2
GEOGRAPHY AND ECONOMIC FACTORS	3
THE DMEA PROJECT	5
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ILLUSTRATIONS

Figure 1	Index map
2	Geologic sketch map
3	Geologic map
4	Geologic sections
5	Upper and lower adits

INTRODUCTION

The Garnet tungsten mine was explored under a Defense Minerals Exploration Administration contract, dated June 25, 1953, by the Garnet Tungsten Mining Co. and the Sunshine Mining Co. (Stage I), and by Knowles Bros. partnership (Stage II). Exploration was completed on September 30, 1955. A final report by Glenn G. Gentry, U. S. Bureau of Mines, and Roscoe M. Smith, U. S. Geological Survey, dated May 7, 1954, describes the results of the Stage I exploration. Examinations to evaluate the results of the Stage II exploration were made by Henry W. Jones of the U. S. Bureau of Mines on October 20, 1955, accompanied by Edward A. Knowles; and by Robert G. Reeves, U. S. Geological Survey, on November 11, 1955, accompanied by Abram A. Knowles.

The mine was discovered by Abram A. Knowles, Edward A. Knowles, George G. Knowles, and Price Montrose, who explored the property by surface cuts and diamond drilling. In 1952 the property was leased to the Garnet Tungsten Mining Co. who received DMEA assistance to carry on exploration. The contract was assigned to Sunshine Mining Co. who completed Stage I of the contract. Sunshine Mining Co. and Garnet Tungsten Mining Co. relinquished their interests in the property and the contract was reassigned to and completed by Knowles Brothers.

CONCLUSIONS AND RECOMMENDATIONS

Under both stages of the DMEA project, about 600,000 tons of measured, indicated and inferred ore containing around .30 to .50 percent WO_3 were discovered.

The project was confined to the No. 1 tactite lens and Stage II of the program partially delineated in the lower adit the ore that was exposed under Stage I in the upper adit. In addition to the ore in Lens No. 1, reserves of 180,000 tons containing about .30 to .50 percent WO_3 are estimated to be in lenses 2 and 3.

Further exploration will probably discover additional ore -- and would be required to more definitely determine the grade, but is not essential at this time. Further participation by the Government in exploration costs is not recommended.

The ore discovered makes a significant addition to the tungsten reserves of the United States, but the economic aspect will depend on the future price of tungsten. The size and shape of the ore bodies favor reasonable cost of mining operations.

A certificate of discovery has been issued and the issuance of another is probably not necessary. There has been no production todate and no royalties are due the Government.

GEOGRAPHY AND ECONOMIC FACTORS

Ownership, Location, and Accessibility

The Garnet tungsten mine consists of 24 mining claims held by location by Abram A., George G., and Edward A. Knowles, and Price D. Montrose. The claims are on Tennessee Mountain, in secs. 16 and 17, T. 45 N., R. 56 E., M.D.B.&M., in north central Elko County, Nevada. The altitude of the claims ranges from the 8,356 foot summit of Tennessee Mountain to about 7,200 feet above sea level.

The claims are 2 miles east of the Wild Horse to Rowland road over a steep, unimproved dirt road that becomes virtually impassable during wet weather. The road to the mine turns east 14.8 miles northeast of the junction of the Wild Horse-Rowland road with State Highway 43 (fig. 1). The road to Rowland turns northeast from the Elko to Mountain City highway, State highway 43, about 2 miles north of Wild Horse, Nevada.

Power

A high-voltage power line of the Idaho Power Co. passes about 1-1/2 miles northeast of the mining claims. Power may be obtained when the cost of a transformer and feeder line to the property is warranted.

Water

An adequate quantity of water is presently available from a

small stream approximately 1,000 feet from the portal of the proposed adit at orebody No. 1. It is probable that sufficient water could be developed from this same source for the operation of a moderate sized milling plant.

Labor and supplies

A few experienced miners are generally available at Mountain City, Nevada, and some mining supplies may also be obtained there. Personnel experienced in mining are also available in Elko and surrounding northern Nevada cities. Mining supplies and equipment, including mine timbers, may be obtained in Elko.

Housing

There are no housing facilities on the property. The few employees required for the exploration project were accommodated in a cabin owned by the Montrose brothers.

Ore treatment

There are no milling facilities within a distance over which it is economically feasible to haul ore of this grade. There are, however, several suitable locations for a beneficiation plant at or near the mine.

A 500-pound sample of ore was submitted by the operators to the Bureau of Mines, Reno, Nevada, for metallurgical testing. Copies of this test are included as Appendix A. The sample contains about two times as much WO_3 as the average ore, but it is representative of the

mineralogy and size distribution of scheelite in the ore.

THE DMEA PROJECT

The project called for exploration of the No. 1 tactite lens in two stages. Stage I as originally proposed consisted of 40 feet of drifting and 520 feet of diamond drilling. Stage I was changed by amendment No. 1, dated November 4, 1953, to consist of 64 hours of bulldozer trenching and 620 feet of diamond drilling. It was completed on December 7, 1953, and further operations were suspended because of adverse weather and road conditions. In all, 64 hours of bulldozing and 770 feet of diamond drilling were done. A summary of diamond drilling is as follows:

Hole	Location	Date Started	Date Completed	Depth, feet	Bearing	Angle
A	Surface	10/13/53	11/17/53	281	N. 45° E.	-56°
B	Surface	11/30/53	12/7/53	149	N. 45° E.	-45°
D	Underground	11/23/53	11/27/53	103	Northeast	Horizontal
A	Surface	hole abandoned at		142		
A_2	Surface	hole abandoned at		95		
				770 total		

The work in Stage I resulted in the discovery of 225,000 tons of all classes of reserves averaging 0.3 percent WO_3.

Stage II further explored the No. 1 tactite lens by a 400 foot adit. Amendment No. 2, extending the completion date to October 1, 1955, was granted on December 1, 1954, after assignment to the Knowles Bros.

Work was started from a previously prepared portal site on May 26, 1955, shortly after snow conditions permitted access to the property. An adit was driven through soft, shaley limestone and 55 feet from the portal, tactite was encountered. Because of the low tungsten content, the course of S. 55° E. was continued. At 150 feet, a gradual turn to S. 5° E. was made in order to crosscut the tactite body and determine the location of the contact between the tactite and lime shale. The contact was encountered at 340 feet, at which point the adit was stopped. A drift from the 295-foot point was driven for 111 feet on a bearing of S. 32° E. The total length of the adit and drift is 446 feet; 400 feet of which are chargeable to DMEA. The work was terminated October 1, 1955.

From the 55-foot point, the adit is in tactite containing sparsely disseminated scheelite. A 20-foot wide zone estimated to contain less than 0.2 percent WO_3 was cut at 130 feet from the portal. Following the change in direction to S. 5° E., a low grade ore zone 35 feet wide, trending N. 30° W. and dipping 60° SW was crosscut at an acute angle. The footwall of this zone was intersected at 238 feet and the hanging wall at 310 feet. The body is separated from the tactite-lime shale contact by 20 feet of tactite that contains sparsely disseminated scheelite. Uranium-bearing material in fault gouge was cut at 290 feet. The drift from 295 feet is in the ore body near the hanging wall side. As a result of Stage II

work, continuity of the ore body at depth was established and the reserves were increased to 600,000 tons averaging 0.3 to 0.5 percent WO_3.

Expenditures

Total approved cost			$21,760.00
Stage I:	Trench by bulldozer for 64 hrs. @ $12.50/hr.	$ 800.00	
	Diamond drill 620 feet @ $8.00/ft.	4,960.00	
	Total cost Stage I	$5,760.00	
Stage II:	Drive adit 400 feet @ $40.00/ft.	$16,000.00	
Total cost Stage I and Stage II		$21,760.00	
Government's share of the cost			$16,320.00
Government's share unexpended			None
Value of production during operations			No production
and Government royalty			No royalty

No equipment was purchased under terms of the contract.

GEOLOGY AND ORE DEPOSITS

The Garnet tungsten mine is on the northwest slope of Tennessee Mountain in an area of moderate to steep relief. Tennessee Mountain is composed of sedimentary rocks that have been intruded by granitic rock.

The sedimentary rocks are highly deformed, interbedded, thin-bedded limestone, shale, and limey shale to which the name Tennessee Mountain formation has been given [1]. No fossils have been found in the Tennessee Mountain formation; it underlies the Sunflower formation of late Pennsylvanian age, and is tentatively assigned to the lower Paleozoic by Bushnell. The sedimentary rocks have been tightly folded and faulted; at the mine they strike from N. 40° W. to N. 60° W. and dip from 40° to 70° SW, and are cut and offset by faults with strikes and dips of various angles.

The granitic rock is exposed on the crest and eastern side of Tennessee Mountain. It is a coarse porphyritic rock ranging in composition from quartz monzonite to granite. Alaskite and aplite dikes cut both the sedimentary rocks and the granitic rocks.

At the Garnet tungsten mine, the contact between the granitic rock and the sedimentary rocks trends N. 45° W, and dips from nearly vertical to 50° SW. The contact is irregular in detail, with tongues of granitic rock extending several hundred feet into the sedimentary rocks.

Lenses of tactite have been formed in the sedimentary rocks along the contact between them and the granitic rock. The tactite consists of 60 percent garnet; the remainder is pyroxene, hornblende, and minor amounts of chlorite, antinolite, and epidote. The tactite lenses

---

1/ Bushnell, K. O., 1955, Geology of the Rowland quadrangle, Nevada; PhD thesis submitted to Yale University.

are elongate parallel to the strike and dip of the sedimentary rocks.

Three tactite lenses or groups of lenses occur at the Garnet tungsten mine; from north to south they are designated Nos. 1, 3, and 2 (fig. 2). No. 1 is 900 feet northwest, and No. 2 is 1,000 feet southeast of No. 3. The lenses range from 500 feet to less than 100 feet long, and from 150 feet to 25 feet wide. The greatest exposed depth down the dip is 400 feet in lens No. 1.

Scheelite, the main ore mineral, is disseminated in small amounts throughout the tactite of all three lenses. Molybdenite, powellite, and pyrite are associated with the scheelite.

Nodules of hard, black, siliceous rock from 2 to 10 inches in diameter that contain a radioactive mineral, tentatively identified as uraninite, occur in a 1 to 2 foot fault zone. The fault zone, which strikes N. 70° W. and dips 70° N, was cut in the lower adit 290 feet from the portal.

The tungsten ore bodies are concentrations of scheelite along favorable beds. The main ore body is in the No. 1 tactite lens and has been exposed on the surface and in underground workings for nearly 400 feet along the strike, and cut at a maximum depth of 400 feet down dip; it averages 30 feet wide. The ore body in tactite lens No. 2 is about 400 feet long and may average 25 feet wide; it was cut about 75 feet below the surface in diamond drill holes. The ore body in lens No. 3 is about 300 feet long, 25 feet wide, and was cut in diamond drill holes less

than 50 feet below the surface.

The average grade of the ore in No. 1 tactite lens is 0.3 to 0.5 percent WO_3; that in lenses 2 and 3 is considered to be the same or slightly less than that of lens No. 1.

SAMPLING

The results of about 60 samples in Stage I are as follows:

Sample Location	Width, feet	Percent, WO_3
Outcrop	14	0.30
Upper adit	32	0.69
Diamond drill holes	23	0.31

In Stage II the following samples were taken:

Sample No.	Width, feet	%, WO_3	Description
243	-	*0.01	186 foot point drift. General muck sample, showing WO_3.
244	2.0	0.18	174 foot point drift, chip sample across WO_3 enriched garnet zone.
245	2.0	0.11	186 foot point drift, chip sample across WO_3 enriched band.
248	-	0.22	295 foot point, muck sample at face, thin banded WO_3 in tactite.
268	4.4	0.18	406 foot point across face, streaked and thin banded WO_3.
269	4.0	0.80	364 foot point, chip across back, broad banded WO_3.
270	5.0	0.97	322 foot point, chip across back, broad banded WO_3, very little WO_3 on either side.

*Less than.

Two additional samples were taken from a narrow gouge filled fault zone containing a black center core showing radioactivity. Radiometric determinations are as follows:

Sample No.	Width, feet	%, eU_3O_8	Description
1331	-	0.39	Black mineral from fault zone, selected from dump material.
1331A	1.0	0.05	Green and brown fault gouge with center core black material, 290 foot point in adit.

Four of these samples (fig. 5) were taken in the lower adit from a layer 4 to 5 feet wide near the east side of the ore body. The weighted average of these is 0.66 percent WO_3, but inasmuch as the samples were cut from the enriched areas in the layer, the average grade of the entire ore body is less than the weighted average, and by visual comparison is estimated to be 0.3 to 0.5 percent WO_3.

ORE RESERVES

The ore body in the No. 1 tactite lens has been exposed for 400 feet along the strike, an average of 300 feet down the dip, and averages 30 feet wide (fig. 3). The body is consistent in both width and average grade, but mineralization within this zone is irregular. Assuming the measured ore to extend 25 feet from surface and underground workings and diamond drill holes, the ore body contains 90,000 tons of measured ore and 270,000 tons of indicated ore. Additionally, 240,000 tons of ore may be inferred to a depth of 200 feet below where the body has been cut in diamond drill holes.

The grade of the ore as indicated by sampling and examination by mineralight determines the grade to be approximately the same as found in Stage I (Gentry and Smith, May 7, 1954) or 0.3 to 0.5 percent.

The ore body at No. 2 lens is 400 feet long and averages 25 feet wide, and contains 25,000 tons of indicated ore to a depth of 25 feet, and 75,000 tons in addition may be inferred to a depth of 100 feet. The average grade is considered to be the same or slightly lower than in ore body No. 1, or about 0.3 to 0.5 percent WO_3.

The ore body at No. 3 lens is about 300 feet long and averages 25 feet wide; 20,000 tons of about 0.3 to 0.5 percent WO_3 ore is indicated to a depth of 25 feet, and an additional 60,000 tons may be inferred to a depth of 100 feet.

Ore reserves of the property are:

	Tons		
	No. 1 lens	No. 2 and 3 lens	Total
Measured ore	90,000		90,000
Indicated ore	270,000	45,000	315,000
Inferred ore	240,000	135,000	375,000
Total all classes	600,000	180,000	780,000

Estimated grade of all classes of ore is 0.3 to 0.5 percent WO_3. By slective mining, a moderate tonnage of 0.50 to 1.00 percent WO_3 ore could be produced. How much?

APPENDIX A

October 22, 1952

Garnet Tungsten Ore, Mountain City, Nevada

This sample was received through the Mining Branch for concentration tests in connection with a proposed field project.

The ore carried about 1.4 percent WO_3 as scheelite. The gangue minerals were garnet, hornblende, quartz, and calcite. The scheelite occurred in part in fairly coarse grained form and also in fine-grained disseminated particles. Optimum liberation required grinding to minus 150-mesh, but considerable scheelite was liberated after crushing to minus 10-mesh.

Gravity concentration tests were made on ore crushed to minus 10-mesh and hydraulically classified, using the laboratory Wilfley table. Some low-grade concentrates were produced with considerable middlings, and sand tailings. The coarser middlings were reground to minus 35-mesh, reclassified and concentrated on the table to produce more low-grade concentrates, and good tailings. The secondary slimes were combined with the primary slimes and tabled, but results were not satisfactory.

The combined table concentrates were sized by screening and treated on the high-intensity magnetic separator. A recovery of 50 percent on the original ore was obtained from the plus 150-mesh portion in a product carrying 57.39 percent WO_3.

Detailed data of the gravity concentration and magnetic separation are shown in the following tables:

Gravity concentration on Wilfley table

Product	Weight, %	WO_3, %	Distribution of WO_3 percent
Sand concentrates	12.52	8.80	82.75
Sand tailings	64.46	.07	3.45
Slime concentrates	.90	5.35	3.62
Slime middlings	5.92	.73	3.25
Slime tailings	16.20	.57	6.93
Total slimes	23.02	.80	13.80
Composite	100.00	1.33	100.00
+- 150-mesh	1.16	57.39	50.06
Magnetic	6.78	.32	1.63
- 150-mesh			
Nonmagnetic	1.02	22.87	17.51
Magnetic	3.56	5.07	13.65
Composite	12.52	8.80	82.75

The minus 150-mesh material did not yield satisfactory nonmagnetic concentrates.

The sand table tailings, amounting to 64.46 percent of the original weight and carrying .07 percent WO_3, representing 3.45 percent loss, could be discarded. The slimes and magnetic separation products other than the plus 150-mesh concentrates (nonmagnetic)

would require regrinding of the plus 150-mesh portions to minus 150-mesh and treatment by flotation. This flotation feed would amount to about 36 percent of the original ore, and would carry 1.8 percent WO_3, representing 46.5 percent of the original tungsten content of the ore.

Flotation tests

Several flotation tests were made on the ore, at minus 100-mesh and minus 150-mesh grinds. The lowest rougher tailings obtained at the coarser grind were 0.13 percent WO_3, while at minus 150-mesh, tailings running 0.04 could be made.

By cleaning the rougher concentrates in three stages, final concentrates carrying 31 percent WO_3 were made. Gross recovery was about 98 percent of which the cleaner concentrates represented 80 percent while 17 percent remained in the cleaner tailings for retreatment. These cleaner tailings amounted to 16 percent of the original weight of ore, and under suitable plant operating conditions would probably yield most of their tungsten contents in final concentrates of satisfactory grade.

The reagents used for flotation were in pounds per ton of ore:

Soda ash,	1.0	—for conditioning
Quebracho	0.1	—for conditioning
Quebracho	0.05	—in cleaning
Oleic acid	0.25	—as collector
Aerosol OT85	0.05	—for modifying oleic acid
B-23	0.25	—as frother

Detailed data of the flotation were:

Flotation Test 3, minus 150-mesh grind

Product	Weight, %	WO_3, %	Distribution of WO_3, %
Cleaner concentrates	3.90	31.05	80.70
Combined cleaner tailings	16.15	1.58	17.03
Rougher tailings	79.95	.04	2.27
Composite	100.00	1.50	100.00

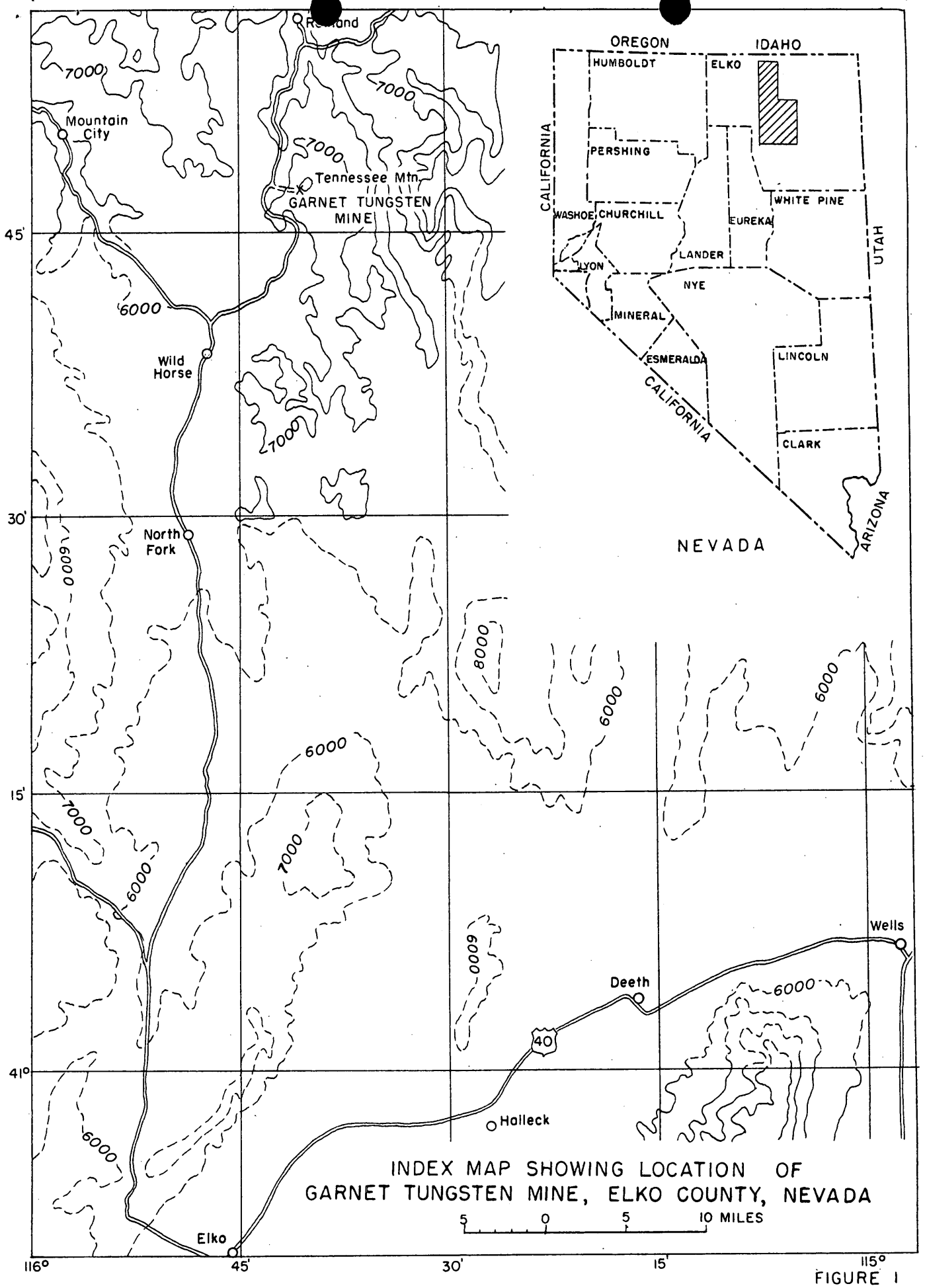
The gravity and magnetic separation concentrates which carried 57.39 percent WO_3 also contained 1.25 percent Mo.

The flotation concentrates which carried 31.05 percent WO_3 carried 0.80 percent Mo.

Molybdenum was present as the mineral powellite, which also contains tungsten. No molybdenite was noted in the ores.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2820
Idm-E-556 (TUNGSTEN)

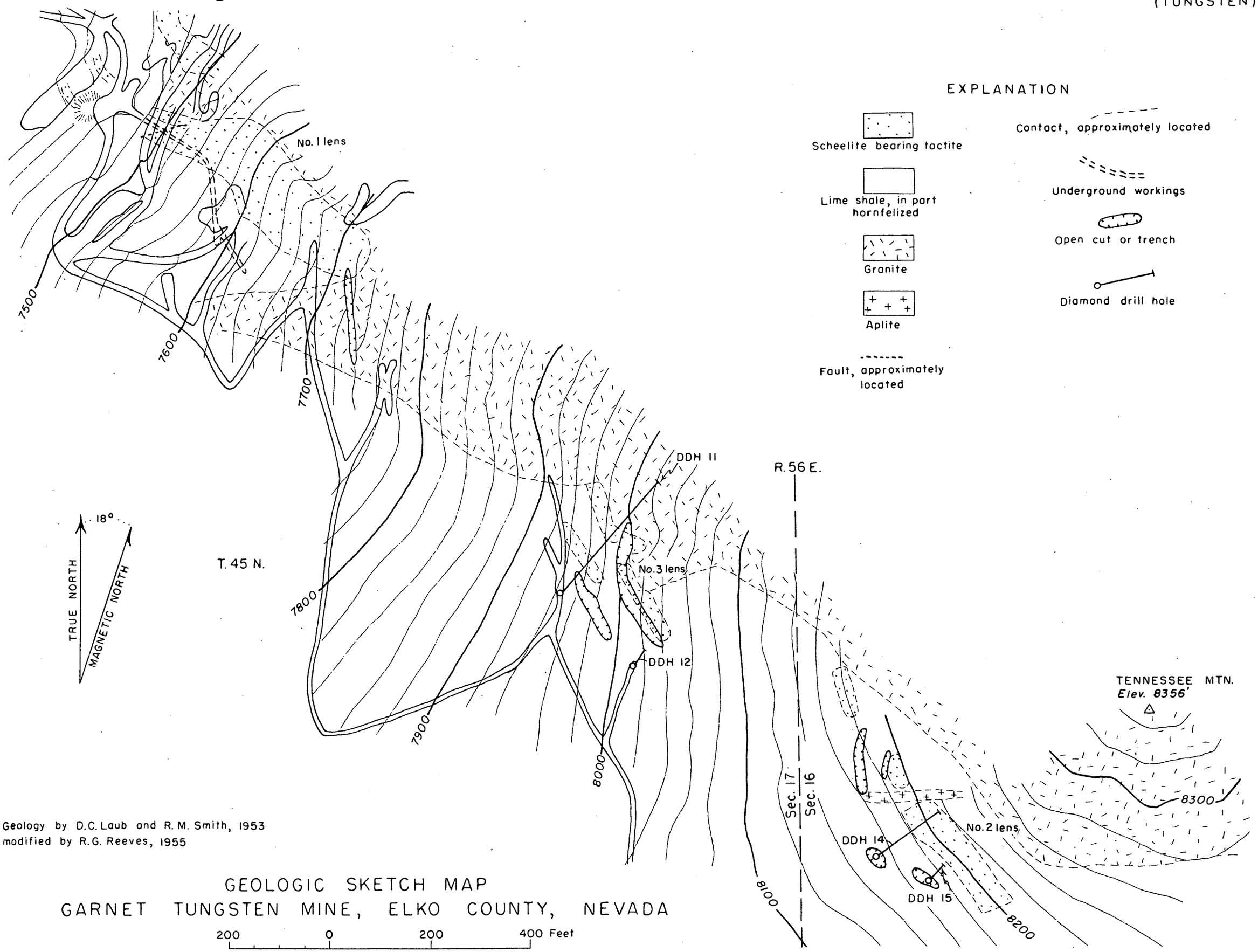


INDEX MAP SHOWING LOCATION OF GARNET TUNGSTEN MINE, ELKO COUNTY, NEVADA

FIGURE 1

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2820
Idm E-556
(TUNGSTEN)



Geology by D.C. Laub and R.M. Smith, 1953
modified by R.G. Reeves, 1955

GEOLOGIC SKETCH MAP
GARNET TUNGSTEN MINE, ELKO COUNTY, NEVADA

FIGURE 2

EXPLANATION

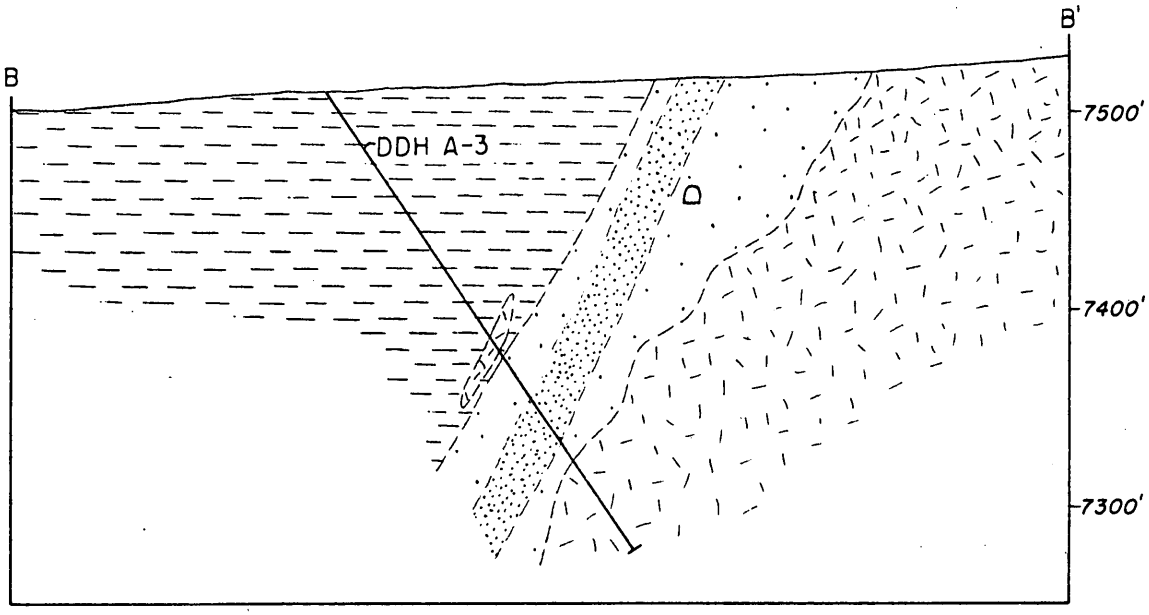
Scheelite bearing tactite

Ore

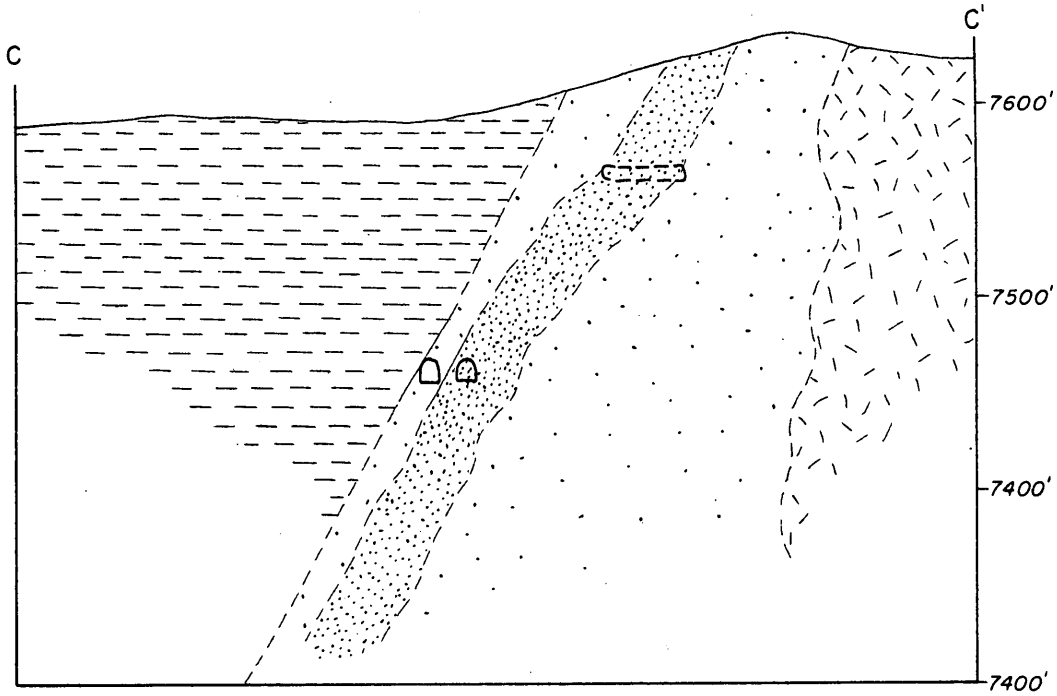
Lime shale

Granite

Contact
Dashed where approximately located



SECTION ALONG B-B'
(Figure 3)



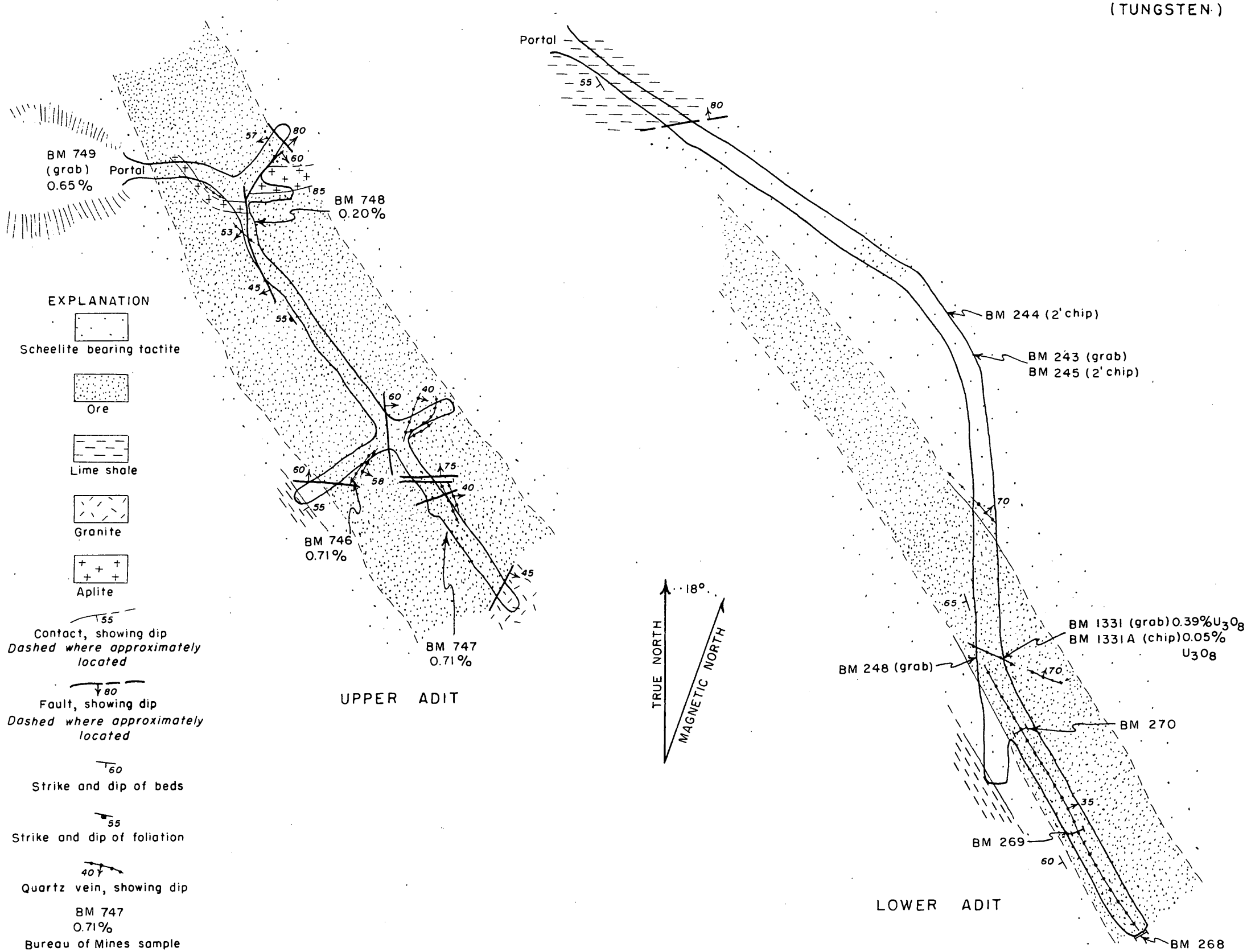
SECTION ALONG C-C'
(Figure 3)

GARNET TUNGSTEN MINE, ELKO COUNTY, NEVADA

FIGURE 4

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2820
Idm E-556
(TUNGSTEN)



GARNET TUNGSTEN MINE, ELKO COUNTY, NEVADA

FIGURE 5

9

400

DOCKET
Surname:
Chapman
Martin
Selfridge
Mattendorf

DEC 19 1955

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-2820, Tungsten
Knowles Bros., Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-2556

Dear Mr. Ricker:

Reference is made to your memorandum of November 3, 1955, with Operator's final report on the referenced project.

We would appreciate receiving the Field Team's final report so that we may close the docket on the project.

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. 2

TLChapman/ls
12/16/55

cc

Talbert

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

NOV 10 1955

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Report of Review
Abram A. Knowles, George C. Knowles,
Edward A. Knowles
Idn-E556, DMTA-2820

Dear George:

Receipt is acknowledged of the Washington copies of the Report of Review dated November 7, 1955 covering the referenced Exploration Project Contract.

It is noted that this report incorrectly cites the contract number as Idn-E566. The regional copies of the report undoubtedly have been distributed; however you should arrange to correct this citation on all copies. The Washington copies have been corrected.

Sincerely yours,

(Signed) E. D. Talbert

for Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
November 10, 1955

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.L.

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

1605 Evans Avenue
Reno, Nevada

November 3, 1955

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2820 - Tungsten
Knowles Bros., Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Attached are four copies of the Operator's final report on above subject contract.

S. Ricker

Attach.

BUREAU OF MINES
WASHINGTON, D. C.
Nov 7 10 12 AM '55

A REPORT on CONTRACT NO. Idm-E556

RECEIVED
NOV - 7 1955

Work was started on this contract early in spring of 1955, by Knowles Bros. of Elko and Mountain City, Nevada. The first problem was snow removal from the road over a high pass known as "Waterlog summit" and from around the proposed tunnel site then a two week delay for a new grade and fill to dry out before heavy loads of mining equipment could be transported over them. By May 15, road was good enough to start moving heavy loads and actual work on tunnel started about May 20. The first 50 feet was loose soft lime and granite that had to be timbered. This soft decomposed lime and granite gradually changed to tactite which in turn gradually became hard, fine grained and very hard, causing lots of breakage of drill steel and bits, This tunnel is 7'X5' in size most of the way nearer to 7'X 7' and first 150' on a straight line S-55°-E, then to S-5°-E, for 120', when it changes back to S-32°-E to end of tunnel at 406'.

The first signs of scheelite was near 140' very poor for next 25', then at 165' the grade began to improve especially on the left side which led to believe the tunnel was running along the right side of the ore body.

At 230' encountered a 4' quartz vein and at 248' another 7' quartz vein. After passing the first quartz vein the quality of scheelite improved considerably and continued very near same grade to the end of the tunnel and this grade we should remember is along right hand side of the ore body, if the tunnel were through the middly of the ore body it would be good on both sides, this ore body, according to previous diamond drilling, should be 35 to 40 feet thick here. The tunnel needs cross cuts to the left to determine the size of the ore body.

At 287' a vein of 6" to 18" of good grade unanium crossed at near right angles to the tunnel and at about 70° pitch it seemed to be narrow at top and widening at floor of tunnel which may indicate more width at septh, there should be a winz put down to see what this vein does at depth. From this unanium vein to end of tunnel the drilling was hard and it took considerable powder and steel and bits, otherwise there was no obstacle or problem that delayed the work. The tunnel was finished on last day of September. The next three days were spent in washing the muck off the walls with water under 120 pounds of pressure through fire hose nozzle which worked good and left walls clean for inspection. This tunnel should be driven on through the ore zone to help determine extent of the ore body.

A. A. Knowles

Docket

January 7, 1955

PROJECT SUMMARY REPORT

By: A. G. Keating

1. DMEA Docket No. 2820 (Tungsten)
   Contract No. Idm-E556
   Property - Garnet Claims
   Elko, Nevada

   Operator - Garnet Tungsten Mining Company (partnership)
   Mountain City, Nevada

   Operator's Property Rights: Lessee

   8-25-53 - Assignmnet of Lease and Option to Purchase to Sunshine Mining Company.
   9-1-53 - Assigrment of Contract to Sunshine Mining Company.
   10-27-54 - Reassignment by Sunshine Mining Company to Garnet Tungsten Mining Company.
   12-10-52 and 10-27-54 - Owners Consent to Lien.

2. Contract: Dated June 25, 1953.
   On Form MF-200A. To be completed in 8 months.

   Work Authorized: Agreed Unit Costs.

   Stage I

Drift - 40 ft. @ $40.00 per ft.	$ 1,600.00
Diamond Drill - 520 ft. @ $8.00 per ft.	4,160.00
	$ 5,760.00

   Stage II

Extend Adit - 400 ft. @ $40.00 per ft.	$16,000.00
	$21,760.00
Government's participation at 75%	$16,320.00

   Amendments:

   No. 1 - 11/4/53. Deletes Stage I and in lieu thereof authorizes -

Bulldozer trenching - 64 hrs. @ $12.50 per hr.	$ 800.00
Diamond drilling - 620 ft. @ $8.00 per ft.	4,960.00
	$ 5,760.00

Amendments continued:

No. 2 - Extends time for completion - 8 months - to October 1, 1955.

Work Completed:

12-8-53 - Stage I of contract work was completed by assignee, Sunshine Mining Company, and reassigned by them to Garnet Tungsten Mining Company.

Owners of land request that they be allowed to complete work authorized under Stage II of contract. Work to commence after winter months by May 1955.

Diamond drilling - 770 ft.	$ 4,765.90
Trenching - 147 hours	1,176.00
Labor	550.00
Supervision	3,177.28
Total as reported by Operator	$ 9,669.18

3. Audit Report of Review: Dated July 13, 1954.

All costs incurred were under agreed unit cost basis contract, therefore -

Total cost as billed by Operator	$ 9,669.18
Exceptions in excess of contract	3,909.18
Total accepted costs	$ 5,760.00
Government participation at 75%	$ 4,320.00

4. Certification of Discovery: Dated 10/27/54.

Ore estimates - No. I ore body above 7,300 ft. altitude 400,000 tons ore containing an average of 0.30 percent WO_3 or 225,000 tons ore containing an average of 0.315 percent WO_3 above the 7,400 ft. altitude. There has been no production from the project and therefore no royalties have been paid.

5. Comments:

The work under the contract was conducted efficiently and the engineering satisfactory, although the cost of supervision as related to the cost of work was high.

Comments continued:

Prior to the exploration project the property had been explored to a shallow depth by diamond drilling, surface trenching and by approximately 340 ft. of adit. There were no measured ore reserves estimated. The diamond drilling had not been properly laid out or efficiently executed because of the limited experience of the Operators.

At the time of application for exploration aid the examining engineers found scheelite mineralization in bands of various widths in tactite as the host rock. Two surface exposures of tactite appeared to justify exploration. The northwest tactite block was indicated on the surface to have a length of 460 feet and a width of 120 ft. The 200 ft. along adit level scheelite mineralization was shown. This, together with results obtained from two diamond drill holes from the adit indicated an ore body in size of approximately 50,000 tons of inferred ore above the level averaging 0.50% WO_3 with additional 180,000 tons below the level averaging 0.25% to 0.30% WO_3.

Therefore it was reasonable to consider that additional exploration would develop ore reserves much greater than possible to properly estimate with the limited amount of work previously accomplished.

The purpose of the exploration project was to determine the distribution and content of scheelite in the tactite and the quantity of scheelite bearing rock in the northwest area. The work under the project closely determined the northwest limits of the ore and indicated the location of the highest grade portion of the deposit. The southeast area had some good surface showings with four previous drill cores assaying in the order of 21 ft. of ore averaging .28% WO_3. No work was undertaken under the contract in this area.

The Sunshine Mining Company relinquished their interest in the project after completing the work under Stage I, because they felt they had reasonably well determined the tonnage and grade of ore which could be expected to be successfully mined from the area. They believed that the ore was too low in grade to make the project attractive under present conditions.

Undoubtedly, there could be a much greater tonnage of minable ore developed if the operation was carried on by a smaller company with less overhead and if the present price of tungsten continued.

cc to: Docket (original)
Admr. Reading File
Mr. Martin
Mr. Keating
Mr. Johnson

A. G. Keating
A. G. Keating

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

January 6, 1955

Memorandum

To: Miss Curtin, Statistics and Control Division

From: Hazel Berry, Operating Committee

Subject: Amendment to Contract

Attached is the following docket copy of an amendment to a contract which has been reviewed and approved by the commodity division, Contract Administration and Audit Division, and the Legal Division. The official docket is also attached.

Knowles Bros., Assignee, DMEA-2820, Idm-E556, Amendment No. 2.

Attachment 1

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

420 Custom House
555 Battery Street
San Francisco 11, Calif.

December 9, 1954

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2820 - Tungsten
Knowles Bros., Assignee
Garnet No. 1 and No. 2 Claims
Elko County, Nevada
Contract No. Idm-E556
Amendment No. 2

Attached are the original and two copies of Amendment No. 2, dated December 1, 1954, extending the time of completion of work under the subject contract to October 1, 1955.

A justification sheet is attached to each copy of the amendment.

Proper distribution has been made of the remaining copies.

S. Ricker
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment)
Roscoe Smith, USGS
George Mavor

RECEIVED
DEC 31 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Talbert

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

NOV 22 1954

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Idm-E556, DMEA-2820
Sunshine Mining Company
Contract Assigned to
Knowles Brothers

Dear Mr. Mavor:

Reference is made to your letter of November 16, 1954, relative to the subject Exploration Project Contract.

Arrangements are being made to reobligate the $12,000.00 which was released as a result of your Report of Review dated July 13, 1954. For all practical purposes your Report of Review in lieu of final audit will be considered, under the circumstances, to be an "Interim" Report.

I appreciate having this case brought to my attention inasmuch as we have overlooked the reobligation of the funds.

Sincerely yours,

(Signed) E. D. Talbert

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

EDTalbert/wb
November 22, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.G.

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

November 17, 1954

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Sunshine Mining Company, Docket No. 2820

Reference is made to a letter dated November 1, from the operator to the field team executive officer which was submitted here on a routing slip dated November 5, bearing the notation: "Should we take any action?" The operator's letter refers to a certification of discovery or development signed by the administrator under date of October 27. The operator's letter states: ". . .Sunshine Mining Company relinquished its interest in the Garnet Tungsten Mine last spring, and mailed notice of termination to Mr. A. C. Johnson, Chief, Mining Division, Region III, . . . on March 30, 1954".

I find in the docket of this case no communication from the operator dated March 30, nor anything in the nature of a "notice of termination" which the operator states it mailed to Mr. A. C. Johnson. The operator further states that on April 3, 1954, it mailed to Mr. Johnson the "final report covering Stage I, the only stage completed. . ."

I do not know what the purpose of these statements by the operator may be. I can only surmise that they may be intended to show either that the certification of discovery or development was too late, or else that it was a useless gesture because the operator has abandoned its interest in the property.

The mere statement by the operator that it "relinquished its interest" in the property is not sufficient to establish an abandonment under the provisions of the exploration contract. In this connection, there is attached hereto a memorandum from the Acting Assistant Solicitor to the

D.M.E.A. Docket

the Administrator on the subject "Abandonment Provisions in Exploration Contracts" which points up the matter in a broader field than merely in connection with this one contract.

Under these circumstances, any action to be taken by the Government depends upon what the Government wishes to do. If the Government is satisfied with the termination of the work by the operator, it can give the operator a notice of termination for default in the performance of the work. If the Government is not satisfied with the termination of the work by the operator, it should promptly give the operator a notice of that fact and make demand upon the operator for continued performance. If the operator refuses to comply, the Government can then give the operator a notice of rescission of the contract for default in the performance of the work, and demand the repayment of the money previously contributed. Until a determination is made as to the course of action to be taken, no reply should be made to the operator. The matter has been long pending, and a decision should be made as promptly as possible.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachment

JLHofflund:gjb

Copy to: W. S. Martin (2)
Solicitor's Docket
DMEA Docket
J. L. Hofflund (2)
Chron. File

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

Department of the Interior
Defense Minerals Administration
RECEIVED
NOV 19 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

November 15, 1954

Sunshine Mining Company
Box 1080
Kellogg, Idaho

Re: Docket No. DMEA-2820 - Tungsten
Knowles Bros. Assignee
Garnet No. 1 and No. 2 Claims
Elko County, Nevada
Contract No. Idm-3556

Gentlemen:

Enclosed is the Operator's copy of the executed Assignment of Contract, Assignee's Acceptance, and Government's Consent covering the subject contract.

Sincerely yours,

S. RICKER

S. Ricker
Executive Officer
DMEA Field Team, Region III

Enclosure

Copy to: DMEA, Washington, D. C.
A. C. Johnson, Reno
Finance Office, Region III
Roscoe Smith, USGS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 19 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

November 15, 1954

Mr. Abram A. Knowles, Partner
Knowles Bros.
Mountain City, Nevada

Re: Docket No. DMEA-2820 - Tungsten
Knowles Bros. Assignee
Garnet No. 1 and No. 2 Claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

According to information from our Washington office, an executed copy of Assignment of Contract, Assignee's Acceptance, and Government's Consent covering the subject contract has been sent to you through Grant Sawyer, Esq., Elko County Court House, Elko, Nevada, on November 8, 1954.

Will you please advise us as soon as possible as to the time you will need for completion of the project so that the necessary amendment can be made.

You should also notify Mr. A. C. Johnson, Chief, Mining Division, U. S. Bureau of Mines, 1605 Evans Avenue, Reno, Nevada, when you will commence work on the contract. A copy of the Assignment of Contract is being forwarded to him.

Sincerely yours,

S. RICKER

S. Ricker
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
A. C. Johnson, Reno (With copy of Assignment)
Finance Office, Region III (With copy of Assignment)
Roscoe Smith, USGS
George Mavor

DOCKET
Surname:
Rutledge
Martin
Hoffman
Selfridge
Newcomb

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

NOV 8 - 1954

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA 2820-Tungsten
Knowles Bros., Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Ricker:

We are enclosing the Field Team copy, the Finance Office copy, and the Operator's copy of an executed Assignment of Congract, Assignee's Acceptance, and Government's Consent covering the subject contract. The Assignee's copy has been mailed to Grant Sawyer, Esq., Elko County Court House, Elko, Nevada.

It is suggested that you amend the contract to extend the time for completion of the project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHS)

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines (JHS)

E. L. Newcomb

Member, Geological Survey (JHS)

cc: Docket
FT, Reg. 3
Code 400
Oper. Comm.
Adm. Read. File
R. W. Geehan, USBM
Thor Kiilsgaard, USGS

FARutledge/ls
11-2-54

P.S. - The new Owner's Consent to Lien executed by Price D. Montrose has been attached to all copies of the assignment except the Operator's copy, which goes to the former operator; the present operator being, of course, the assignee.

R.S.R.

400

DOCKET
Surname

Rutledge
Margin
Selfridge
Hedges
Newcomb
Selfridge

NOV 8 - 1954

Grant Sawyer, Esq.
Elko County Court House
Elko, Nevada

Re: Docket No. DMEA 2820-Tungsten
Knowles Bros., Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Sawyer:

Enclosed is the Assignee's copy of the executed Assignment of Contract, Assignee's Acceptance, and Government's Consent.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

cc: Docket
FT, Reg. 3
Code 400
Adm. Read. File
Oper. Comm.
R. W. Geehan, USBM
Thor Kiilsgaard, USGS

FARutledge/ls
11/2/54

R.C.H.

400

DOC
SU

Rum
Martin
Hedges
Kiilsgaard
Chamber
Selfridge

NOV 3 - 1954

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Gumbel:

Enclosed is a copy of a certification of discovery or development issued under the subject contract.

Contract No. Idm-E556 was executed June 25, 1953, to cover a 2-stage exploration program. Expenditures up to $21,760.00 were authorized, of which the Government's share at 75 percent was $16,320.00. The project was terminated by the Operator after Stage I of the program was completed. The cost of the work completed was $5,760.00, of which the Government's share at 75 percent was $4,320.00.

The exploration program was designed to investigate the scheelite mineralization at the Number 1 deposit of the Garnet Tungsten mine. Trenching and diamond drilling under the subject contract and sampling of the existing underground workings indicated some 255,000 tons of ore above the 7400-foot elevation and estimated to contain 0.31 percent WO_3, or a total of 400,000 tons, at 0.315 percent WO_3, above the 7300-foot elevation. The exploration work done under the contract was accomplished efficiently.

The subject contract has now been assigned to three of the owners, doing business as Knowles Bros., who intend to complete the contract. Upon completion of the project, we shall supply you with a summary of the results obtained.

Sincerely yours,

C. O. Mittendorf
Administrator

cc: DOCKET
CODE 400
OPER. COMM.
FT, REG. III
ADM.READ.FILE
Enclosure

cc: J.H.HEDGES, USBM
THOR KIILSGAARD, USGS
R.W.GEEHAN, USGM

CODE 800-MR. CHAMBERS
CODE 110-MR. JOHNSON

FARutledge/ls
10-28-54

R.C.

DOCKET
Surname:
Rutledge
Martin
Chamber

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA 2820-Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract Idm-E556

Dear Mr. Gumbel:

Enclosed is a copy of a Certification of Discovery or Development issued under the subject contract.

Contract No. Idm-E556 was executed June 25, 1953, to cover a 2-stage exploration program. Expenditures up to $21,760.00 were authorized, of which the Government's share at 75 percent was $16,320.00. The project was terminated by the Operator after Stage I of the program was completed. The cost of the work completed was $5,760.00, of which the Government's share at 75 percent was $4,320.00.

The exploration program was designed to investigate the scheelite mineralization at the Number 1 deposit of the Garnet Tungsten mine. Trenching and diamond drilling under the subject contract and sampling of the existing underground workings indicated some 255,000 tons of ore above the 7400-foot elevation and estimated to contain 0.31 percent WO_3, or a total of 400,000 tons, at 0.315 percent WO_3, above the 7300-foot elevation.

The exploration work done under the contract was accomplished efficiently.

Sincerely yours,

Administrator

cc: DOCKET
CODE 400
OPER. COMMITTEE
ADM. READ. FILE
FIELD TEAM, REG. III

Enclosure

cc: CODE 800-Mr. Chambers
CODE 110-Mr. Johnson
J. H. HEDGES, USBM

cc: R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10-13-54

DOCKET
SURNAME
Rutledge
Martin
Hedges
Kiilsgaard
Selfridge

400

NOV 3 - 1954

Mr. Price D. Montrose
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-8556

Dear Mr. Montrose:

Transmitted herewith for your information is a copy of the certification of discovery or development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray F. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952, and is the same property referred to in the "Owner's Consent to Lien" executed December 10, 1952.

Also enclosed is a copy of our letter of October 28, 1954, to the Sunshine Mining Company.

Sincerely yours,

C. O. Mittendorf

Administrator

FARutledge:foc
10-28-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. III
Code 400 - Mr. Martin
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson
J. H. Hedges, USBM
R. W. Geehan, USBM
Thor H. Kiilsgaard, USGS

Enclosures

DOCKET
Surname:
Rutledge
Keaton
Chesnutt

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

Revised 10/78

Mr. Price D. Montrose
Mountain City, Nevada

Re: Docket No. DMEA 2020-Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-2556

Dear Mr. Montrose:

Transmitted herewith for your information is a copy of the Certification of Discovery or Development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray A. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952, and is the same property referred to in the "Owner's Consent to Lien" executed December 12, 1952.

By the terms of the exploration project contract and of the certification, all production from the aforesaid lands from the date of the exploration project contract is subject to the Government's percentage royalty as set forth in the contract until the sum of $4,320.00 is paid or until June 25, 1963, whichever occurs first.

Payments should be made to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Miller at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

Administrator

Enclosure

cc: DOCKET
FIELD TEAM, REGION III
OPERATING COMMITTEE
ADMIN. READ. FILE
CODE 400 - MR. MARTIN
CODE 800 - MR. CHAMBERS
CODE 110 - MR. JOHNSON
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10-13-54

400

DOCKET
SURNAME
Rutledge
Martin
Hedges
Kiilsgaard
Selfridge

NOV 3 - 1954

Mr. L. D. Wilson, President
Mr. Ray E. Summers, Vice President
Garnet Tungsten Mining Company
John Day, Oregon

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Transmitted herewith for your information is a copy of the certification of discovery or development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray E. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952; is the same property referred to in the "Owner's Consent to Lien" executed by Price D. Montrose, E. A. Knowles, George G. Knowles, and Abram A. Knowles on December 10, 1952; and is the same property set forth in the assignment of the aforementioned "Lease and Option to Purchase" to the Sunshine Mining Company by Ray E. Summers and Harold A. Culp on August 25, 1953.

Also enclosed is a copy of our letter of October 28, 1954, to the Sunshine Mining Company.

Sincerely yours,

C. O. Mittendorf

Administrator

FARutledge:foc
10-28-54

Enclosures

cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. III
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson

cc: J. H. Hedges, USBM
R. W. Geehan, USBM
Thor H. Kiilsgaard, USGS

R.L.J.

DOCKET
Surname:
Rutledge
Martin
Chamberlin

Revised 10/28

Mr. L. D. Wilson, President
Mr. Ray E. Summers, Vice President
Garnet Tungsten Mining Company
John Day, Oregon

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Transmitted herewith for your information is a copy of the Certification of Discovery or Development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray A. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952; is the same property referred to in the "Owner's Consent to Lien" executed by Price D. Montrose, E. A. Knowles, George G. Knowles, and Abram A. Knowles on December 10, 1952; and is the same property set forth in the assignment of the aforementioned "Lease and Option to Purchase" to the Sunshine Mining Company by Ray E. Summers and Harold A. Culp on August 25, 1953.

By the terms of the exploration project contract and of the certification, all production from the aforesaid lands from the date of the exploration project contract is subject to the Government's percentage royalty as set forth in the contract until the sum of $4,320.00 is paid or until June 25, 1963, whichever occurs first.

Payments should be made to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward

check direct to the Executive Officer. Royalty payments to the Governmwnt should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in the ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Miller at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

Administrator

Enclosure

cc: DOCKET
CODE 400
OPERATING COMMITTEE
ADMIN. READ. FILE
CODE 800-Mr. Chambers
CODE 110 - Mr. Johnson
FIELD TEAM, REGION III
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10-13-54

Revised 1/56

400

DOCKET
SURNAME:
Rutledge
Martin
Hedges
Kiilsgaard
Selfridge

NOV 3 - 1954

Mr. Abram A. Knowles, Partner
Knowles Bros.
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

Transmitted herewith for your information is a copy of the certification of discovery or development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray E. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952, and is the same property referred to in the "Owner's Consent to Lien" executed December 10, 1952.

Also enclosed is a copy of our letter of October 28, 1954, to the Sunshine Mining Company.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosures

CC: DOCKET
FIELD TEAM, REGION III
CODE 400 - Mr. Martin
CODE 800 - Mr. Chambers
CODE 110 - Mr. Johnson
GEO. G. KNOWLES, ELKO, NEV.
EDW. A. KNOWLES, ELKO, NEV.

cc: OPERATING COMMITTEE
ADMIN. READ. FILE
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10/13/54; rew.10/28/54

R.C.S.

DOCKET
Surname:
Rutledge
Martin
Chandler

Revised 1958

Mr. Abram A. Knowles, Partner
Knowles Bros.
Mountain City, Nevada

Re: Docket No. DMEA 2020-Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-8550

Dear Mr. Montrose:

Transmitted herewith for your information is a copy of the Certification of Discovery or Development issued as a result of the exploration program under the above-referenced contract. The property as set forth in the contract was leased to Ray M. Summers and Harold A. Culp, of John Day, Oregon, by Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose, under a "Lease and Option to Purchase" dated September 1, 1952, and is the same property referred to in the "Owner's Consent to Lien" executed December 10, 1952.

By the terms of the exploration project contract and of the certification, all production from the aforesaid lands from the date of the exploration project contract is subject to the Government's percentage royalty as set forth in the contract until the sum of $4,320.00 is paid or until June 25, 1963, whichever occurs first.

Payments should be made to Mr. H.C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Miller at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

Administrator

Enclosure

cc: GEORGE G. KNOWLES, ELKO, NEV.
EDWARD A. KNOWLES, ELKO, NEV.

DOCKET
FIELD TEAM, REG. III
OPER. COMMITTEE
ADMIN. READING FILE
CODE 400 - MR. MARTIN
CODE 800 - MR. CHAMBERS
CODE 110 - MR. JOHNSON
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

FARutledge/ls
10-13-54

SUNSHINE MINING COMPANY
KELLOGG, IDAHO

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 5 1954

November 1, 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team
Region III
420 Custom House
555 Battery Street
San Francisco, California

Dear Sir:

With reference to the attached letter and certification by Mr. C. C. Mittendorf, Administrator, Defense Minerals Exploration Administration, Washington 25, D.C., Sunshine Mining Company relinquished its interest in the Garnet Tungsten Mine last spring, and mailed notice of termination to Mr. A. C. Johnson, Chief, Mining Division, Region III, U. S. Bureau of Mines, P. O. Box 1515, Reno, Nevada on March 30, 1954.

On April 3, 1954, the final report covering Stage I, the only stage completed, was transmitted to Mr. Johnson in Reno.

Copies of this letter are being sent to Mr. Mittendorf and Mr. Johnson for their information.

Yours very truly,

ROBERT M. MEDY, Jr.
Assistant to the General Manager

MMJr
C
Enclosure

cc: Mr. C. C. Mittendorf
Mr. A. C. Johnson

RECEIVED
NOV 5, 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

COPY

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

Sunshine Mining Company
Box 1080
Kellogg, Idaho

OCT 28, 1954

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

Gentlemen:

Transmitted herewith is a Certification of Discovery or Development issued under the subject contract executed June 25, 1953.

By the terms of the Exploration Project Contract and of the Certification, all production from the property described in the contract after June 25, 1953, the date of the original contract, is subject to the Government's percentage royalty as set forth in the said contract, until such sums which the Government may advance as its participating interest have been repaid or until June 25, 1963, whichever occurs first.

Payments should be made to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Miller at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

O. Meltzer

Administrator

Enclosure

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

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Sunshine Mining Company
Box 1080
Kellogg, Idaho

Assignee-Operator under Exploration Project Contract No. Idm-E556, dated June 25, 1953 (Docket No. DMEA 2820), hereinafter called the "contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

A considerable tonnage of marginal-grade tungsten ore in tactite has been indicated by bulldozer trenching and diamond drilling at the Garnet Tungsten mine. The tungsten, present in the form of scheelite, is distributed along bedding planes, in garnet and epidote seams, and as disseminations in the tactite which occurs at the contact of granite and sedimentary rocks.

THE UNITED STATES OF AMERICA

Dated: Oct 27, 1954 By [signature]
Administrator, Defense Minerals
Exploration Administration

DOCKET
SURNAME
Rutledge
Martin
Hickory
Newcomb
Talbot
Kiilsgaard
Hedges
Selfridge
Johnson

400

OCT 28 1954

Sunshine Mining Company
Box 1000
Kellogg, Idaho

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-2556

Gentlemen:

Transmitted herewith is a Certification of Discovery or Development issued under the subject contract executed June 25, 1953.

By the terms of the Exploration Project Contract and of the Certification, all production from the property described in the contract after June 25, 1953, the date of the original contract, is subject to the Government's percentage royalty as set forth in the said contract, until such sums which the Government may advance as its participating interest have been repaid or until June 25, 1963, whichever occurs first.

Payments should be made to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 420 Custom House, 555 Battery Street, San Francisco 11, California. Checks should be payable to the Defense Minerals Exploration Administration. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer. Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the tungsten products sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Miller at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

FARutledge:foc
10-26-54

cc: R. W. Geehan, USBM
Thor H. Kiilsgaard, USGS

cc: FT. REG. 3
Code 800 - Mr. Chambers
Code 110 - Mr. Johnson
J. H. Hedges, USBM

Docket
Code 400
Oper. Comm.
Adm. Reading File

GRANT SAWYER
Attorney at Law
Elko County Court House
ELKO, NEVADA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1954

October 25, 1954

AIR MAIL

U. S. Department of Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Attention: C. O. Mithendorf, Administrator

Re: Docket No. DMEa-2820 (Tungsten)
Sunshine Mining Company,
Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Mithendorf:

Enclosed please find seven executed form NF-203, Owner's Consent to Lien, and six executed Assignment of Contract with regard to the above docket.

Prompt consideration of these matters will be most appreciated. If there is anything further that needs to be done please feel free to contact me on behalf of the parties involved.

Sincerely,

Grant Sawyer

GRANT SAWYER

e

encs. 13

Rubin

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

October 18, 1954

Memorandum

To: The Administrator, DMEA

Attention: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2820, Garnet Tungsten Mining Company, Sunshine Mining Company, Assignee, Contract Idm-E556 (Tungsten)

We have reviewed the proposed certification papers transmitted to us by Mr. Martin with reference slip dated October 14.

We understand that these several papers have been prepared in anticipation that the proposed assignment of the subject contract by Sunshine to Knowles, the papers for which were prepared in this office, probably will be unacceptable to Sunshine, and that these certification papers will then be ready for transmittal. However, if the Assignment is executed and submitted to the Administrator for the Government's Consent, the figure $4,320 in the certification papers, representing the total amount of the Government's contribution to date, must be deleted from all the certification papers.

The certification seems vague, even for a February 1952 form contract.

HCRubin/emd

J. L. Hofflund

Copy to: DMEA Docket
Solicitor's Docket
W.S.Martin (2)
J.L.Hofflund
H.C.Rubin
chron.

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachment

R.C.G.

DOCKET
Surname:
Rutledge
Martin

October 11, 1954

MEMORANDUM

To: Administrator, DMEA

From: Chief, Iron and Ferro-Alloys Division, DMEA

Subject: Review of contract prior to certification of discovery
Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet Tungsten mine
Elko County, Nevada
Contract No. Idm-E556

Operator: Sunshine Mining Company
Box 1080
Kellogg, Idaho

Assignees for: Garnet Tungsten Mining Company, a Nevada limited partnership composed of L. D. Wilson and R. E. Summers, of John Day, Oregon, and H. A. Culp, of Mountain City, Nevada.

Operator's property rights:

Lessee of Garnet Nos. 1 and 2 unpatented claims recorded, respectively, in Book 28, page 218, and Book 29, page 308, in the office of the County Recorder of Elko County, Nevada.

Contract: Dated June 25, 1953

(a) Work authorized:

Stage I		
40 feet of drifting @ $40.00/ft.	$1,600.00	
520 feet diamond drilling @ $8.00/ft.	4,160.00	$ 5,760.00
Stage II		
400 feet drifting @ $40.00/ft.	$16,000.00	
Total Estimated Cost of Project		$21,760.00
Government's Participation @ 75%		$16,320.00

R.C.S.

(b) By Agreement dated September 1, 1953, the subject contract and the lease covering the land referred to in Article 2 of said contract were assigned to the Sunshine Mining Company.

(c) Amendment No. 1 authorized the following work in lieu of that originally set up under Stage I:

64 hours of bulldozer trenching @ $12.50/hr.	$ 800.00
620 feet of diamond drilling @ $8.00/ft.	4,960.00
	$5,760.00

(d) Work completed:

The Sunshine Mining Company completed 675 feet of diamond drilling and 147 hours of bulldozing. Total costs as billed by the Operator follow:

Drilling	$4,765.90
Bulldozing	1,176.00
Labor	550.00
Supervision	3,177.28
	$9,669.18

Because the contract was on an agreed unit cost basis, all cost over the $5,760.00 authorized for Stage I was disallowed.

Comments:

The exploratory work under Stage I of the contract was efficiently carried out by the Operator-Assignee. However, upon completion of Stage I, the Sunshine Mining Company decided that the deposit had been explored to its satisfaction, the results obtained being reasonably consistent, but too low in grade to make the project attractive under present conditions. 255,000 tons of ore containing 0.31 percent WO_3 were indicated above the 7400-foot elevation, or 400,000 tons containing 0.315 percent WO_3 above the 7300-foot elevation.

The Operator felt that the results obtained had reasonably determined the grade of ore that could be expected to be mined from the ore body, and that the additional exploration outlined under Stage II would not materially change these data. The Operator, therefore, relinquished all interests in the property.

The Assignors of the contract, Garnet Tungsten Mining Company, in turn released the property back to the owners, Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose.

The Field Team, however, recommended that the additional exploration is justified by the amount of scheelite-mineralization exposed in the underground workings and concluded that production is economically feasible by selectively mining the higher grades of ore. Indicated and inferred ore in the area of the present adit amounts to approximately 50,000 tons averaging 0.50 percent WO_3.

Three of the owners of the land covered by the subject contract on July 26, 1954, requested that they be allowed to complete the work authorized under Stage II. They were advised that the contract was still in force and if the Sunshine Mining Company would assign the subject contract to them, such an assignment would be considered.

The Sunshine Mining Company assigned the referenced contract to the Knowles Brothers, but the assignment contained the following qualification in paragraph 6: " . . . with the express understanding that Sunshine shall have no obligations or liabilities arising out of this assignment."

An assignment containing such a clause was considered by Legal as not acceptable to the Government, and the usual assignment form was prepared for execution by the Operator-Assignee. It is doubted that the proposed agreement will be acceptable to the Sunshine Mining Company, but the subject contract should be certified not later than November 1, 1954, and immediate certification is therefore recommended.

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

cc: DOCKET
ADM. READ. FILE
OPER. COMM
CODE 400

FARutledge/ls
10-11-54

140

Rubin
Hofflund
Rutledge
Martin
K. Johnson

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

OCT 8 1954

Grant Sawyer, Esq.
Elko County Court House
Elko, Nevada

Re: Docket No. DMEA-2820 (Tungsten)
Sunshine Mining Company,
Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Sawyer:

We have reviewed the proposed assignment by Sunshine Mining Company to Abram A., George G., and Edward A. Knowles of the subject contract, and the Consent to Assignment executed by Price D. Montrose, one of the landowners, submitted for Government approval with your letter dated September 7 to the Administrator.

As the assignment is not in a form acceptable to the Government, we have prepared for your use a combination form--Assignment of Contract, Assignee's Acceptance, and Government's Consent.

We also require an Owner's Consent to Lien executed by Price D. Montrose on the enclosed forms.

We shall give prompt reconsideration to the proposed assignment upon return of the executed forms.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures 13
HCRubin/emd 10/5/54
Copy to: DMEA Docket
Solicitor's Docket
Adm. R. File
Operating Committee
Field Team, Reg. III (2)
R. W. Geehan, USBM
T. H. Kiilsgaard, USGS
W. S. Martin (2)
J. L. Hofflund H. C. Rubin chron. pending

R.C.S.

Porter

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

October 5, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Assignment of Contract, Docket No. DMEA-2820, Contract No. Idm-E556, Sunshine Mining Company (Assignee) - Tungsten

Pursuant to a memorandum dated September 10 from Mr. Martin, we have reviewed a proposed assignment of the subject contract, submitted for the consent of the Government, by Sunshine Mining Company to Abram A., George G., and Edward A. Knowles, three of the four landowners.

The contract, dated June 25, 1953, was entered into with Garnet Tungsten Mining Company, a partnership, and lessee of the land, and the Owner's Consent to Lien was furnished. On September 1, 1953, the Operator assigned the contract to Sunshine, and on November 4, 1953, the Government consented to the assignment without releasing the Operator under the contract.

Sunshine abandoned the project after completing the first of two stages. The assignment executed by Sunshine and accepted by the three Knowles provides for the transfer of "Stage II" of the project, and consents to all future amendments of the contract, but with "the express understanding that Sunshine shall have no obligations or liabilities arising out of this assignment." In this regard Mr. Martin's memorandum states that:

> "While it is the usual practice in the case of an assignment of contract not to release the Assignor of his obligations for repayment under the contract, it should be understood in the present case that the Sunshine Mining Company abandoned the project upon completion of Stage I and that the property has been released back to the owners, consisting of Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose."

We are not clear as to the intent of the assignment submitted. Apparently, the parties have attempted to divide responsibility under the contract each for one stage of the work, with Sunshine released from liability under Stage II. It has been our practice for the Government not to release Operators or other assignors when consenting to assignments of contracts. The land has reverted to the landowners, three of them are the latest proposed assignees, and the Government's lien on the land in the event of certification (or production prior thereto) is as good as it always has been. However, the situation here is not to be confused with the question of an operator's liability for royalty after abandonment. Here the work has not been completed and Sunshine is in default under the contract for failure to complete the work. In the absence of a determination to release Sunshine from the obligation to complete the work (which determination is an administrative one) the assignment submitted for our consideration is not acceptable.

We have prepared a combination form of assignment which does not release Sunshine, and a letter of transmittal for your signature, if you are in agreement with them.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin/emd

Copy to: DMEA Docket
Solicitor's Docket
W. S. Martin (2)
J. L. Hofflund
H. C. Rubin
chron.

DOCKET
SURNAME:
Rutledge
Martin

September 10, 1954

MEMORANDUM

To: Acting Assistant Solicitor, Defense Minerals

From: Iron and Ferro-Alloys Division, DMEA

Subject: Consideration of Assignment of Contract
Docket No. DMEA 2820 - Tungsten
Sunshine Mining Company (Assignee)
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-1556

Transmitted herewith is an assignment of the subject contract from the Sunshine Mining Company to the Knowles Brothers, Elko County, Nevada.

Please note the qualification in paragraph 6 of the assignment as follows: " * * * with the express understanding that Sunshine shall have no obligations or liabilities arising out of this assignment."

While it is the usual practice in the case of an assignment of contract not to release the Assignor of his obligations for repayment under the contract, it should be understood in the present case that the Sunshine Mining Company abandoned the project upon completion of Stage I and that the property has been released back to the owners, consisting of Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price D. Montrose.

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

Attachment

cc: DOCKET
CODE 400
ADM. READING FILE

FARutledge/ls

Docket

Phone 2

GRANT SAWYER
Attorney at Law
Elko County Court House
ELKO, NEVADA

September 7, 1954

SEP 9 1954

WBM

U. S. Dept. of Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet No. 1 and No. 2 claims
Elko County, Nevada
Contract No. Idm-E556

Attention: C. O. Mithendorf

Dear Mr. Mithendorf:

Enclosed please find six executed Assignments of the Exploration Project Contract from Sunshine Mining Company to Abram A. Knowles, George G. Knowles, and Edward A. Knowles, together with an original Consent to such Assignment by Price D. Montrose.

If there is anything further that is needed to be done in order to complete the transfer would you please advise.

Sincerely,

Grant Sawyer

GRANT SAWYER

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encs. 7

To Whom It May Concern:

I hereby give my consent as Co-owner of Garnet #1 and #2 claims to lien on property required in connection with Knowles Bros. application for loan to drive exploration tunnel.

Price D Montrose

STATE OF NEVADA)
)
COUNTY OF ELKO)

On this 2nd day of Sept, 1954, personally appeared before me, a Notary Public in and for said County and State, Abram A. Knowles, George G. Knowles and Edward A. Knowles, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Thank Sawyer
Notary Public in and for the said County and State

My Commission expires July 22, 1956.

ASSIGNMENT OF CONTRACT

THIS ASSIGNMENT made this 20th day of August 1954 by Sunshine Mining Company a Washington Corporation hereinafter called Sunshine in favor of Abram A., George G. and Edward A Knowles all of Elko County, Nevada and hereinafter called Knowles

WITNESSETH:

The Garnet Tungsten Mining Company, a partnership, entered into an Exploration Project Contract dated June 25, 1953, Contract No. Idm-E556, Docket No. DMEA-2820, with the United States of America acting through the Department of Interior, Defense Minerals Administration.

On September 1, 1953 the Garnet Tungsten Mining Company assigned this DMEA contract referred to above to Sunshine which assignment was accepted by Sunshine on September 1, 1953 and approved for the United States of America on November 4, 1953 by C. O. Mithendorf, Administrator, Defense Minerals Exploration Administration.

On March 30, 1954 Sunshine advised A. C. Johnson, Chief of the Mining Division of Region III that Sunshine had completed Stage I of the above contract and was relinquishing its interest in the property so would not proceed with Stage II of the aforementioned contract.

Sunshine has now been advised that Knowles wishes to proceed with Stage II of the aforementioned contract.

NOW THEREFORE, Sunshine in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration received from Knowles, does hereby assign, transfer and convey to Knowles all of its right, title and interest in and to Stage II of the aforesaid Exploration Project Contract and hereby consents to all future ammendments to the contract with the express understanding that Sunshine shall have no obligations or liabilities arising out of this assignment.

IN WITNESS WHEREOF Sunshine has executed these presents the day and year first above mentioned.

SUNSHINE MINING COMPANY

R D Leisk

R. D. Leisk, Vice President

THE ASSIGNEE, Knowles, this 24 day of Sept 1954, hereby accepts the above assignment and assumes and agrees to be bound by the terms, provisions and conditions of said Exploration Project Contract that were first assumed by the Garnet Tungsten Mining Company and later by Sunshine.

Abram A. Knowles

Abram A. Knowles

George G. Knowles

George G. Knowles

Edward A Knowles

Edward A. Knowles

Mountain City, Nevada
August 28, 1954
A. A. Knowles

400

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 31 1954

W. S. Martin, Chief
Irin and Ferro-Alloys Div.

AUG 31 1954

WSM

Re: Docket No. DMEA 2820- Tungsten
Sunshine Mining Co, Assignee
Garnet # 1 and # 2 claims
Elko County, Nev.
Contract No. Idm-E556

Dear Sir:

Received your letter of August 25 today and I want to thank you for your interest in rushing this contract to the finish.

The reason for the delay is that Church Holmes, the exploration engineer for Sunshine Co., who had all this information was out in the field and did not get in for 10 days . He immediatly fixed up the necessary papers and mailed them to us. We took them to Elko yesterday to be signed and Notorized only to fine my Brother gone to Los Angeles to his Father-in Laws funeral. He expects to be back to Elko Mon. Or Tue (30 or 31) and we will get it off as soon as he returns.

The delay is bad, we are very anxious to get at this job.

Sincerely

A. A. Knowles

400

DOCKET
Surname:
Rutledge
Martin
Mitchell

AUG 2 5 1954

Mr. A. A. Knowles, Partner
Knowles Bros.
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

Reference is made to the above-docketed contract for exploration, your application to complete the work authorized under the subject contract, and our letter of August 4, 1954.

In the interest of expediting the processing of this case, it would be appreciated if you would keep us informed regarding your progress in negotiating with the Sunshine Mining Company for assignment of Contract No. Idm-E556.

Sincerely yours,

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

cc: Docket
Field Team, Region III
Code 400
Adm. Reading File
R. W. Geehan, USBM
E. L. Newcomb, USGS

FARutledge/ls
8-25-54

400
Rutledge
Rutledge
Hoffman

INTERIOR DEPT.
JUL 30 1954
SOLICITOR

Aug 4 - 1954

Mr. A. A. Knowles, Partner
Knowles Bros.
Mountain City, Nevada

Re: Docket No. DMEA 2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 claims
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Knowles:

This will acknowledge your letter of July 26, 1954, submitting your application for completion of the exploration authorized under the subject contract.

The referenced contract with the Sunshine Mining Company is still in effect and will remain in force until the contract is terminated. Therefore, it is suggested, if you wish to complete the authorized program, that you contact the Sunshine Mining Company and arrange to have the subject contract assigned to the Knowles Bros. Such an assignment is subject to the approval of the Government.

FROM SOLICITOR
8 - 1954
FOR SIGNATURE

In case the Sunshine Mining Company agrees to assign the subject contract to you, we will prepare the necessary papers here.

If Price D. Montrose is not one of the partners in Knowles Bros., we will need copies of the document (lease, option to purchase, or assignment) transferring control of his interest in the property to Knowles Bros. Owner's Consent to Lien will also be needed in case Mr. Montrose retains his interest in the property.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FARutledge:foc 7-30-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 3
R. W. Geehan, USBM
E. L. Newcomb, USGS - Rm.5227

R.C.H.

Mountain City, Nevada
July 26, 1954

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Washington 25, D.C.

Dear Mr. Mittendorf:

My property has been under lease and option to the Garnet Tungsten Mining Co., who later subleased it to the Sunshine Mining Co. These companies subsequently obtained a DMEA loan on my property. The exploration project was set up under two stages:

Stage 1 called for drifting and diamond drilling; stage 2 called for driving 400-foot adit to determine and explore the possibilities of tungsten mineralization in the event that stage 1 was favorable.

It is my understanding from the above mentioned companies that stage 1 was successful, however, the Sunshine Mining Co. terminated their lease with the Garnet Tungsten Mining Co. and the Garnet Tungsten Mining Co. in turn released the property back to me.

I do not believe that the property has been tested thoroughly for a turn down and I am now submitting my application to complete the work that was originally set up by the government. This work would consist of 400 feet of drifting to test the scheelite mineralization at depth.

Trusting that this application will be given your immediate attention as the summers in the mountain areas is very limited, and if we are to complete the work outlined under the contract, we will need action.

Very truly yours,

KNOWLES BROS.

By A. A. Knowles
A. A. Knowles, Partner

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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. .....
Metal or Mineral .....
Date Received .....
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: Knowles Bros.
Mountain City, Nevada

(*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 3-B- Garnet Tungsten Claims
Knowles Bros. are 1/2 owners.
Photostatic copy of the cancellation of the lease with Garnet Tungsten Co.
is attached

(*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.

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

(*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 5 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 [x] 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 July 26, 1954, 195__

Knowles Bros.
(Applicant)

By A. R. Knowles

Partner

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

1-D George G. Knowles)
Edward A. Knowles) Elko, Nevada

Abram A. Knowles Mountain City, Nevada

Price Montrose Mountain City, Nevada

3-F See original application :

DMEA-2820 - Contract No. Idm-E566 for data on mining claims

4-A to E See original application.

5-B The original contract called for two stages of exploration. The first stage consisted of drifting and diamond drilling, which has been completed.

The applicant wishes to complete the second stage of the contract, which consists of 400 feet of drifting at $40.00 per foot.

5-D See original contract.

6 The estimated cost of $40.00 per foot is considered fair. It is our understanding that a breakdown of costs was submitted by the examining engineers.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 28 1954

[illegible]

[illegible]

[illegible]

[illegible] of [illegible] [illegible] [illegible] [illegible] property.

This letter will serve to formally cancel our [illegible] and [illegible] [illegible] between the Garnet Dingleton Mining Co., a partnership consisting of Ray E. Summers and Harold [illegible] of [illegible], Oregon, and the Knowles brothers, [illegible] of Mountain City, Nevada.

The notice of cancellation will also apply to the Garnet Dingleton Mining Co., a limited partnership of Ray E. Summers, Harold A. Jelly, and L. D. Wilson, all of [illegible] Bay, Oregon.

The notice of cancellation will apply to the Garnet Dingleton Mining Co., a corporation of Nevada, consisting of Ray E. Summers, Vice-President, Harold A. Jelly, Secretary-Treasurer, and L. D. Wilson, President.

This is to serve notice of our relinquishing all our rights, title, and interests in what is known as the Garnet Dingleton Mining property of Mountain City, Nevada.

Enclosed is a copy of cancellation of Sunshine Mining Co., participating in the enterprise.

Very truly yours,

[illegible] Mining Co.

By L. D. Wilson

L. D. WILSON, PRESIDENT

Ray E. Summers

RAY E. SUMMERS, Vice-President

[illegible]

HAROLD A. JELLY, Sec.-Treasurer

Talbert
Chambers

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

JUL 21 1954

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

AIR MAIL

Re: Idm-E556, DMEA-2820
Sunshine Mining Company

Dear Mr. Mavor:

Returned herewith for correction are the copies of the Report of Review covering the above-cited Exploration Project Contract.

It is noted that, although the Report of Review indicates the inclusion of Amendment No. 1, that the costs which you have allowed per Schedule of Exceptions attached thereto are based on the agreed unit cost under the original contract, rather than the Amendment No. 1. Furthermore, the final Field Team Report dated May 7, 1954, prepared by Glenn G. Gentry and Roscoe M. Smith states "The Sunshine Mining Company have completed Stage I of the amended exploration contract consisting of 620 feet of diamond drilling and 64 hours of bulldozer work."

It therefore appears that your Schedule of Exceptions is in error insofar as the basis of allowable costs is concerned.

Sincerely yours,

(Signed) J. L. Chambers
Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb
July 20, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.G.S.

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

JUL 12 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

July 8, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 Claims
Elko County, Nevada
Contract No. Idm-E556

Reference is made to your letter dated June 22, 1954, requesting to be advised of the present status of the subject contract.

The matter was taken up with A. C. Johnson and a copy of his reply to me, dated June 30, is attached.

This office has had no direct word from the Sunshine Mining Company that they intended to give up their lease on the Garnet Tungsten Mine. I have, however, a letter dated May 25, 1954, from A. A. Knowles - one of the owners of the property - informing me that he was attempting to get the Garnet Tungsten Mine back from the Sunshine Mining Company and then wished to carry on the remaining exploration under the contract.

In a letter dated June 16, I called Mr. Knowles' attention to the provision of the contract which allowed, under Stage II, the driving of an adit 400 feet long at a cost of $16,000.00, and told him I understood an adit that long was not long enough to reach the ore. I told him, also, that it was Sunshine's opinion that rather than drive the adit, some $18,000.00 worth of diamond drilling should be done. In other words, I was trying to find out from Mr. Knowles just what exploration he had in mind should the property revert to the owners and they were to continue where Sunshine left off.

To date I have had no reply to my June 16 letter, which may mean that Sunshine has not relinquished its lease as yet.

There is no doubt that a certification should be made. I hesitate at this time, however, to recommend termination of the contract as I have not yet received a reply to my letter to Mr. Knowles.

In view of the statement in the Sunshine Mining Company's final report - "We therefore do not feel that the Stage II of the DMEA contract will serve any useful purpose and are relinquishing our interest in the property." - we might reasonably assume that the property eventually will revert to the owners.

It seems, therefore, that an audit would be in order at this time, and I am so informing Mr. Mavor.

If you have any thoughts on the matter that I should follow, I would appreciate having them.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment to 400

Copy to: Roscoe Smith, USGS
George Mavor

June 30, 1954.

Memorandum

To: Mr. H. C. Miller, Executive Officer, DMEA Field Team
Region III

From: Chief, Mining Division, Region III

Subject: Docket No. DMEA-2820 - Tungsten
Garnet Tungsten Mine
Elko County, Nevada
Contract No. Idm-E556

In reference to your memorandum of June 29: The Sunshine Mining Company as well as the original lessees - Garnet Tungsten Mining Company, a Nevada limited partnership composed of L. D. Wilson and R. E. Summers, of John Day, Oregon, and H. A. Culp of Mountain City, Nevada, have relinquished their lease on the two unpatented lode mining claims in the Alder Mining District known as Garnet No. 1 and Garnet No. 2, in Elko County, Nevada. The property, under the circumstances, has reverted back to the original owners - Price D. Montrose, E. A. Knowles, George G. Knowles and Abram A. Knowles.

The engineer and geologist have recommended, from the work that was done under Stage I of the DMEA project, that a Certification of Discovery should be made. It is my understanding that the original owners are planning on submitting an MF-103 Form, Application for Exploration loan, to complete Stage II of the original contract. However, I do not have anything in my files that will verify this.

It is believed that an audit should be made on the work that has already been completed under the peoject and if further work is done, it should be under a new contract.

I do not have any correspondence in my files except the final report of the Sunshine Mining Company in which they state under Conclusions:

"It is felt that the results obtained from our study and the

completion of the work outlined under Stage I of the DMEA program have reasonably well determined the grade of the ore that could be expected to be mined from this orebody. Further we do not feel that the additional information that would be obtained from doing the work outlined under Stage II would materially change this picture.

"We therefore do not feel that the Stage II of the DMEA contract will serve any useful purpose and are relinquishing our interest in the property."

A. C. Johnson

(1)

400

Docket
Surname
Rutledge
Hamilton
Selfridge
Thomson
Whitehouse

JUN 22 1954

Mr. H.C. Miller, Executive Officer
DMEA Field Team, Region III
420 Customhouse Building
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA 2520 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 claims
Elko County, Nevada
Contract No. IdM-5585

Dear Mr. Miller:

Reference is made to the subject contract under which the Operator has discontinued exploration after completion of Stage I.

It was noted from the Field Team final report and the final report by the Operator that sufficient data have resulted from prior exploration and the exploration completed under the referenced contract to warrant certification of a discovery, and that the Field Team recommends issuance of a "Certification."

The Field Team "Interim Report" dated May 20, 1954, stated that the Owners intended to request a transfer of the referenced contract to them for completion of Stage II of the approved exploration program. In view of the certification recommendations, it would be appreciated if the Field Team would advise us of the present status of this contract. If there is little probability of the Owners completing the project and a certification is to be issued, the subject contract should be terminated by mutual consent and a final audit made.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

J. H. Hedges

Member, Bureau of Mines (JHB)

s/E. D. McKnight

Member, Geological Survey (JHB)

FARUTLEDGE:fec 6-21-54

cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 3
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.G.

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

May 13, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2820 - Tungsten
Garnet Tungsten Mine
Elko County, Nevada
Contract Idm-E556

Attached are four copies of the final report on the subject property entitled "DMEA-2820, Garnet Tungsten Mine, Elko County, Nevada," by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and Roscoe M. Smith, Geologist, U. S. Geological Survey, dated May 7, 1954.

The operator completed Stage I under the DMEA contract and did not believe that the ore indicated was of commercial value at the present time and does not plan on carrying out Stage II of the project. The work that was done under Stage I of the project indicated approximately 255,000 tons of scheelite ore with an average grade of 0.31% WO_3.

The engineer and geologist are in agreement that a Certificate of Discovery should be made and the Government be entitled to royalties from production from the portion of the property that was investigated under the DMEA loan. I concur with their recommendations.

Four copies of the operator's final report also are attached.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno
Finance Officer, Region III
George Mavor

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

FINAL REPORT

Idm-E556

DMEA-2820, Garnet Tungsten Mine

Elko County, Nevada

Glenn G. Gentry, Mining Engineer
U. S. Bureau of Mines

Roscoe M. Smith, Geologist
U. S. Geological Survey

May 7, 1954

Reviewed by
DMEA OPERATING COMMITTEE
5-21-54
(date)

FINAL REPORT

Docket No.: DMEA-2820 (Tungsten)

Name and address of operator: Garnet Tungsten Mining Co., Mountain City, Nevada

Name and location of property: Garnet Tungsten Mine
Garnet No. 1 and Garnet No. 2
Elko County, Nevada

Contract No.: Idm-E556

SUMMARY

The Garnet Tungsten Mining Co.'s property, consisting of 25 lode mining claims, are situated in the Alder mining district of Elko County, Nev. The survey description of the claims is recorded as secs. 16 and 17, T. 45 N., R. 56 E. The mining claims are held by right of location by Messrs. Abram A. Knowles, George G. Knowles and Price Montrose, all of Elko County, Nev.

Exploration by the owners consisted of drilling 16 diamond drill holes of varying depth which fairly well outlined the tactite zone. In all, a total of 2,097 feet of diamond drilling was completed.

Under date of Sept. 1, 1952, the owners granted a lease and option to purchase, to Messrs. L. D. Wilson, R. E. Summers and Harold A. Culp, all of John Day, Ore.

The lessees, under the name of the Garnet Tungsten Mining Co., then proceeded to further prospect the property by means of several bulldozer cuts and by driving an adit approximately 320 feet in length in

order to explore one of the mineralized tactite exposures at greater depth.

The property was examined by an engineer of the Bureau of Mines and a geologist of the Geological Survey on October 30 and 31, 1952 and a report submitted on January 27, 1953. In this report the field team recommended a 4-stage exploration program at an estimated total cost of approximately $59,000.

Again, during the period April 29 to May 1, 1953, the property was examined by an engineer of the Bureau of Mines and a revised program of exploration recommended. This program included diamond drilling and an adit, at a total estimated cost of $23,520.

The Garnet Tungsten Mining Company applied to the Defense Minerals Exploration Administration for financial assistance and on June 25, 1953 an exploration contract in the amount of $21,760 was approved by the DMEA Administrator for further work on the Garnet No. 1 and Garnet No. 2 mining claims.

On August 25, 1953, the lessee's with the approval of the owners, granted a lease and option on the property to the Sunshine Mining Co., Kellogg, Idaho. This company then requested the DMEA exploration contract be assigned to them. Said assignment was made to the Sunshine Mining Company on November 4, 1953.

After acquiring a lease on the property, the Sunshine Mining Company completed 770 feet of diamond drilling and a moderate amount of bulldozer trenching. Operations were suspended on December 7, 1953 because of ad-

verse weather and road conditions.

On March 29, 1954, Mr. W. Church Holmes, manager of exploration for the Sunshine Mining Co., visited the office of the Bureau of Mines at Reno and informed Mr. A. C. Johnson, Chief, Mining Division, Region III, together with R. M. Smith, Geologist, Geological Survey, that the Sunshine Mining Company considered the grade of the scheelite ore, encountered in the diamond drill holes, surface trenching and the present adit, to be non-profitable and further that the Sunshine Mining Company were relinquishing their interest in the property.

CONCLUSIONS

The Sunshine Mining Company have completed Stage I of the amended exploration contract consisting of 620 feet of diamond drilling and 64 hours of bulldozer work. As a result of some low assays in the drill cores, the operators have decided that exploration under Stage II, consisting of a 400-foot adit, would serve no useful purpose.

Considerable scheelite mineralization has been exposed in the present adit and in two out of three diamond drill holes. The grade of ore will vary to a considerable extent, however, the field team believe that exploration under Stage II is justified in order to fully determine the merit of the property.

RECOMMENDATIONS

Additional exploration and development is justified either with Government or private financial assistance. This is recommended by the

amount of scheelite mineralization exposed in the present adit. The indicated and inferred ore in this present adit amounts to approximately 50,000 tons, which according to the samples taken by the Bureau of Mines should average 0.50% WO_3. An additional 180,000 tons is inferred below the adit level and Diamond Drill Hole No. A indicates 27.5 feet of tactite averaging 0.25% WO_3. Diamond drill hole D, drilled underground from the adit indicates 59.7 feet of ore averaging 0.30% WO_3.

The field team consider that the Defense Minerals Exploration Administration should certify that the project has been successful in exposing approximately 255,000 tons of scheelite ore which the operators infer to average 0.31% WO_3, and that the Government is entitled to royalties from any future production.

The field team concludes that production is economically feasible by selectively mining the higher grades of ore presently exposed underground and on the surface. Considerable ore could be mined cheaply by means of a power shovel from prominent surface exposures.

DESCRIPTION OF WORK COMPLETED

Exhibit "A" of the contract approved exploration in two stages:

Stage I:	
40 feet of drifting and 520 feet of diamond drilling	$5,760.00
Stage II:	
400 feet of adit	16,000.00
Total	$21,760.00

Amendment No. 1, dated November 4, 1953, deleted everything and

substituted:

Trench by bulldozer, 64 hours	$ 800.00
Diamond drill, 620 feet	4,960.00
Total	$5,760.00

Diamond drilling completed:

Hole	Location	Date started	Date completed	Depth/feet	Bearing	Angle
A	Surface	10/13/53	11/17/53	281	N. 45° E.	-56°
B	"	11/30/53	12/7/53	149	N. 45° E.	-45°
D	Underground	11/23/53	11/27/53	103	NE	Hort.
				533		

Diamond drill holes abandoned:

A	142 feet	
A_2	95 feet	
	237 feet	237 feet
	Total diamond drilling	770 feet

Reported by operator for reimbursement:

620 feet of diamond drilling
64 hours of bulldozing

GEOLOGY AND ORE DEPOSITS

The exploratory work in Phase 1 closely determined the northwestern limits of the tactite body and indicated the location of the highest grade part of the No. 1 orebody.

The tactite body strikes northwest and dips 55° SW. It is in contact with granite on both the northwest and southeast ends, and with shale on the southwest (hanging wall) side. It is 460 feet long, 120 feet wide, and extends down the dip at least 450 feet to the altitude where it was cut by diamond drill hole 9--7300 feet. The highest grade part of the tactite--the part which

may be commercial at $65 per unit--is along the hanging wall side; it ranges from6 to 46 feet in width and may average 23 feet.

It shows continuity along the strike in the Upper adit for 200 feet--the continuity in the 200 feet at the northwest end has not been determined, but drill holes 6 and A3 indicate a mineralized zone from 24 to 35 feet wide.

The following table summarizes all information available on diamond drill hole samples:

D.D. Hole	Intercept, feet	Percent WO_3 Weighted av.
No. 1 Orebody:		
1	14	0.34
2	22	0.45
3	16	0.12
4	20	0.42
6	35	mineralized
7	24	mineralized
9	40	0.25
A3	24	0.29
No. 3 Orebody:		
11	21	0.29
12	13	trace
13	6	0.28
No. 2 Orebody:		
16	25	0.12

These weighted averages do not tell the entire story. For example, the ore revealed in the Upper adit occurs in layers parallel with the bedding and assays suggest that by selective mining a grade of 1 percent or more could be maintained for widths as high as 13 feet (see Geologic Map of the Upper Adit).

ORE RESERVES

The operator has analyzed the results of Phase 1 of the exploration program and has estimated reserves in No. 1 orebody of 400,000 tons containing an average of 0.315 percent WO_3 above the 7300 altitude, or 225,000 tons of ore averaging 0.31 percent WO_3 above the 7400-foot altitude. The block extends 460 feet along the strike, 450 feet down the dip, and averages about 23 feet wide; it is located along the hanging wall side of the tactite body, which has a total width of 120 feet. The outcrop ranges in altitude from 7510 to 7700 feet. The estimate was made by calculating weighted average of samples taken from the surface, from the Upper adit, and from diamond drill hole cores. The operator points out that the grade of the ore reserve blocks ranges from 0.26 percent to 0.36 percent WO_3.

This estimate of ore reserves appears to be a reliable analysis of the data that is presently available, and the method used is a reflection of the operator's hope that a large enough ore body to support open pit mining would result from the exploratory work. Although a smaller reserve having a correspondingly higher grade is indicated by the samples from the Upper adit, Stage I of the program did not yield sufficient data to permit a reserve of high grade ore to be made. It should be pointed out that the results of sampling to date indicate a marked difference between samples taken on the surface, in drill holes, and in underground workings.

These are illustrated in the following table:

Sample location	Sample width	Percent WO_3 weighted av.
Surface	14	0.30
Underground	32	0.69
Diamond drill holes	23	0.31

It is considered unlikely that the Upper adit was driven in the highest grade portion of the orebody, although the reasons for the underground samples being higher in grade is not known. It may be owing in part to the friable nature of scheelite which might have been mechanically weathered from the surface outcrops and mechanically eroded from drill cores by the process of drilling and core splitting. Scheelite lost from the samples in these processes would not be recovered in the assays. It may also be that underground samples are "selected", but this is not apparent from lamping.

The examining engineer and geologist consider that the results of diamond drilling in Stage I are sufficient to justify work proposed in Stage II of the program. Although the operator has relinquished his interest in the property, they recommend that, in the event the original applicant or another assignee should so desire, Stage II of the program be approved.

The site of the proposed adit in Stage II was selected by the Sunshine Mining Company and is shown on the enclosed figure 2. A portal for the adit was completed before they abandoned the project. The proposed adit would be driven S. 55° E. about 100 feet, and then turned along the strike of the ore body and driven S. 35° E. for 300 feet. The site and direction

of the proposed adit is considered well chosen to explore the ore body at an altitude of 7450 feet, or about midway between the Upper adit and the point penetrated by drill hole 9. Exploration to determine the extent and continuity of the scheelite bearing tactite at this altitude appears to be justified because this determination will reasonably delineate the size and grade of the ore body.

SAMPLING

Diamond Drill Hole	Location	Sample No.	Depth/feet	%, WO_3
A	Surface	BM-1013	186 - 191	0.35
		1014	191 - 194	0.37
		1015	194 - 197	0.01
		1016	197 - 213	0.33
		1017	211.3 - 212.8	*0.01
		1018	212.8 - 213.5	0.44
		1019	213.5 - 216	0.01
		1020	216 - 218	*0.01
		1021	218 - 219.2	*0.01
D	From adit	1006	10 - 12	0.29
		1007	13 - 16.3	0.13
		1008	19.7 - 23.2	0.28
		1009	38.5 - 42.2	0.17
		1010	52.1 - 55	0.62
		1011	60.9 - 62.7	0.22
		1012	68.3 - 69.7	0.41
		1022	79.5 - 81	*0.01

Diamond Drill Hole B - surface: Very little core was recovered from this drill hole and during the inspection on Dec. 2 and 3, 1953, no scheelite mineralization was observed in the sludge available for lamping in the first 70 feet of depth. The operator reports no scheelite in the additional 79

feet drilled.

Sample No.	Width, Feet	%, WO_3	Adit & Surface, location
BM-424	16	0.45	Chip sample of tactite exposure 32 feet in width.
425	10	0.37	East bank of bulldozer cut 75 feet north of BM-424.
426	16	0.19	Southwest bank of dozer cut on west slope of hill.
427	10.6	*0.01	North end of east bank of dozer cut, wide exposure of tactite.
428	7	0.13	East bank of dozer cut, near center line of proposed adit.
429	7.8	0.42	Tactite exposure dozer cut, 75 feet east of BM-428.
430	15	0.21	Surface exposure, bold outcrop of tactite and quartz, N. 20° W., 100 feet from BM-429.
431	10	0.05	At south end of BM-428.
432	14	0.53	Surface exposure at approximate location of proposed adit N. 30° E., 100 feet from BM-431.
433	6	0.42	General chip sample of surface exposure, 6 feet wide, at bottom of hill N. 60° E., 150 feet from BM-432.
746		1.20	Grab sample of broken ore in S. 55° W. cross-cut 20 feet back from face.
747	6	0.71	Adit - in southwest drift - about average grade by lamp; 35 feet east of Station 4.
748	5	0.20	Adit - east wall of southeast drift; 7 feet southeast of Station 2.
749		0.65	Grab; dump at portal of adit. Tactite on tunnel dump and produced from mineralized section of adit.
750		0.16	Surface; tactite exposure in dozer cut, N. 23° E., 380 feet from collar of No. A diamond drill hole.
879	4	*0.01	Tactite exposure in face of dozer cut N. 36° E. 100 feet from No. 2 DDH No. A.
880	13	*0.01	Mixed tactite and aplite in dozer cut.
881	4.4	*0.01	Tactite exposed in dozer cut.
882	8.5	*0.01	Same dozer cut as BM-881
883	8	*0.01	Face ofnew cut northeast of adit portal and above the adit.
884	7.8	*0.01	Face of trench about 35 feet northeast of BM-883.
885	7.6	0.33	Bottom of dozer cut, N. 60° E., 150 feet from BM-879

Sample No.	Width, Feet	%, WO_3	Adit & Surface, location
BM-1568	32	0.52	Present adit - south wall of west crosscut.
1569	20	0.27	" " - " " " east "
1570	5	0.18	" " - west wall - near face of adit.
1571		0.49	Grab sample; ore dump at portal of present adit.

*Less than.

EXPENDITURES

Total approved:	$5,760
Total cost of the project:	$5,760
Government's share of the cost - 75% = $4,320	
Government's share unexpended:	None
Value of production during operations and Government's royalty:	No production No royalty

EFFICIENCY OF OPERATIONS

The operators have had long experience in conducting large scale mining operations and development, and employed Boyles Bros. contracting firm to complete the major part of the diamond drilling. The examining engineer considers that all operations were conducted in an efficient manner.

EQUIPMENT

Equipment purchased for the project: None

Resume:

While the exploration contract, dated June 25, 1953, approved 40 feet of drifting, 520 feet of diamond drilling and 400 feet of adit, amendment No. 1, dated Nov. 4, 1953, deleted the above and substitutes 64 hours of trenching by bulldozer and 620 feet of diamond drilling.

In the assignment of lease and option to purchase, from Messrs. R. E. Summers and Harold A. Culp, dated August 25, 1953, to the Sunshine Mining Co., item 3 states: "Sunshine shall have the right and option after completion of the program as called for under the DMEA contract with the Garnet Tungsten Mining Company, identified as Idm-E556, to withdraw from the project in which case Sunshine agrees to reassign the lease and option to purchase referred to above to the lessees."

The original plans for the exploration of the property, as proposed by the field team and approved by the Defense Minerals Exploration Administration have not been completed inasmuch as no part of the 400 foot adit has been extended.

From the information obtained in the short adit driven by the first lessees, together with data from diamond drill holes A and D, the field team concluded that the extension of the 400-foot adit was justified, and on Dec. 3, 1953 in company with R. L. Anderson, chief engineer for Sunshine Mining Co., during an inspection of the property, the alignment of the proposed adit was mutually agreed upon. The ultimate objectives of the DMEA exploration program have not been attained and it is unfortunate that the operators abandoned the project.

SUNSHINE MINING COMPANY

Subject: Docket No. DMEA-2320 (Tungsten
Garnet No.1 & No.2 Claims
Elko County, Nevada
Contract No. Idm-E556
Amendment No.1

FINAL REPORT

Location:

The Garnet-Tungsten property consists of twenty-five (25) lode mining claims on Tennell Creek, tributary of Meadow Creek, tributary of the Bruneau River. It is in Sections 16 and 17, T45N, R55E, Principal Nevada Meridian and embraces the summit of Tennessee Mountain, elevation 8,356 ft., extending down both its northwest and southeast slopes.

Ownership:

The owners are three Knowles brothers and Price Montrose, all of Elko County, Nevada, who granted the Garnet-Tungsten Company, a limited partnership, a lease and option on the group. Sunshine Mining Company acquired its interest through the Garnet-Tungsten Company.

Rocks and Minerals:

The ore mineral is a fine grained scheelite ranging normally from pin point to match head in size which is disseminated throughout the hanging wall portion of a contact metamorphic rock known as tactite and composed principally of garnet and epidote. The unaltered sedimentary is thin-bedded lime-shale and the igneous mass is granodiorite. Some aplite dikes cut the tactite bodies.

Surveys and Maps:

A transit, chain survey was made starting at the U.S. bench mark on Tennessee Mountain, elevation 8,356 ft., backsighting Copper Mountain for bearing, some eight miles distant, and was run about 3,000 feet northwesterly along the general course of the tactite outcrops. Based on this survey, auxiliary brunton surveys, diamond drill holes, bulldozer cuts, and sample assays results, the following maps and sections have been compiled:

Maps:

Plan
Longitudinal Projection K-K and Longitudinal Projection I-J-J
Vertical Section I-I
Vertical Cross Sections A, B, C, D, E, F, G, H.

8½ x 11 Sketches which accompanied monthly DMEA reports:

40 Scale Plan and Section, Diamond Drill Hole A
40 Scale Plan and Section, Diamond Drill Holes A & A-2
Plan, Section and Assays, Diamond Drill Holes A, A-2, A-3

20 Scale Assay Plan Cut #1

20 Scale Plan Cut #2
20 Scale Assay Plan Cut #5
20 Scale Assay Plan Cut #6 & #7
20 Scale Assay Plan Cut #9
20 Scale Assay Plan Cut #10
20 Scale Plan of Collar Locations Holes A, A-2, A-3
20 Scale Plan Hole B
20 Scale Assay Plan Hole D

100 Scale Plan

Log and Assays Hole A-3
Log and Assays Hole D
Log Hole B.

Exploration:

Several metamorphosed bodies occur, only two of which should be considered true tactite, the others being insufficiently altered. Before Sunshine became interested, the northwest body had been penetrated by seven diamond drill holes, numbers 1, 2, 3, 4, 6, 7, and 9, and two other holes, numbers 5 and 10 had been drilled outside the north and south extremities respectively. Holes 8, 11, 12, 13, 14, 15, and 16 had been drilled into the southeast orebody with disappointing results. Numerous bulldozer cuts had been made on both bodies and a 320 foot exploration and sampling tunnel had been driven into the northwest body at an elevation of 7,570 feet.

DMEA Contract:

The Garnet-Tungsten Company had been granted a U.S. Government DMEA contract of exploration of two stages; the first stage, amended after Sunshine became an active participant, to consist of 620 feet of diamond drilling and 64 hours of bulldozing at a total cost of $5,760 of which the Government would participate to the extent of 75% or $4,320, reimbursible to Sunshine.

Sunshine Participation:

Sunshine became active in exploration and sampling on the property, after preliminary examination, on August 18, 1953 and completed Stage 1 on December 7, 1953.

Sunshine Exploration:

Sunshine drilled 770 feet of diamond drill hole and did 147 hours of bulldozing. Three attempts were made before the diamond drill hole designated at location A was successfully finished. Hole A, 142 feet, and Hole A-2, 95 feet were abandoned after caving, but Hole A-3 penetrated tactite and passed on into granodiorite. Hole D underground was almost wholly in tactite but did not indicate ore of commercial value. Hole B was not expected to find ore and did not, but exposed two narrow strips of poor tactite. The bulldozing consisted of exposing tactite in Cuts number 1, 2, 5, 6, 7, and 10; preparing the collar locations for diamond drill holes A-2, A-3, and B; preparing a portal site for a new sampling tunnel; preparing a housing site; making a water dam, pipe line ditch, and compressor house site; and bulldozing the road to the highway to enable truck travel through the snow from the property. Sunshine took fifty-six (56) samples for assay, from underground, surface outcrops and dia-

mond drill cores.

The DMEA program had outlined certain exploratory work to be done on the northwest body and our work was concentrated in this area since this also had by far the best surface indication.

The southeast orebody had some good surface showing and one assay was reported to carry .45% WO_3 over 16 feet. However, Sunshine's sample in the same vicinity only gave .18% WO_3 content. Sunshine also sampled and assayed the core of the drill holes which the owners had previously drilled into the southeast tactite body with the following results:

DD Hole 11---21 feet-----.29% WO_3
DD Hole 13--- 6 feet-----.28% "
DD Hole 12---13 feet-----trace
DD Hole 16---25 feet----.12% WO_3

No further exploration was undertaken in the southeast orebody.

Orebody Description:

The northwest tactite body on which Sunshine concentrated its principal exploration is 460 feet long and averages 120 feet in width on the surface. The strike of the outcrop is N50W but the strike of the banding is N33W. The dip is 55 degrees SW. The concentration of scheelite occurs quite consistently at the hanging wall of the body, being 46 feet wide at its richest and widest exposure in the tunnel but averaging only about half that width throughout the length of the body, widths being taken perpendicular to the 55 degree dip of the banding.

Indications are that the orebody is somewhat shorter at depth since it is cut off by a granitic body on the southeast which can be traced on the surface and shows in Diamond Drill Hole 10 down to an elevation of 7,370 which is the bottom of this hole.

The outcrop of the tactite varies in elevation from 7700' at the southeast end to 7510' at the northwest end and the ore is known to continue to the depth of 7300 elevation where it was passed through by diamond drill hole #9 at about the lateral center of the body. Hole A-3, 180 feet to the northwest, also passed out of ore at elevation 7330, about 50 feet southeast of the indicated northwest end of the body.

Tonnage and Grade:

Calculations made from cross sections D, E, F, G, and H indicate 255,000 tons of ore of a grade of 0.31% WO_3 above the 7400 foot elevation and 400,000 tons of 0.315% WO_3 above the 7300 elevation. For the 7400 calculation, Block C-D, from Section D to the end of the orebody 50 feet northwest of Section D, contains 179,250 cu. ft. at 0.31%; Block D-F contains 768,400 cu. ft. at 0.30%; Block F-G contains 819,200 cu. ft. at 0.36%; and Block G-H contains 663,856 cu. ft. at 0.26%; totalling 2,430,706 cu. ft., or 255,000 tons at 0.31% WO_3. It is noteworthy that these indicated grades of these blocks vary only from 0.26% to 0.36%. It is also noteworthy that the assays at depth, 40 feet of Hole 9 averaged 0.25%,

and 24 feet of Hole A-3 averaged 0.29% which likewise are quite consistent.

Mining:

Ore of this grade must be mined cheaply with as little dilution as possible. This premise excludes open stopes, shrinkage stope, or rill stope methods as too expensive. Block caving is not to be considered practical because of the limited width of the ore zone. This excludes all cheap underground methods and leaves the open pit method, which would probably allow lamping the ore faces at night for some selective mining the next day when necessary. An open pit method would require removal of some 26,000,000 cu. ft. or about 2,230,000 tons of waste above the 7400 elevation, which is equivalent to 10 parts waste to one part ore. This calculation assumes a hanging wall slope of 45 degrees and a tactite footwall slope of 55 degrees. This is an extremely high ratio of waste to ore for such low grade material.

Milling:

A recovery of 85% is probably the maximum to be expected in this type of ore. Most of the scheelite is in minute crystals and fine grinding would be necessary to free the mineral. The 85% recovery of 0.31% ore would be equivalent to about 0.25% recoverable WO_3 per ton which is roughly equivalent to $15.00 per ton. Although sufficient water is probably available the year around for mining and camp use from Tennell Creek, additional water would need to be developed for milling and tailings disposal precautions would be necessary.

Further Exploration:

Although the DMEA contract Stage 2 tentatively outlined a 400 foot tunnel in the orebody, this tunnel would be 60 feet short of reaching the southeast end of the orebody at the elevation of the tunnel site already prepared. It would be correspondingly shorter at greater depths. In any case, crosscutting to the hanging and footwall of the orebody or diamond drilling from the drift to give the same information together with building camp facilities would require substantial expenditures in excess of the $16,000 DMEA allocation for the 400-foot tunnel projected.

A considered alternate was a set of diamond drill holes from the surface at 50-foot horizontal intervals, totalling about 2250 feet. It is estimated that the cost of this program would be in the range of $13,000. Such holes would project roughly 100 feet into the footwall of the known ore zone.

Conclusions:

The indicated orebody has been explored to our satisfaction, the results obtained being reasonably consistent, but too low in grade to make the project attractive under present conditions.

Consideration was given to the possibilities of selective mining to produce a higher grade mill head but this plan was abandoned as being impractical under the circumstances of the ore occurrence.

It is felt that the results obtained from our study and the completion of the work outlined under Stage I of the DMEA program

have reasonably well determined the grade of the ore that could be expected to be mined from this orebody. Further we do not feel that the additional information that would be obtained from doing the work outlined under Stage II would materially change this picture.

We therefore do not feel that the Stage II of the DMEA contract will serve any useful purpose and are relinquishing our interest in the property.

Respectfully submitted,

SUNSHINE MINING COMPANY

R L Anderson

R.L. Anderson
Chief Engineer

RLA:vh

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

Defense Minerals Administration
RECEIVED
MAY 4 - 1954

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 30, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 Claims
Elko County, Nevada
Contract No. Idm-E556

Reference is made to your letter dated April 26, 1954, stating that the completion date of the exploration program under the subject contract was February 25, 1954, and requesting me to advise if action had been instituted to amend the contract to extend the time for completion of the work.

No request has come to me from the operator to extend the completion date. The operator has submitted vouchers for expenses incurred through December, and in a memorandum dated April 2, 1954, transmitting these vouchers to me, Mr. A. C. Johnson writes that it is his understanding that the operator expects to terminate the contract as of the completion of Stage I, which is covered by the vouchers he was enclosing. The vouchers are being held in this office unpaid pending the decision as to whether or not the Government will approve going on to Stage II, which I believe will not be done.

A copy of this memorandum is going to Mr. Johnson and as soon as he furnishes me with the latest information on the status of this project, I will let you hear further from me.

H. C. Miller, Executive Officer
DMEA Field Team, Region III

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno
Finance Officer, Region III

400

DOCKET
SURNAME

Rutledge
Nearing
Selfridge
Johnson
Mittenday

APR 26 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
XXXX Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2820 - Tungsten
Sunshine Mining Company, Assignee
Garnet #1 and #2 claims
Elko County, Nevada
Contract No. [illegible]

Dear Mr. Miller:

Reference is made to the subject contract. Completion date of the exploration program under this contract was February 15, 1954.

Please advise if action has been instituted to amend the contract to extend the time for completion of the work.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (216)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (216)

D. M. Larrabee
Member, Geological Survey (216)

FARutledge:fcc
4-22-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 3
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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 30 1954

1012 Flood Bldg.
870 Market Street
San Francisco 2, Calif.

March 26, 1954

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Sunshine Mining Company, Assignee
Garnet #1 and #2 Claims, Elko County, Nevada
Contract Idm-E556

Reference is made to your letter of November 5, 1953, and to subsequent correspondence concerning the assignment of subject contract to the Sunshine Mining Company.

The documents, Assignment of Contract, Assignees' Acceptance, Government's Consent, and Amendment No. 1 to Contract Idm-E556 have been executed by all parties concerned, and the Government's, Division, and Docket copies are attached. Also attached to each copy of the Assignment of Contract is a copy of document entitled "Assignment of Lease and Option to Purchase." The Operator retained his copies of the documents mentioned herein, and the usual distribution has been made of the remaining copies.

H. C. Miller
Executive Officer, DMEA Field Team
Region III

Attachments 3

Copy to: A. C. Johnson, Reno (With attachments mentioned above)
Finance Office, Region III ditto
R. M. Smith, USGS
Geo. Mavor

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

Department of the Interior
Defense Minerals Administration
RECEIVED
MAR 23 1954

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

March 19, 1954

Mr. W. Church Holmes
Manager of Exploration Division
Sunshine Mining Company
738 Peyton Building
Spokane, Washington

Re: Docket DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Elko County, Nevada
Contract Idm-3556
Amendment No. 1

Dear Mr. Holmes:

We acknowledge your letter of March 17, 1954, with which you returned our five copies of the executed "Assignment of Contract-Assignees' Acceptance-Government's Consent."

I am now sending herewith six copies of Amendment No. 1 to Contract Idm-3556 for Mr. Cox's signature. After Mr. Cox has signed all six copies kindly return the original and all copies except the copy marked "Operator's Copy" to this office. The Operator's copy is for your files.

All reports, vouchers, etc., covering work done under Stage I should be submitted to Mr. A. C. Johnson, Bureau of Mines, Reno, Nevada, who, after aporoving them, will send them to this office for processing. Mr. Johnson would like everything sent to him in quintuplicate.

Sincerely yours,

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Enclosure

Copy to: DMEA, Washington, D. C.
Roscoe Smith, USGS
A. C. Johnson, Reno

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

March 12, 1954

Mr. W. Church Holmes
Manager of Exploration Division
Sunshine Mining Company
738 Peyton Building
Spokane, Washington

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Elko County, Nevada
Contract Idm-2556

Dear Mr. Holmes:

In order to effectuate the assignment of the cited exploration contract to the Sunshine Mining Company, the "Assignment of Contract" has been executed by Messrs. Culp, Summers, and Wilson, of the Garnet Tungsten Mining Company.

It will now be necessary for the Sunshine Mining Company to execute the "Assignees' Acceptance" before a notary public.

Six copies of the "Assignment of Contract-Assignees' Acceptance-Government's Consent" document are enclosed herewith. Kindly sign all six of the copies and return all but the copy marked "Operator's Copy" to this office promptly. The Operator's copy is for your files.

When the executed document is returned to this office, Amendment No. 1 to the contract, deleting all work now specified in the contract and substituting bulldozing and diamond drilling, will be sent to you for your signature.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Enclosure

Copy to: DMEA, Washington, D. C.
Roscoe Smith, USGS
A. C. Johnson, Reno

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

February 10, 1954

Garnet Tungsten Mining Co., Inc.
Box 72
Mountain City, Nevada

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Elko County, Nevada
Contract Idm-E556

Gentlemen:

In order to effectuate the assignment of the cited exploration contract to the Sunshine Mining Company, the enclosed six copies of the "Assignment of Contract" will have to be executed by Messrs. L. D. Wilson, R. E. Summers, and H. A. Culp, and all copies returned to this office.

Upon receipt of the signed copies of the assignment, they will be attached to copies of "Assignees' Acceptance" and "Government Consent" and sent to the Sunshine Mining Company for execution of its part of the assignment and acceptance.

After the assignment has been executed, the contract will be amended by having the Assignee (Sunshine Mining Company) sign the amendment which is being held in this office awaiting execution of the above-cited documents.

Kindly return all copies of the executed Assignment of Contract to this office promptly.

Sincerely yours,

H. C. Miller

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Enclosure

Copy to: W. Church Holmes, Spokane, Washington
DMEA, Washington, D. C.
Roscoe Smith, USGS
A. C. Johnson, Reno

140 FILE COPY
SURNAME:

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

FEB - 1 1954

Butin
Hoffman
Martin
Chandler
Selfridge
Johnson
Mattfeldorf

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Elko County, Nevada
Contract No. Idm-E556

Dear Mr. Miller:

This responds to your memorandum dated January 18 to the Chairman of the Operating Committee concerning assignment of the subject contract to Sunshine Mining Company. The questions raised in your letter are stated and answered below in the order in which they were raised. The answers assume that neither the Garnet Tungsten Mining Company nor the Sunshine Mining Company have executed the Assignment of Contract form.

1. Is it necessary that the day in November 1953, on which the lessees executed the Assignment of Lease and Option to Purchase be inserted in the Assignment? No. The effective date of the Assignment of Lease is stated as August 25, 1953, in the first paragraph thereof, and the date of execution is sufficiently identified as November 1953.

2. Which date should be inserted in the third paragraph on the first page of the Assignment of Contract form, August 25, 1953, or November 25, 1953? The date August 25, 1953, should be inserted.

3. What date should be inserted at the end of the Assignment of Contract form on page 1? Insert the date September 1, 1953. In this regard, the Assignment of Contract form specifically provides for payment of the voucher for August work to the Operator, Garnet Tungsten Mining Company, and payment of this voucher should be so made after the Assignment of Contract is properly executed.

HHH
2-1-54

4. What date should be inserted for the Assignee's Acceptance of Assignment? The comments in paragraph 3 apply here. Insert the date September 1, 1953.

5. What date should be inserted in the Government's Consent to Assignment? The date of the Government's Consent is already set forth as November 4, 1953, and this date should not be changed.

6. After the dates for insertion in the Assignment of Contract form have been determined, are the dates in Amendment No. 1 to the contract proper? Yes.

Sincerely yours,

George C. Selfridge (JHB)

Chairman, Operating Committee

Approved:

J. H. Hedges (JHB)

Member, Bureau of Mines

s/ Philip W. Smith (JHB)

Member, Geological Survey

HCRubin:/emd 1/27/54

Copy to: Docket
Adm. R. File
Op. Comm.
W. S. Martin
J. H. Hedges
T. P. Thayer
J. L. Hofflund
H. C. Rubin
chron.
pending

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 19 1954

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

January 18, 1954

Air Mail

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Elko County, Nevada
Contract No. Idm-E556

Reference is made to your letter dated November 5, 1953, concerning assignment of subject contract to the Sunshine Mining Company.

By today's mail I received six photostatic copies of an Assignment of Lease and Option to Purchase, entered into as of the 25th day of August, 1953, by and between Ray E. Summers and Harold A. Culp, and the Sunshine Company. A copy of one of the photostatic copies is enclosed.

You will note on page 2 that the date on which the lessees subscribed their respective names has not been filled in. Is it necessary that this be done before I accept the assignment?

If the assignment is acceptable as sent in, then my next question relates to what dates I should insert in the blank spaces of the copies of the Assignment of Contract, Assignees' Acceptance, and Government's Consent which was prepared in the Washington office. Is the date of the instrument which duly assigns the lease to Sunshine Mining Company August 25, 1953, or November 25, 1953 (date Mr. R. D. Leisk, General Manager, acknowledged execution of the lease before a notary)? Also what date should be filled in the blank space at the bottom of the Assignment of Contract, Assignees' Acceptance and Government's Consent document?

After the above dates have been determined, consideration should then be given to the dates shown on Amendment No. 1, which was drawn in the Washington office and signed by Mr. Mittendorf. This amendment is dated November 4, 1953, effective August 18, 1953. Are those dates correct on the basis of the date of the assignment?

I presume that you have copies of the last two cited documents in your files so that it will not be difficult for you to check the dates and supply those needed based upon the dates shown on the copy of the Assignment of Lease which I am sending you.

Kindly let me have your air-mail reply so I can expedite execution of the documents which I am holding for Sunshine officials' signatures as per your November 5 letter.

H. C. Miller
Executive Officer
DMEA Field Team
Region III

Attachments

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno

DEPARTMENT OF THE INTERIOR
Date
JAN 1 0 1954

ASSIGNMENT OF LEASE AND OPTION TO PURCHASE

THIS AGREEMENT made and entered into as of the 25th day of August, 1953 by and between Ray E. Summers and Harold A. Culp, both of the town of John Day, State of Oregon and hereinafter called, Lessees, and the Sunshine Mining Company, a Washington Corporation, hereinafter called, Sunshine.

W I T N E S S E T H:

The Lessees hold a Lease and Option to Purchase Agreement made and entered into the first day of September, 1952 by and between themselves as Lessees and Abram A., George G., and Edward A. Knowles, and Price D. Montrose, all of Elko County, State of Nevada as Lessors, covering certain mining claims located in the Alder Mining District, Elko County, State of Nevada and named Garnet #1 to #8 inclusive, Garnet Extension #1 to #15 inclusive and Barium #1 and #2.

On August 25, 1953 the Lessees agreed to assign the above described Lease and Option to Purchase to the Sunshine Mining Company in consideration for an operating agreement as outlined in a Joint Letter of Intent between Garnet Tungsten Mining Company, Incorporated, a Nevada Corporation, and Sunshine.

NOW THEREFORE, in consideration of the premises and the covenants herein made and to be kept by Sunshine and in consideration of other valuable and sufficient consideration received, the Lessees hereby jointly and severally assign to Sunshine all of their right, title and interest in the aforementioned Lease and Option to Purchase.

1. In consideration for this assignment, a specific reference is made to the provisions outlined in the Joint Letter of Intent dated August 25, 1953 referred to above.

2. Sunshine will prepare the initial draft of the formal operating agreement between the Lessees, Garnet Tungsten Mining Company and Sunshine, and will forward it to the Lessees for their approval and execution, and will cause the same to be executed by Sunshine.

3. Sunshine shall have the right and option, after completion of the program as called for under the DMEA contract with the Garnet Tungsten Mining Company, identified as Idm-E556, to withdraw from the project in which case Sunshine agrees to reassign the Lease and Option to Purchase referred to above to the Lessees.

4. For purpose of notices between the parties to this agreement, notice is deemed to have been received five days after deposit by registered mail, one to the other. Sunshine's address shall be Box 1313, Yakima, Washington and the Lessees official address shall be John Day, Oregon.

5. The parties to this assignment specifically covenant and agree that they will do such things as are necessary to keep the property covered by this assignment in good standing.

JAN 19 1954

6. This assignment shall remain in force throughout the life of the Lease and Option to Purchase referred to above.

This Agreement will be binding upon and inure to the benefits of the heirs, executors, administrators, successors, and assigns of the respective parties hereto.

IN WITNESS THEREOF, the Lessees have subscribed their respective names this _____ day of November, 1953.

LESSEES:

Ray E. Summers

Ray E. Summers

Harold A. Culp

Harold A. Culp

SUNSHINE:

R. D. Lisk

R. D. Lisk
General Manager

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 19 1954

STATE OF WASHINGTON }
COUNTY OF SPOKANE }

On this 25th day of November, 1953, personally appeared before me, a Notary Public in and for said County and State, R. D. Leisk, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Ruby A. Kenney
Notary Public in and for the said County and State

My Commission expires March 17, 1957.

STATE OF Nevada }
COUNTY OF Elko }

On this 31st day of ~~November~~ December, 1983, personally appeared before me, a Notary Public in and for said County and State, Ray E. Summers, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

G. Russell
Notary Public in and for the said County and State

My Commission expires 1/3/87.

STATE OF Colorado }
COUNTY OF San Miguel }

On this 12th day of ~~November~~ December, 1983, personally appeared before me, a Notary Public in and for said County and State, Harold A. Culp, known to me to be the person described in and who executed the foregoing instrument, who acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Notary Public in and for the said County and State

My Commission expires _____.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 18 1954

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

January 14, 1954

Mr. W. Church Holmes
Sunshine Mining Company
738 Peyton Building
Spokane, Washington

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Elko County, Nevada
Contract TGA-2556

Dear Mr. Holmes:

On November 9, 1953, we answered Mr. E. D. Leisk's request for necessary procedure for assigning the above-captioned contract to the Sunshine Mining Company as follows:

"According to the Washington Office of the Defense Minerals Exploration Administration, in order to effectuate an assignment of the contract, the lease dated September 1, 1952, from Abram A., George G., and Howard A. Knowles and Price Montrose to two of the Operator-partners, Ray E. Summers and Harold A. Culp, should first be assigned to the Sunshine Mining Company. Paragraph "H" of that lease specifically permits such an assignment.

"When this assignment of lease has been duly executed and this office is furnished with six copies, we will send you for execution an Assignment of Contract and Assignees' Acceptance and the Government's Consent."

To date we have not received the executed copies of the assignment of lease and I am still holding the copies of Assignment of Contract, Assignees' Acceptance and Government's Consent, awaiting this receipt.

May we hear from you soon regarding the above matter.

Sincerely yours,

H. C. MILLER
H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
Roscoe Smith, USGS
A. C. Johnson, Reno

140

FILE COPY
SURNAME:

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

NOV 5 1953

AEKane
Perkins
Martin
Selfridge
Hefhusen

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA-2320 (Tungsten)
Garnet Tungsten Mining ~~Company~~
Elko County, Nevada
Contract No. Idm-E555

Dear Mr. Miller:

Reference is made to your memorandum dated October 7 to the Chairman of the Operating Committee requesting that the subject contract be assigned to the Sunshine Mining Company.

In order to effectuate an assignment of the contract, the lease dated ~~August 31, 1953~~ Sept. 1, 1952, from Abram A., George G., and Edward A. Knowles and Price Montrose to two of the Operator-partners, Ray E. Summers and Harold A. Culp, should first be assigned to the Sunshine Mining Company. Paragraph "H" of that lease specifically permits such an assignment.

When this assignment of lease has been duly executed, then the enclosed Assignment of Contract and Assignee's Acceptance should be duly executed, after the blanks in the former have been filled in. The Administrator has signed the Government's Consent. These documents should not be delivered until the Assignor and Assignee have both signed them. After the assignment has been executed, then the contract may be amended by having the Assignee sign the amendment which has also been signed by the Administrator on behalf of the Government, and which is enclosed.

Distribution of all these documents should be made in the usual way after they have been duly executed.

Sincerely yours,

George C. Selfridge (GCS)
Chairman, Operating Committee

Approved:

J. H. Hedges (JHH)
Member, Bureau of Mines

A. R. Kinkel, Jr. (ARK)
Member, Geological Survey

AEKane/ema/11-2-53

cc: Mails & Files
Adm. R. File
W. S. Martin
A. E. Kane
Chron.
Op. Comm.
Mr. Thayer
Mr. Hedges
J.L.Hofflund
Pending

Rec'd. 11-5-53

FILE COPY
SURNAME: 18

140

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

Office Admin

N.S. in Rel

November 3, 1953

Memorandum

To: The Administrator

Through: W. S. Martin

From: Chief Counsel

Subject: Garnet Tungsten Mining Company - Docket No. DMEA-2320 - Contract No. Idm-E556

There is attached, in satisfactory legal form for execution, an Amendment, Assignment of Contract, Assignees' Acceptance, and Government's Consent, subject to the attachment of the map referred to in Amendment No. 1.

Albert E. Kane

for J. L. Hofflund
Chief Counsel

Attachments

AEKane/ema
cc: Mails & Files
Adm. R. File
W. S. Martin
A. E. Kane
J. L. Hofflund
Chron.

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

DEPARTMENT OF THE INTERIOR
Business Center
Received
OCT 1 0 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

October 7, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Garnet No. 1 and Garnet No. 2 Claims
Elko County, Nevada
Contract Idm-E556

You have perhaps noted in Mr. Glenn G. Gentry's interim report on the subject property, dated September 3, 1953, that there seems to be some question as to the company actually carrying on the work under Contract Idm-E556. He states that apparently the Sunshine Mining Company has been paying the expense of operation since August 18 but that no work had been started on the exploration project on August 23 and 24, the dates of his inspection.

We have now learned that Mr. Gentry is correct, that the Sunshine Mining Company of Kellogg, Idaho, has succeeded in interest the Garnet Tungsten Mining Company and that no work under the contract was performed by the Garnet Company within the alloted 45 days after the date of the contract. We have, however, Garnet Tungsten Mining Company's MF-104 and MF-104A vouchers for August 1953, billing us for 27 feet of core drilling at $8.00 a foot, $216.00. We have learned from Mr. W. Church Holmes, Director of Exploration, Sunshine Mining Company, that that work was done on August 30 and 31. In view of all the facts that have now come to our attention, we are withholding payment of the August vouchers.

Sunshine Mining Company has now come in with a request for assignment of the Garnet Tungsten Mining Company to them, as they wish to carry out the exploration work under Garnet's contract with a few minor changes.

Attached are three copies of a letter, dated October 6, 1953, from Mr. W. Church Holmes, Director of Exploration, Sunshine Mining Company; six photostat copies of a joint letter of agreement executed for both Garnet Tungsten and Sunshine Mining Companies; six photostat copies of an amendment to Lease and Option to Purchase; and one set of five prints showing development work done on the property.

The letter outlines Sunshine's wishes and the supporting documents, I believe, are sufficient for you to prepare an amended contract or to do whatever is needed to effect the assignment to that company on our books. If there are any questions I will gladly attempt to get answers to them.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

R. M. HARDY, PRESIDENT B. COX, VICE PRESIDENT FRANK M[illegible]DY, TREASURER C. M. HULL, SECRETARY

Sunshine Mining Company

P. O. BOX 1080 PHONE 39

Kellogg, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 12 1953

October 6, 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Subject: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada
Contract Idm-E556

Dear Mr. Miller:

The purpose of this letter is to advise you of the change in ownership in connection with the tungsten property referred to in the subject and to request certain minor changes in the work program and time schedule as set out in the subject contract.

Part A

1. Sunshine Mining Company, a Washington corporation, having its principal business at Box 1080, Kellogg, Idaho, has succeeded in interest the Garnet Tungsten Mining Company, the Nevada Limited partnership referred to in the subject. As evidence of this succession in interest, please find:

a. Seven photostatic copies of the joint letter of agreement executed for both the Garnet Tungsten and Sunshine Mining companies, outlining and specifying the terms of the assignment of the certain Mining Lease and Option Agreement dated September 1, 1952 between Ray Summers and Harold Culp and Abram A. Knowles, George G. Knowles, Edward A. Knowles, and Price Montrose, a copy of this lease and option being currently in your files. This Mining Lease and Option Agreement had been assigned to the Garnet Tungsten Mining Company, Inc., a Nevada corporation, by the partnership prior to the period of our negotiations.

b. Seven photostatic copies of the Amendment to Lease and Option to Purchase, dated as of August 31, 1953, and executed on September 16, 1953 by the same parties who had executed the Mining Lease and Option Agreement, referred to above.

2. As provided for under Article 7 of the subject contract, the written consent of the Government is requested to the assignment of this contract to the Sunshine Mining Company.

Part B

1. Due to the delay caused by the negotiations, work was not started on the project until on or about August 18, 1953, at which time Sunshine assigned an engineer to the property to supervise the current exploration program.

2. It is, therefore, requested that this date of August 18, 1953 be substituted for the date of June 25, 1953, as set out in the subject contract.

3. Due to further delays in getting the diamond drilling program, as set out in the subject contract, under way, it will not be possible to complete Stage I in two months from the requested starting date of August 18, 1953, and it is further requested that the time allowed for completion of Stage I be extended to four months from this latter date.

Part C

1. Reference is made to five prints showing the existing development work done on the property, together with certain notations of the geology of the deposit. These prints are enclosed in duplicate and listed as follows:

a. Plan Garnet Tungsten
b. Garnet Tungsten Sections AA! and BB!
c. Garnet Tungsten Sections CC! and DD!
d. Garnet Tungsten Section EE!
e. Garnet Tungsten 7571 Adit

2. Since the date the property was examined by the Government engineers and prior to the granting of the subject Exploration Contract Project, the drift referred to in paragraph 1 of Stage I of the contract was extended at no cost to the Government. In this connection, reference is made to item e under paragraph 1 above, which shows that this drift extension exposed the granodiorite-tactite contact in the face of the tunnel, and no useful information can, therefore, be anticipated from doing an additional 40 feet of drifting in the exposed granodiorite since the next tactite exposure on the surface is several hundred feet away to the southeast.

It is, therefore, requested that this part of Stage I be abandoned and the $1,600 allocated thereto be made available to other phases of Stage I as outlined below.

3. It is requested that surface bulldozer work having the objective of exposing scheelite-bearing tactite be authorized at approximately the locations as marked on the plan (item a., paragraph 1).

Work done prior to the granting of the subject contract and at no cost to the Government exposed tactite in the foot wall area of the main tactite body being explored. This latter body is apparently cut off, on the surface at least, by a granite nose, as indicated on the Plan, between section lines BB! and CC!.

It is felt that useful information can be obtained by further exploration of this indicated body, to the northeast of the currently indicated scheelite zone, of far greater importance than extending the existing drift to the southeast into the granodiorite.

4. It is, therefore, requested that surface bulldozer exploration work be authorized in an amount not to exceed $800 to cover an estimated sixty-four hours of work, at $12.50 per hour.

5. It is further requested that the balance of the funds allocated to the 40 feet of drifting set out in Stage I, which amounts to $800, be transferred to diamond drilling as set out in paragraph 2 of Stage I. This will increase the aggregate length of the three drill holes to 620 feet from 520 feet.

This will permit an extension of drill hold A to possibly 380 feet, and will explore the foot wall area of the presently known tactite body.

6. With further reference to drill hole A, as indicated on Figure B of the subject contract, the amount of overburden in the area made the drilling of the hole at 45° impracticable. An attempt was made to drill the hole as outlined in the contract, but caving in the oberburden zone caused the hole to be abandoned after reaching a total depth of 142 feet.

It is, therefore, requested that the collar of this hole be moved 50 feet to the northeast and the hole be drilled at 60°, which will cause it to enter the projected tactite zone at approximately the same point as was projected for the original location. Reference is made to section BB' enclosed as item b under paragraph 1 of this section.

The above requested amendments have been discussed at length with Mr. Glen Gentry of the Reno office of the Bureau and have his verbal agreement.

We will appreciate your earlier approval of the assignment of the subject contract to Sunshine Mining Company, together with the amendments requested.

Very truly yours,

SUNSHINE MINING COMPANY

W. Church Holmes

W. Church Holmes
Director of Exploration

SUNSHINE MINING COMPANY
KELLOGG, IDAHO

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 12 1953

August 25, 1953

Mr. L. D. Wilson, President
Mr. Ray E. Summers, Vice President
Current Tungsten Mining Co., Inc.
Salt Lake City, Utah

Gentlemen:

This letter is written to amend our joint letter of agreement in connection with the property held by your company in the Alder Mining District, Elko County, Nevada, which was written and accepted by you on August 12, 1953.

This amendment is written at your request and sets out the revised terms of our taking over the development and the operation of the property as discussed at Mountain City, Nevada, on August 18, 1953.

1. The property consists of 24 claims named Current 1 - 16, inclusive, Current Extension 1 - 16, inclusive, and Burlem 1 and 2. Twenty-six of these claims, namely, Current 1 - 8, inclusive, Current Extension 1 - 16, inclusive, and Burlem 1 and 2 are held by you under the certain Mining Lease and Option Agreement dated September 1, 1952 between Ray Summers and Harold Culp and the Douglas Brothers and Price Montreen. The balance of the claims are held by you under direct location either by yourselves or your agents and are also under the above Lease and Option Agreement.

2. You are offering to assign the above described Lease and Option to Sunshine Mining Company and Sunshine will accept this assignment under the conditions as outlined below. except money payments due owing Sept 30, 1953 & RBW. RES. & Aug 31, 1954 inclusive.

3. Sunshine will proceed with an economic study of the property with the intention of bringing it into production at the earliest date consistent with good mining and business practice should the results of this study show that the venture can be a profitable one consistent with the capital and effort that will be required.

a. As the first step in this study, Sunshine will provide at their expense competent supervision and will finance the DMSA program as currently approved for the property by the U. S. Bureau of Mines in the amount of some $21,000.

b. Sunshine at its option may have additional diamond drilling or other development done on the property over and above that specified in the DMSA contract.

6

Mr. L. D. Wilson, President
Mr. Ray E. Summers, Vice President

August 25, 1959

e. Should Sunshine decide after the completion of the DDA program as set out above and its study of both the property and the economics involved that further capital investment is not warranted, it may withdraw from the venture.

4. Should Sunshine decide on completion of its study that the property warrants further capital investment with the objective of developing it into a profitable mining operation, it will proceed with such development.

5. Sunshine will pay to the Garnet Tungsten Mining Co. or their successors and assigns a royalty of four and one-half (4.5%) per cent of the net proceeds received from all ore, concentrates and products produced and sold from the property during the period covered by the Lease and Option Agreement referred to in Paragraph I, which period is equivalent to a net proceeds production of $5,000,000.

6. After the payments to the owners as referred to in this Lease and Option have been completed, Sunshine will pay to the Garnet Tungsten Mining Co. a royalty of 4% of the net proceeds received from all ores, concentrates and products produced and sold from the property throughout the remaining life of the property.

7. It is understood that the above referred to net proceeds shall be the net smelter, treatment plant, or stockpile returns after deduction of transportation costs and concentrate treatment charges made by the buyers of the product.

8. Sunshine will prepare the initial draft of the formal agreement and will forward it to you for your corrections or changes.

Kindly indicate your acceptance of the terms of this letter in the space provided below and return a signed copy for your records.

Yours very truly,

SUNSHINE MINING COMPANY

By R. E. Lisk Jr.

General Manager

Attorney

FDL/ms

ACCEPTED:
GARNET TUNGSTEN MINING CO., INC.

By L. D. Wilson
L. D. Wilson, President

By Ray E. Summers
Ray E. Summers, Vice President

AMENDMENT TO LEASE AND OPTION TO PURCHASE

THIS AGREEMENT made and entered into as of the 31st day of August, 1953 by and between ABRAM A. KNOWLES, GEORGE G. KNOWLES, EDWARD A. KNOWLES and PRICE MONTROSE, all of the County of Elko, State of Nevada hereinafter referred to as the Owners, and RAY E. SUMMERS and HAROLD A. CULP, both of the Town of John Day, State of Oregon hereinafter called the Lessees,

W I T N E S S E T H

Said Owners and Lessees are the same parties that entered into the certain Mining Lease and Option Agreement dated the first day of September, 1952 covering certain lode mining claims in the Alder Mining District, Elko County, Nevada, namely Garnet #1 to #[illegible] inclusive and Garnet Extension #1 to #15 inclusive and Barium #1 and #2.

It is the wish and intent of both the Owners and Lessees to clarify and revise the wording of Paragraphs #2 and #7 of the aforementioned Mining Lease and Option Agreement.

NOW, THEREFORE, in consideration of the premises and the covenants herein made and to be performed by the Lessees, and in consideration of other valuable and sufficient consideration, the receipt whereof is hereby acknowledged, said Owners and Lessees jointly and separately agree to the following revision of Paragraphs #2 and #7 of the original agreement and these revised paragraphs shall be of the same force and effect as though they were originally included in the aforesaid Mining Lease and Option Agreement.

A. The following shall take the place of Paragraph #2:

#2: The lessees hereby covenant and agree to enter upon said property and commence work upon the same or some part and portion thereof to the end that there will be a concentrating plant on the property that will have a capacity to treat not less than 100 tons of ore per day by the first day of September, 1954, or should a mill of this capacity not be in operation by that date, the Lessees shall pay to the Owners an advance royalty of ONE THOUSAND ($1,000) DOLLARS monthly until such mill begins operation, the first payment of the advance royalty to be due and payable on the 30th day of September, 1954. It is understood and mutually agreed by the parties that if construction of a concentrator having a minimum capacity as set out above has not been commenced by September 1, 1954, the Owners have the option to declare the Mining Lease and Option Agreement in default, it being understood that such declaration of default shall be evidenced by thirty (30) days notice in writing given to the Lessees by the Owners and that Lessees shall have a period of thirty (30) days additional to begin construction of the above referred concentrator.

B. The following shall take the place of Paragraph #7:

#7: It is specifically covenanted and agreed by the Lessees that the property covered by this agreement shall be brought into production as rapidly as is

consistent with good mining practice and the availability of the necessary machinery, equipment and manpower, the expectation being that commercial production from the property shall commence during the month of September, 1954 or within a reasonable number of months following. It is further agreed between the parties to this agreement that once commercial production has started on the property that during the life of this agreement the Lessees shall not cease production and treatment of ores for any reason other than a strike or other labor shortage, instability in the tungsten market which would prevent disposing of the product produced at a profit, mechanical breakdown, unusual mining accident or casualty, government order, or Act of God.

C. The Lessees further covenant and agree that they will pay to the owners the sum of ONE THOUSAND ($1000.00) DOLLARS monthly, for the period of twelve months beginning September 30, 1953, and ending August 31, 1954, as advance royalties. After this date, the provisions of paragraph A above will come into full force, and effect.

The advance royalties covered by this paragraph shall be recoverable out of production as follows:

1. Fifty per cent of these advances will be recoverable out of the first production of the property at a rate equivalent to ten per cent of the royalty as set out in paragraph 4 of the certain Mining Lease and Option Agreement referred to earlier in this amendment, and during this period the royalty to the owners, as set out in this paragraph referred to, will be reduced to nine per cent of net proceeds as thus defined.

2. The balance of the advance royalties covered by this paragraph shall be credited against the final payments due on the purchase price of this property as set out in paragraph 9 of the aforementioned Mining Lease and Option Agreement.

D. The paragraphs in this amendment take the place of, and supercede any and all paragraphs in the aforementioned Mining Lease and Option Agreement having to do with work, production, payments or performance by the Lessees in connection with the said agreement.

E. It is further specifically covenanted and agreed by both the owners and Lessees hereto aforementioned that in case of default by the Lessees, of any of the provisions of this amendment to the Mining Lease and Option Agreement, that the Owners will notify by registered mail the Sunshine Mining Company, a Washington corporation, at Box 1080, Kellogg, Idaho, c/o R. D. Leick, General Manager, that the Lessees are in default, such service to be deemed to be complete upon deposit in the post office, and that the Sunshine Mining Corp. may reinstate the Mining Lease and Option Agreement by correcting any defaults which have occurred thereunder in thirty days after the expiration of the thirty day period available to Lessee, and substitute itself as the Lessee with the same force and effect as though the original Mining Lease and Option Agreement, and this amendment were executed by and between the Owners and Sunshine Mining Company.

F. It is further understood and agreed that should the Lessees [illegible] default under this amendment, all payments made hereunder by them,

will be retained by the Owners as liquidated damages, and the Lessees will have no further right, title or interest in the Mining Lease and Option Agreement referred to above in this Agreement.

G. It is further agreed that Paragraph 33 shall be amended to provide for completion of service on lessees by deposit of notice in the Post Office addressed to L. D. Wilson and Roy E. Summers at John Day, Oregon.

H. It is further agreed that this mining lease and option and amendments thereto shall not be assigned or sublet without the written consent of the owners, such consent will not be arbitrarily withheld by the owners. The owners hereby specifically consent to the assignment of the mining lease and option and amendments thereto to the Sunshine Mining Co., a Washington corporation.

I. It is further agreed that all of the provisions in the original Mining Lease and Option Agreement shall remain in full force and effect except as herein modified.

This amendment shall be binding upon and inure to the benefits of the heirs, executors, administrators, successors, and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereunto have subscribed their respective names this 26th day of September, 1953.

OWNERS: Abram A. Knowles
Abram A. Knowles

George G. Knowles
George G. Knowles

Edward A. Knowles
Edward A. Knowles

Price D. Montrose
Price D. Montrose

LESSEES: Ray E. Summers
Ray E. Summers

Harold A. Culp
Harold A. Culp.

STATE OF NEVADA)
)
COUNTY OF ELKO)

On this 16 day of September, 1953, personally appeared before me, a Notary Public in and for said County and State, Abram A. Knowles and Pride Montrose, known to me bo be the persons described in and who executed the foregoing instru - ment, who acknowledged to me that they executed the same freely and volunta ily and for the uses and purposes therein mentioned.

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

Chauncey Olson
Notary Public in and for the said County and State

My Commission expires September 5th, 1957

STATE OF NEVADA)
)
COUNTY OF ELKO)

On this 16 day of September, 1953, personally appeared before me, a Notary Public in and for said County and State, Ray E. Summers and Harold a Culp, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and pruposes therein mentioned.

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

Chauncey Olson
Notary Public in and for the said County and State

My Commission expires September 5th, 1957

STATE OF NEVADA)
)
COUNTY OF ELKO)

On this 16th day of September, 1953, personally appeared before me, a Notary Public in and for said County and State, GEORGE G. KNOWLES and EDWARD A KNOWLES, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

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

Paul Dwyer
Notary Public in and for the said County and State

My Commission expires July 22, 1956

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 21 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

September 17, 1953

Mr. Harold A. Culp
Garnet Tungsten Mining Company, Inc.
Box 72
Mountain City, Nevada

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Garnet #1 & Garnet #2 Claims
Elko County, Nevada
Contract Idm-E556

Dear Mr. Culp:

According to a recent report made by our engineer who inspected the work being conducted under subject exploration contract, it would appear that the Sunshine Mining Company is carrying on the work under Contract Idm-E556. It is questionable in our minds, therefore, whether or not the contract should be transferred to the Sunshine Mining Company, in which case new Owner's Consent to Lien forms in favor of the Sunshine Mining Company would be required from you.

It is also noted that the contract was dated June 25, 1953, and that the work apparently had not been started within the 45-day period allowed to commence operations. In this event an amendment to the original contract will be necessary.

Until these points are clarified, it will be necessary for us to withhold payment of any vouchers that you may render in connection with this project.

Sincerely yours,

S. RICKER

S. Ricker for H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 17 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif,

August 12, 1953

Case 8-17

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Garnet Mines, Elko County, Nevada
Contract Idm-E556

Reference is made to Mr. George Selfridge's letter of June 25, 1953, transmitting to this office the original and five copies of subject contract.

The contract has been executed on the part of the Operator and one copy retained by him. Proper distribution has been made of the Field Team's and Finance Officer's copies, and the original and two remaining copies are returned herewith.

In accordance with your instructions of June 25, enclosed herewith are copies of two leases which bring up to date the ownership of the claims involved in Contract Idm-E556.

S. Ricker for H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments 2

Copy to: A. C. Johnson, Reno (With copy of contract)
Finance Officer, Region III (With copy of contract)
E. H. Bailey, USGS
George Mavor

Note: 2 addtn'l copies of the two leases required. The one copy that was received was sent to Iron & Ferro Alloys.

Copied from the Mining and Industrial News August 1953, Volume 21, No. 8

A 150 ton mill will be installed at property of Garnett Tungsten Mining Co. at Tennessee mountain in Mountain City area about 80 miles north of Elko, Nev., with contract awarded to the Galligher Co., of Salt Lake City. Exploration tunnel at the property was recently completed. The company, which has a government contract for the sale of its tungsten concentrates, has a lease and option to buy the property from the owners, Turk Montrose and the Knowles Brothers. Some of the work will be by open pit method.

Nmea - 2820

Copied from Engineering and Mining Journal-Vol. 154. No. 8
August 1953

An exploration tunnel has been completed for a distance of 340 ft. in the Garnett Tungsten mine in Elko county. E. O. Hart is company manager in charge of the work, and the Gallagher Co. of Salt Lake City, which made the test runs on the ore, will supervise construction of a mill on the property. Plans for the mill call for a capacity of 150 tons daily. The Garnett Tungsten Co. expects' to do part of the mining by open pit method. L. D. Wilson, of John Day, Ore., is president of the company, Ray E. Summers ~~xxxxxx~~ and Harold A. Culp, of Mountain City, is secretary and treasurer.

Docket

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1953

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 14, 1953

Mr. Harold A. Culp
Garnet Tungsten Mining Company, Inc.
Box 72
Mountain City, Nevada

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Co.
Garnet #1 & Garnet #2 claims
Elko County, Nevada
Contract Idm-~~E566~~ E556

Dear Mr. Culp:

Your letter dated July 8, 1953, to which was attached requested Assignment by Ray E. Summers and Harold A. Culp of their lease and option to purchase the Garnet claims, dated September 1, 1952, to the Garnet Tungsten Mining Company, is acknowledged.

Attached herewith are six copies of contract Idm-E556 (Docket DMEA-2820), dated June 25, 1953. the contract allows 45 days from the date of the contract in which to commence work on the propject.

If the terms and conditions of the contract are satisfactory, will you and your two partners kindly sign all six copies, retain the copy marked "Operator's Copy" for your files, and return the other five copies to this office promptly.

Sincerely yours,

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Enclosures

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

Docket

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

June 30, 1953

WSM

Garnet Tungsten Mining Company
Mountain City, Nevada

Re: Docket DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 claims
Elko County, Nevada
Contract Idm-E566

Gentlemen:

The Office of the Defense Minerals Exploration Administration, Washington, D. C., has sent us a contract for your signatures covering exploration of your Garnet #1 and Garnet #2 claims in Elko County, Nevada. The contract copies have been signed by the Government but before submitting them to you for execution, it will be necessary for you to furnish this office with a copy of an assignment by Ray A. Summers and Harold A. Culp of their Lease and Option to Purchase the Garnet claims dated September 1, 1952, to the Garnet Tungsten Mining Company.

I note that the following major changes have been made in the contract as originally outlined: "1. The agreed unit price for drifting has been reduced to $40.00 per foot. 2. Drill holes C and E have been omitted."

The above changes have decreased the amount of the proposed contract from $23,520.00 to $21,760.00.

If the above changes meet with your approval and you furnish us with a copy of the above requested assignment, the contract copies will be sent to you for your signatures.

Please inform us also the approximate date on which work under the contract will be started, if the contract is satisfactory to you and you sign it.

Sincerely yours,
H. C. MILLER
H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D.C.
E. H. Bailey, USGS
A. C. Johnson, Reno

FILE COPY
SURNAME:

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

JUN 25 1953

Rutledge
Martin
Lampson
McLudge
M. Johnson

Air Mail

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 claims
Elko County, Nevada

Dear Mr. Miller:

We are enclosing the original and five copies of the above-referenced contract signed by the Administrator for the Government, together with Exhibit "A" (2 pages), Annex I (1 page), Owner's Consent to Lien, and two maps.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. However, before execution of the contract, the Operator must furnish a copy of an assignment by Ray A. Summers and Harold A. Culp of their Lease and Option to Purchase the Garnet claims dated September 1, 1952, to the Garnet Tungsten Mining Company.

If any part of this 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 contract are to be returned to this office, together with the proposed changes for consideration.

Please note that the following major changes have been made in the contract as originally outlined:

1. The agreed unit price for drifting has been reduced to $40.00 per foot.

2. Drill holes C and E have been omitted.

The above changes have decreased the amount of the proposed contract from $23,520.00 to $21,760.00.

Under Article 3, the starting date has been left blank and is to be filled in when the contract is signed by the Operator.

For your information, two copies of a memorandum by D. M. Lemmon, Geological Survey, are enclosed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2KB)

APPROVED:

J. H. Hedges

Member, Bureau of Mines (2KB)

A. R. Kinkel, Jr.

Member, Geological Survey (2KB)

J.H. 6-25-53

Enclosures

FARutledge/esf (6/23/53)

cc: ✓Docket
Code 400
Operating Committee
Admr. Reading File
Mr. DMLemmon, USGS
Mr. RWGeehan, USBM

FILE COPY
SURNAME:

Rutledge
Martin

400

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

June 18, 1953

Memorandum

To: Chief Counsel, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Review and preparation of Exploration Project Contract
Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Co.
Garnet No. 1 and Garnet No. 2 claims
Elko County, Nevada

Transmitted herewith is the rough draft of a proposed exploration project contract for your use in preparing the contract in final form. Apparently we have no record of an assignment by Ray A. Summers and Harold A. Culp of their lease of the referenced claims to the Garnet Tungsten Mining Co.

Copies of the two maps referred to in the draft are being prepared and will be furnished to the Legal Division for attachment to the contract.

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

Attachments

FARutledge:foc

6-18-53
cc: Docket
Code 400
Adm. Reading File

MF-200 (A)
(February 1952)

DOCKET DMEA 2820

COMMODITY Tungsten

IDM-E 556

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 25th day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Garnet Tungsten Mining Co., a Nevada limited partnership composed of L. D. Wilson and R. E. Summers, John Day, Oregon, and H. A. Culp, Mountain City, Nevada

hereinafter called the "Operator," as follows: as set forth in Annex I attached

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 Nevada ~~County of~~ Elko Two, described as follows:[3] Garnet No. 1 and Garnet No. 2 unpatented lode mining claims in the Alder Mining District ~~on~~ recorded in the office of the County Recorder of Elko County, Nevada, ~~as follows:~~ Book 28 pages 281 and 282 ~~p. and~~ 308, respectively

the Operator represents and undertakes:[4] Fraunes

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

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within ____ 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 eight 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. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. 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 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 75 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $16,320.00, which is 75 percent of $21,760.00, 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 check or 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. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed 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 units of work performed 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.

[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*) *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 the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, 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 and statement of work performed to accompany his final report.

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

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

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

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

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the 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 7. *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 8. *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.

ARTICLE 9. *Changes and added provisions* .....

.....

.....

.....

.....

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

.....
(Operator)

By .....

By .....

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—66329-1

D R A F T

EXPLORATION PROJECT CONTRACT
GARNET TUNGSTEN MINING CO.
DOCKET NO. DMEA 2820

EXHIBIT "A"

Description of the Work

The exploration work on this project is indicated on the maps attached hereto, ~~and made a part hereof~~ entitled "Fig. A, Plan map, Garnet Tungsten, Elko County, Nev., May 8, 1953," and "Fig. B, Garnet Tungsten, Elko County, Nev., May 8, 1953."

Stage I

Time Schedule: 0 - 2 months

1. Drift ~~an additional~~ 40 feet to the southeast from the present face of the main drift. The drift shall be not less than 4 feet by 6 feet in the clear and timbered where necessary.
2. Drill three diamond drill holes at locations A, B, and D shown on Fig. "A". The bearings, inclinations, and approximate lengths of the drill holes are shown on Figs. "A" and "B". Aggregate length of the three drill holes is not to exceed 520 feet.

Stage II

Time Schedule: 3 - 9 months

Stage II is to be undertaken only after the completion of Stage I, if, in the opinion of the Government, the results of Stage I warrant it.

Stage II Continued

1. Drive 400 feet of adit to explore the mineralized zone indicated by diamond drill holes A and B. The location and direction of the adit is to be determined by the results of Stage I and be subject to the prior written approval of the Government. The adit shall be not less than 4 feet by 6 feet in the clear and timbered where necessary.

Estimated Cost of Project

Agreed Unit Costs

Stage I

Drift	40 feet ~~of drift~~ @ $40.00/ft. ~~per foot~~	$1,600.00	
	520 feet ~~of~~ Diamond Drilling @ $8.00/ft. ~~per foot~~	4,160.00	$5,760.00

Stage II

Drive adit	400 feet ~~of adit~~ @ $40.00/ft. ~~per foot~~	~~16,000.00~~	16,000.00
	TOTAL Agreed Unit ~~ESTIMATED~~ COSTS FOR PROJECT		$ 21,760.00
	GOVERNMENT PARTICIPATION AT 75 PERCENT		$ 16,320.00

IN REPLY REFER TO:

G-MD-DML

Docket

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

June 15, 1953

Memorandum

To: W. S. Martin, DMEA

From: D. M. Lemmon, USGS

Subject: Field Team report
Garnet Tungsten Mining Co.
Knowles Brothers claims
Elko County, Nevada

DMEA-2820
Tungsten

A field report by W. T. Benson, USBM, dated May 27, 1953, recommends a revised exploration project involving 690 feet of core drilling (4 holes) followed by 400 feet of drifting, at a total cost of $23,520.

The results of the work done by the owner suggest a sizeable ore body containing about 0.5 percent WO_3. Such a deposit warrants the additional exploration proposed in the DMEA application. However, some doubt exists as to the merit of drilling 3 short underground holes (C, D and F) which appear to be development drilling that in part duplicates the deeper information from hole 9.

I concur with the Field Team's favorable recommendation provided the underground drilling be eliminated (270 feet) and provision is made for sampling and assaying.

D. M. Lemmon

D. M. Lemmon

Copy retained 400

Docket

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

Office of
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

June 4, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 (~~Mercury~~)
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims, Elko County, Nevada

Reference is made to your letter dated April 14, 1953, requesting us to have a Field Team representative discuss the proposed new program with the applicant and prepare necessary cost data for your consideration. This has been done and there are attached the originaland three copies of a report entitled "DMEA-2820, Knowles Bros. Tungsten Claims, (Garnet Tungsten) Elko County, Nevada, by W. T. Benson, Mining Engineer, U. S. Bureau of Mines, dated May 27, 1953."

This report outlines a proposed exploratory program which is satisfactory to the applicant, though somewhat different from the program you suggested. The applicant does not believe surface trenching is warranted and asks only for financial assistance in the drilling of about 690 feet of diamond drill holes at a cost of $5,520.00, and, if the extension of the mineralized zone is proved, to drive a 400-foot adit at a cost of $18,000.00.

Mr. Bailey and I concur with the examining engineer's conclusions.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

Sub. Field Team Rpt.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

gcl
6/24/53

SUPPLEMENTAL REPORT

DMEA-2820, Knowles Bros. Tungsten Claims

(Garnet Tungsten)

Elko County, Nevada

W. T. Benson, Mining Engineer
U. S. Bureau of Mines

May 27, 1953

SUPPLEMENTAL REPORT

Docket No.: DMEA-2820 (Tungsten)

Name and address of applicant: Garnet Tungsten Mining Co.,
Harold Culp, lessee
Mountain City, Nevada

Name and location of property: Knowles Bros. Tungsten Claims
(Garnet Tungsten)
Elko County, Nevada

At the request of the Executive Officer, DMEA Field Team, Region III, the property of the Garnet Tungsten Mining Co., Elko County, Nevada, Docket No. DMEA-2820 (Tungsten) was visited during the period April 29 to May 1, 1953, by an engineer[1] of the Bureau of Mines accompanied by Harold Culp, one of the lessees of the property, who now resides in Mountain City, Nev.

Purpose of the visit was to discuss with Mr. Culp the exploratory phases suggested by Mr. Smith and Mr. Bailey which was forwarded by Mr. Miller to Mr. George C. Selfridge, Chairman, Operating Committee under date of March 30, 1953.

As outlined in the letter, Mr. Smith and Mr. Bailey suggest that No. 2 and No. 3 ore bodies be further explored by surface trenching. This phase of the proposed exploratory work is not acceptable to the company since some trenching has already been done in those areas and they feel that the cost of additional trenching would not be commensurate with results that might be obtained.

Since submitting the loan request, the company has completed 303 feet of drifts and crosscuts in the southeast portion of the

1/ W. T. Benson.

No. 1 ore body. This work has disclosed a mineralized section 160 feet long and 60 feet thick, where exposed in the two crosscuts (see Plan Map). Diamond drill hole No. 9, bearing N. 45° E., at an inclination of -70°, encountered scheelite bearing tactite at a depth of 180 feet, which was more or less persistent to a depth of 377 feet (see section B-B). The inclination of this hole was incorrectly plotted on the section maps previously submitted.

The scheelite-bearing material encountered in this hole indicates that scheelite persists down dip from the elevation of the present workings for a distance of 228 feet.

From the work presently done, an ore body 180 feet long, 60 feet thick, and having a slope depth of 228 feet is indicated. Providing a tonnage factor of 11 cubic feet per ton is used, a block of this size would contain approximately 223,800 tons, which according to Mr. Culp, who reduced a 700-pound sample of dump material, taken from the underground workings, assayed 0.5 percent WO_3.

For the purpose of checking, three samples were taken from underground openings and one from the dump. Their locations are shown on the plan map. The assay results were as follows:

Sample/No.	Width/Feet	%,WO_3	Description
1568	32	0.52	Chip alongside of crosscut.
1569	20	0.27	Chip alongside of crosscut.
1570	5	0.18	Cut across face southeast drift.
1571		0.49	Grab sample of dump.

The results of sampling are in close agreement with the average assay of 0.5 percent WO_3, submitted by the company. The weighted

assay value of the underground samples average 0.40 percent WO_3 compared to 0.49 percent WO_3 which was obtained by sampling the dump.

Judging from these results and those of the company, it is safe to assume the mineralized section outlined in the underground workings approximates a grade of 0.5 percent WO_3.

Scheelite mineralization, determined by lamping with a mineral light appears to increase away from the aplite dike which is evidenced on surface and underground near the portal of the crosscut adit.

Since a sizeable block of ore is indicated, it is felt that additional work should be done in this area to prove lateral and downward continuations of this section rather than expending time, effort, and money in attempting to explore outlying sections which are evidenced by outcrops and have been partially exposed by surface trenching.

New work proposed includes diamond drilling and the driving of a 400 foot adit to explore for the continuation of the ore body adjacent to the mine workings and its extension in a northwest direction.

Adjacent to the workings, three holes are proposed (see plan map). Holes C and D would explore the altered zone in a northeast direction. Present plans are that the face of the southeast drift will be extended an additional 40 feet to intersect a granite rib. Hole F from this point would explore for a continuation of the mineralized zone beyond the granite rib in a southeast direction. Core drilling in this area would require 270 feet.

Hole F would probably be all in granite

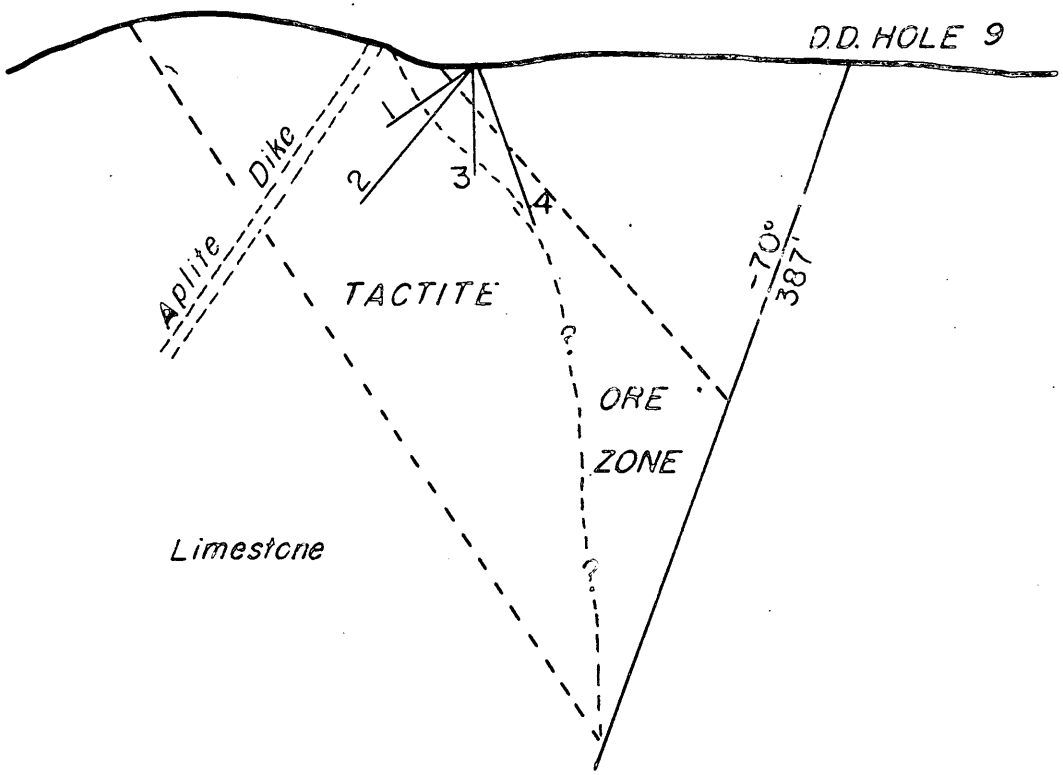
To determine the approximate location of the 400-foot adit, two drill holes A and B are proposed for the purpose of locating the continuation of the mineralized zone in a northwest direction. Should these holes prove the extension of the mineralized zone, then the direction of the proposed 400-foot adit could be determined.

To complete the preliminary phase of the proposed program, about 690 feet of drilling would be necessary at a total cost of $5,520.00, assuming the work could be done on a unit basis of $8.00 per foot.

As estimated in the original proposal, drifting costs for 400 feet of work would approximate $45.00 per foot or a total of $18,000.

For the two phases of the proposed new work, the cost would then approximate $23,520. The Government participation at 75 percent would amount to $17,640.00.

The above proposed exploratory program should adequately develop the area in which the company is primarily interested and should supply sufficient information to permit future company planning to bring the property under production.

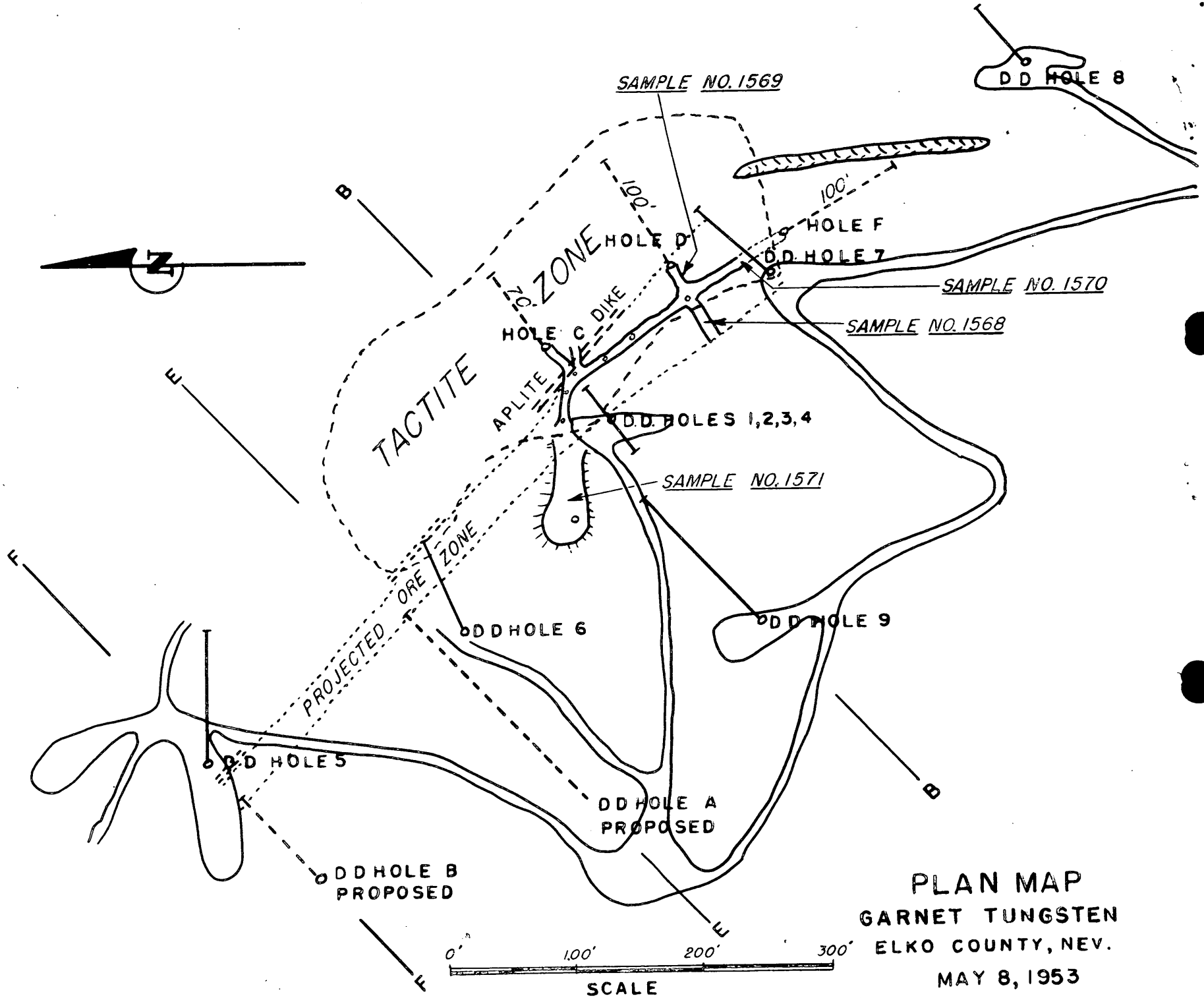


Section B-B

GARNET TUNGSTEN

Elko County, Nevada

Scale: 1" = 100' May 8, 1953


SAMPLE NO. 1569
DD HOLE 8
B
100'
100'
HOLE D
HOLE F
DD HOLE 7
SAMPLE NO. 1570
SAMPLE NO. 1568
70'
ZONE
TACTITE
HOLE C
DIKE
APLITE
E
DD HOLES 1,2,3,4
SAMPLE NO. 1571
F
PROJECTED ORE ZONE
DD HOLE 6
DD HOLE 9
DD HOLE 5
DD HOLE A
PROPOSED
B
DD HOLE B
PROPOSED
E
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0'
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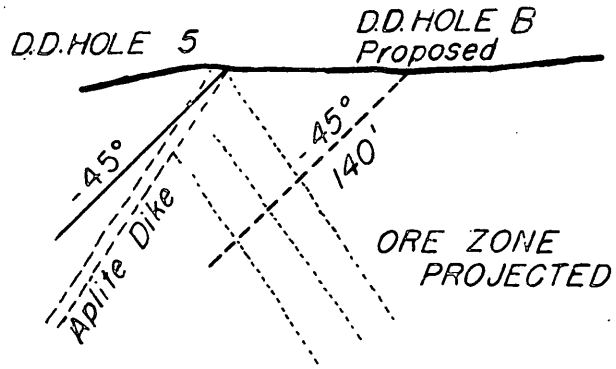
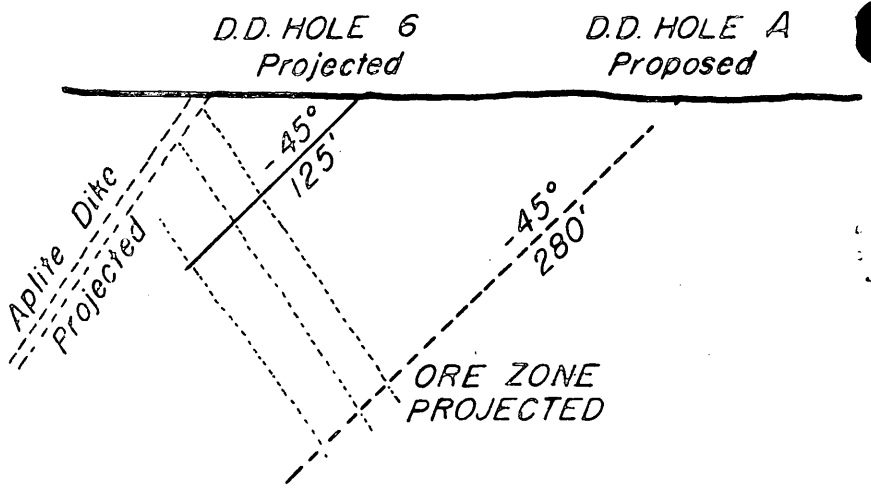
300'
SCALE
PLAN MAP
GARNET TUNGSTEN
ELKO COUNTY, NEV.
MAY 8, 1953



Section F - F



Section E - E

GARNET TUNGSTEN

Elko County, NEVADA

Scale: 1" = 100' May 8, 1953

400

COPY

MINING AND INDUSTRIAL NEWS

MAY 1953

Extract from page 12:

Plans are under way for construction of a mill adjacent to tungsten property 18 miles east of Mountain City, Elko County, Nev., by Garnet Tungsten Mine Co., Inc., L. D. Wilson, president. The company has taken a lease and option to purchase the property, which they have been working since last July, from Knowles Bros. and Price (Turk) Montrose, and with Knowles Bros. equipment considerable diamond drilling and other surface work has been done. A tunnel is in about 200 feet and open pit work will also be undertaken. The property consists of 26 claims adjoining property now owned and operated by Montrose Bros. Mill construction and metallurgy will be in charge of the Galigher Co. of Salt Lake City.

Other officers of Garnet Tungsten firm are Ray E. Summers, vice president and Harold Culp, secretary-treasurer.

C
O
P
Y

Excerpt from
The Western Mineral Survey
Salt Lake City, Utah
April 24, 1953

DEAL MADE ON TUNGSTEN NEAR ELKO

The Garnet Tungsten Mine Co., Inc., has taken a lease and option to purchase on the Knowles Bros. - Price "Turk" Montrose tungsten property, 18 miles east of Mountain City, the Elko Free Press announced recently. Early construction of a mill is contemplated.

L. D. Wilson, president of the corporation, Ray E. Summers, vice president, and Harold Culp, secretary and treasurer, were in Elko recently conferring with their attorney, A. L. Puccinelli, on various details concerning the deal.

They report that they have been working on the property since last July and a great deal of development has taken place since that time. Considerable diamond drilling and other surface work has been done with Knowles Bros. equipment. Four men are on the job currently and a tunnel is in 200 feet. The ore bodies are extended 700 feet long in one place and from 12 to 80 feet wide. There will be open-pit work on the property and plans are under way for the construction of a mill near the property, where there is plenty of water.

There are 26 claims on the property and it adjoins that owned and operated by the Montrose Bros. Attorney Puccinelli said that the government has agreed to purchase tungsten from the corporation, once production is under way.

The Galigher Co. of Salt Lake City will be in charge of the mill construction and metallurgy work the officers of the operation reported, according to the Elko Free Press. Mr. Culp is a geologist and has resided at Mountain City. Mr. Wilson and Mr. Summers are from Oregon, where they have other mining interests.

FILE COPY
SURNAME:

F.E. Johnson

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

Mr. A. L. Puccinelli
Attorney-at-Law
P. O. Box 1066
Elko, Nevada

APR 15 1953

Re: Docket No. DMEA-2820 (Tungsten)
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada

J.C. 4/15/53

Dear Mr. Puccinelli:

This will acknowledge receipt of your letter of April 8, 1953, inquiring about the status of the subject application.

Your letter crossed in the mail our letter of April 14 to Mr. H. C. Miller, Executive Officer of our Field Team, requesting that he have a Field Team representative discuss the proposed program of the Garnet Tungsten Mining Company with the applicant and prepare the necessary cost data for our consideration.

Undoubtedly, the Field Team will contact the applicant very shortly, if they have not done so already.

Sincerely yours,

C. O. Mittenderf (for)
Administrator

WSMartin/FEJohnson/ls/bih
4/15/53
cc to: Docket
Admr. Reading File
Region III
Messrs. D.M.Lemmon USGS
R.W.Geehan USBM
W.S.Martin
F.E.Johnson

400

FILE COPY
SURNAME:

Martin

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

Mr. A. L. Puccinelli
Attorney-at-Law
P. O. Box 1066
Elko, Nevada

Re: Docket No. DMRA 2820, Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada

Dear Mr. Puccinelli:

This will acknowledge receipt of your letter of April 8, 1953, inquiring about the status of the subject application.

Your letter crossed in the mail our letter of April 14 to Mr. H. C. Miller, Executive Officerof our Field Team, requesting that he have a Field Team representative discuss the proposed program of the Garnet Tungsten Mining Company with the applicant and prepare the necessary cost data for our consideration. As you are no doubt aware, the field examination in this instance was made prior to the date of the subject application. In correspondence with our Field Team we have discussed the proposed program at some length.

Sincerely yours,

Administrator

WSMartin/ls 4/14/53

Copy to: Docket
Field Team, Reg. 3
Code 400
Admr. Read. File
D. M. Lemmon, USGS
R. W. Geehan, USBM

400 FILE COPY
SURNAME:

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

Rutledge
Martin
Selfridge
Mustachio

Air Mail

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

APR 1 4 1953

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada

J. C. 4/14/53

Dear Mr. Miller:

This will acknowledge your letter of March 30, 1953, proposing an alternate exploration program at the referenced property. The suggested program consists of two stages: Stage I - surface trenching and sampling and Stage II - underground exploration by means of a 400-foot adit.

It will be appreciated if you will have a field team representative discuss the proposed new program with the applicant and prepare the necessary cost data for our consideration.

Sincerely yours,

Chairman, Operating Committee (JHB)

Approved:

Member, Bureau of Mines (JHB)

Member, Geological Survey (JHB)

cc: Docket
Field Team, Region 3
Code 400
Operating Committee
Admn. Read. File
R. W. Geehan, USBM
D. M. Lemmon, USGS

FARutledge/hhb
4/9/53

P. O. BOX 1066

Docket

PHONE 1111

A. L. Puccinelli
ATTORNEY-AT-LAW
TABER BUILDING
ELKO, NEVADA

April 8, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 13 1953

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

Subject: DMEA-2820

Attention: Robert E. Adams, Chief Operation's Control and Statistics Division.

Dear Sir:

On December 23, 1953, Mr. R. E. Summers of the Garnet Tungsten Mining Co., Inc. of Mountain City, Nevada, received your letter advising him that his application had been assigned Docket No. DMEA-2820, and had been referred to the Iron and Ferro-Alloys Division,

Considerable time has passed since we have received any additional information concerning the application. The work undertaken by the company has advanced to such stages that it now becomes very important to the future explorations to know what disposition has been made of their application.

I appreciate that you are very much occupied withmany similar matters, and applications, but I would appreciate your giving their application the earliest possible attention and thereafter advise us as to what we may expect concerning the outcome of said application.

Sincerely hoping that I receive a very early reply and thanking you in advance, I am,

Very truly yours,

A. L. Puccinelli

A. L. PUCCINELLI rd
Attorney at Law

ALP:rd

(1/2) Dec 31 - To F.T. to examine
(2/16) 2/23 - F.T. recommended 4-stage program
(3/19) 3/18 - We refer alternate plan to F.T. to consider
(3/30) 4/7 - F.T. gives us comments
(4/14) 4/9 - We asked F.T. to prepare necessary cost data.
L.S.

Docket.

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

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

March 30, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

WSM

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 - Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims, Elko County, Nevada

Reference is made to your subject letter dated March 19, 1953, in which you outlined an alternative program of exploration for the Field Team's consideration and comments.

Mr. Roscoe Smith, of the Geological Survey, Salt Lake City, who was one of the three men who examined the Garnet Tungsten property on October 30-31, 1952, was in my office on March 24 when your letter arrived. This made it possible for Mr. Bailey and me to get first-hand information on the property and to comment on the proposed alternative program with assurance that our comments were based on facts.

Mr. Smith reported that trenching of the outcrops was considered at the time the examination was made, but due to the rugged nature of the outcrops and the hard rock, it was decided that trenching was not feasible or practicable and would cost about the same as crosscutting underground.

The trenches would have to be made by drilling and blasting, as bulldozers could not be used. The cost of surface trenches was considered as being not much less than underground drifting; therefore, underground work was recommended. ?

Nevertheless, surface trenching by blasting and shooting would be a good way to determine the grade and extent of the outcrops. Sufficient funds, however, should be allowed for the work because, as stated above, the job is not one that can be done by a bulldozer.

No surface trenching is needed at the southeast end of the No. 1 ore body, as the applicant is now carrying on underground work

in that area. About three trenches across the rest of the ore body would be advisable.

Mr. Smith and Mr. Bailey believe it advisable also to trench No. 2 ore body and to have one of the trenches at the northern end of the most northerly isolated cross-hatch area of the No. 2 ore body. (See Figure 2 accompanying the Gentry-Smith & Laub report on the Knowles Bros. Tungsten claims, dated January 27, 1953.) This trench would trend approximately east-west and would indicate where the tactite is cut off by granite.

Three trenches in the No. 3 ore body also are recommended by Smith and Bailey. Their location as spotted by Smith and Bailey on Figure 2 is approximately as follows: one trench across the eastern of the two cross-hatched areas of ore body No. 3 at its widest part, about one-quarter inch on the map south of line C-C'; another trench running east-west across the northern tip of the ore body, and the third across the other ore body at a position about mid-way on the map between line C-C' and line E-E'.

If the results of the surface samples and those taken from the Operator's underground workings in the southwest area of ore body No. 1 are encouraging, the 400-foot drift you suggest should then be run as Stage II of the overall operation. We believe, however, that if a contract is drawn up it should give the Operator the option of starting the drift at a lower elevation; in other words, at the bulldoze site which was prepared for diamond drill hole No. 5. From that site a 400 drift would be adequate exploration as the southeast end of the No. 1 ore body will soon be explored by the work that the Operator is now doing.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

400

FILE COPY
SURNAME:

Rutledge
Martin
Guyon
Selfridge

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

3/19/53

MAR 19 1953

Air Mail

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

(Date)

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada

Dear Mr. Miller:

Reference is made to the subject docket and the January 27, 1953, report of examination by the Field Team.

We believe the property merits further investigation, but that more complete surface exploration and sampling are in order before extensive underground workings are driven. This is especially true because the backs to be developed are small in comparison with the total footages of underground workings.

An alternative program of exploration is outlined for the Field Team's consideration and comments.

1. Trench deposits 1 and 2 with trenches on 100 to 150 foot centers. The trenches to be excavated several feet into the unaltered rock. Channel sample the trenches.

2. If the results of the trenching and sampling program warrant additional exploration, an underground exploration program of drifting and crosscutting shall be carried out on the better of the two deposits, preferably deposit No. 1.

   Underground exploration at deposit No. 1 to consist of a 400-foot drift starting near the northwest corner of the deposit. With two 100-foot crosscuts at 100 and 300 feet, this would explore the deposit more adequately than the shallower drifts and crosscuts now proposed.

For your information we are enclosing two copies of each of the following memoranda, which were prepared by the

commodity divisions of the U. S. Geological Survey and the U. S. Bureau of Mines.

1. By M. D. Crittenden, USGS, December 29, 1952

2. By D. M. Lemmon, USGS, March 11, 1953

3. By R. W. Geehan, USBM, March 16, 1953

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)

J.C. 3/19/53

Enclosures

Approved:

Jo H. Wedgen (JB)

Member, Bureau of Mines

D. M. Lemmon (JB)

Member, Geological Survey

cc: Docket
Field Team, Region 3
Operating Committee
Admn. Read. File
Code 400
R. W. Geehan, USBM
D. M. Lemmon, USGS

FARutledge/hhb
3/17/53

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

March 16, 1953

Memorandum

To: W. S. Martin, DMEA

From: R. W. Geehan

Subject: DMEA 2820 - Garnet Tungsten Mining Co., Elko Co., Nev.

Proposal: (Field Team)

Stage 1 - 450 feet, drifts and crosscuts
Stage 2 - 450 feet, drifts.

GENERAL: The work proposed is logical and appears to be justified by the report. As two ore bodies are under consideration, stage 2 may be modified if stage 1 locates ore at only one of these.

I am unable to determine from the map why the crosscuts at ore body No. 1 are to be driven N 35° E and the crosscut adit on the same ore body is to be driven E. It would appear from the map that N 45° E is the direction of the line that would give the most information with the least work. However, there may be information available to the Field Team that is not on the map. There is no information given to support the statement that the crosscut from the present adit will hit granite in 125 feet, and the contract should be worded so as to allow a greater length if geological conditions favor additional work.

RECOMMENDATION:

A contract along the lines suggested in the February 16 letter from H. C. Miller should be approved.

Robert W. Geehan

Robert W. Geehan

Copy retained HW

IN REPLY REFER TO:

G-MD-CF

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

March 11, 1953

Memorandum

WSM

To: W. S. Martin, DMEA

From: D. M. Lemmon, USGS

Subject: Field Report
Garnet Tungsten Mining Company
(Knowles Brothers Claims)
Elko County, Nevada

DMEA-2820
Tungsten

I have reviewed the field report by G. G. Gentry of the Bureau of Mines, and R. M. Smith and D. C. Laub of the Geological Survey, dated January 27, 1953, and the recommendation by Miller and Bailey in Mr. Miller's memorandum of February 16th.

Gentry et al recommend a 4-stage program costing $59,000 and involving 850 feet of tunnelling in 4 adits, 200 feet of raising and 2,000 feet of diamond drilling. Mr. Miller recommends a smaller project, in 2 stages, consisting of a total of 900 feet of drifts and crosscuts in 3 adits. The maximum depth beneath the outcrop would be about 80 feet in ore body No. 1 and 40 feet in ore body No. 2.

The objectives of the work are (1) to determine the distribution and content of scheelite in the tactite, and (2) to determine the quantity of scheelite-bearing rock. It is questionable whether either of the proposed programs will accomplish these objectives. The outcrop exposures of mineralized rock are larger than any exposures that can be made by underground exploration short of mining the entire body of tactite. Therefore, careful systematic sampling of the outcrops will give the best information about content and distribution of WO_3.

A careful study of the outcrops in ultraviolet light and preparation of a map showing distribution of scheelite, followed by thorough sampling, should precede underground work. If underground exploration is then to be done through drifts and crosscuts, the work should be located to give the most information about tonnage and grade. If surface sampling shows that the southwestern part of the tactite in ore body No. 1 is of better grade than the rest, it may be possible to drift on the better material starting at the low end of the outcrop,

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and to do a minimum of crosscutting. A drift 400 feet long with 100-foot crosscuts at 200 and 400 feet would explore more ground than the shallower crosscuts that are ~~exposed~~ proposed.

The proposed work in ore body No. 2 is at a depth of only about 40 feet. Inasmuch as attainment of greater depth requires a relatively long crosscut in barren wall rock, I suggest that systematic core drilling to a depth of 200 feet should be done before any underground work is considered.

These conclusions are reached from sketchy information as to overburden and distribution of WO_3. My remembrance of a very brief tour of the deposits in 1951 is that the exposures in the tactite areas shown on the map are fair. The field report mentions considerable slope wash. I have not examined the outcrops in ultraviolet light and my concept that the scheelite is probably not evenly distributed may be erroneous.

I suggest that Mr. Miller be consulted further before any decision is reached about this exploration application. From the field team report, it appears that exploration is justified with the hope of finding a moderate tonnage containing 0.3 to 0.4 percent WO_3.

D. M. Lemmon

D. M. Lemmon

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

2/2/3

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 20 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

February 16, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2820 (Tungsten), Garnet Tungsten Mining Company, Garnet #1 and Garnet #2 Claims, Elko County, Nevada

Reference is made to the letter, dated January 2, from Frank E. Johnson, requesting that certain parts of the subject application be more clearly defined.

Attached are four copies of a report DMEA-2820, Knowles Bros., Tungsten Claims, (Garnet Tungsten), Elko County, Nevada, by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and R. M. Smith and D. C. Laub, Geologists, U. S. Geological Survey, dated January 27, 1953.

The examining engineer and geologists believe that a loan is warranted to conduct exploration on the subject property. They have modified the exploration that was requested by the Applicant and have recommended that the exploratory work be conducted in four stages comprising drifting, crosscutting, raising, and diamond drilling at an estimated cost of approximately $59,000.00.

Mr. Bailey and I discussed the report with Mr. A. C. Johnson when he was in the office recently, and it was tentatively agreed at that time that we would recommend diamond drilling the property in place of carrying out underground exploration. However, when Mr. Bailey got in touch with R. M. Smith, who is one of the geologists that made the examination, it was learned that Mr. Smith and Mr. Gentry had considered diamond drilling as an alternate means of exploration and finally had rejected the idea as they believe the distribution of scheelite so erratic that data obtained from drill cores would be unreliable.

As mentioned, the examining enginner and geologist recommend a four-stage exploration project. Mr. Bailey and I have studied their recommendations and believe that a project involving only two stages

Cleared OC 2/27/53

with the second stage depending upon the results of the first stage would be better. Also we do not believe that requests for funds to explore beyond Stage I and Stage II of the report should be made a part of the first contract.

Inasmuch as the south 45-degree east adit marked "present? workings" on the map, Figure 2, already has been driven, we propose that Stage I consist of the following: (1) For Number 1 orebody, drive a crosscut from a favorable location in the south 45-degree east adit marked "present? workings" on Figure 2 in a north 35-degree east direction clear through the orebody to the granite, a distance of about 125 feet; (2) crosscut the northern part of orebody Number 1 by an adit running due east from a portal at an elevation of 7535 feet to the granite, a distance of about 200 feet. This proposed work is that shown on the map, Figure 2.

For orebody No. 2, we recommend crosscutting at an elevation of 8155 feet, a distance of about 125 feet in a north 50-degree east direction to the granite.

Accordingly, total footage under Stage I amounts to 450 feet.

If Stage I is successful, Stage II should then be carried out. Stage II is to consist of the following: (1) For orebody No. 1, drift at a favorable location southeast from the adit driven under Stage I at an elevation of 7535 feet to a point beneath any ore found in the upper adit crosscut (elevation 7700 feet), a distance of about 150 feet; (2) for orebody No. 2, drift northwest 150 feet and southeast 150 feet from any ore found in the crosscut driven in the Stage I.

Total footage, Stage II, 450 feet.

In the itemization of equipment to be furnished by the Operator, we note that the per foot depreciation figure of $2.58 includes a figure for depreciation of office, storage and change room of $25.00 a month, which we believe should not be allowed. We question also the allowance for depreciation of office equipment.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2820, Knowles Bros. Tungsten Claims

(Garnet Tungsten)

Elko County, Nev.

Glenn G. Gentry, Mining Engineer
U. S. Bureau of Mines

R. M. Smith, Geologist
D. C. Laub, Geologist
U. S. Geological Survey

January 27, 1953

Docket No.: DMEA-2820 (tungsten)

Name and address of applicant: L. D. Wilson, Ray E. Summers and Harold Culp, John Day, Oregon

Name and location of property: Knowles Bros. Tungsten Claims also known as Garnet Tungsten Mining Co., Mountain City, Elko Co., Nev.

gdl 3/18/53

SUMMARY

Pursuant to a letter from Mr. Frank E. Johnson, Chairman, Operating Committee, addressed to Mr. H. C. Miller, Executive Officer, Region III, the Knowles Bros. tungsten mining claims, also known as the Garnet tungsten mine, were examined on October 30 and 31, 1952 by an engineer[1/] of the Bureau of Mines, Region III and geologists[2/] of the U. S. Geological Survey.

At the time of the examination no application had been presented to the Defense Minerals Exploration Administration for Government assistance, however, it was believed that such an application was under consideration by the lessees of the property.

The examination, sampling and mapping was done at this time inasmuch as the engineers were in the immediate vicinity and time and money would be saved. The second reason was that it was considered advisable to secure all information possible before the winter storms begin which would probably preclude further surface examination until late in the spring of 1953.

The examining engineers were informed that Messrs. L. D. Wilson, Ray E. Summers and Harold Culp of John Day, Ore., have secured a lease on the Knowles Bros. mining claims. The lease is for a period of 18

1/ Glenn G. Gentry,
2/ R. M. Smith and D. C. Laub.

years. The three lessees accompanied the engineers during the examination and the night inspection by mineralight.

The lessees have secured the necessary forms and stated they expect to prepare a formal application for Government exploration assistance in the near future.

The lessees tentatively discussed a rather vague exploration of the Western exposure of scheelite bearing tactite by means of an adit 200 feet in length and various crosscuts of undetermined length.

The field team has estimated approximately 14,000 tons of indicated ore and approximately 14,000 tons of inferred ore which has a weighted average of 0.29%, WO_3. There is a reasonable chance that additional exploration will reveal reserves much greater than it is now possible to infer.

The field team recommends a four stage exploration program of drifting, crosscutting, raising and diamond drilling at an estimated cost of approximatly $59,000.00.

In a letter dated Dec. 22, 1952, Mr. Harold Culp has stated that a crosscut has been extended for a distance of 70 feet under the exposure designated as ORE BODY No. 1. This crosscut is reported to have encountered one band of tungsten ore 6 feet in width which is estimated by mineralight to contain approximately 0.50% to 0.60%, WO_3. Mr. Culp further states that "Quite a lot more of the tactite exposure is estimated to contain approximately 0.20%, WO_3."

The application from L. D. Wilson, Ray E. Summers and Harold Culp, for Government assistance in exploring the Garnet Tungsten

Mining claims (formerly known as the Knowles Bros. property) was received on January 7, 1953.

The exploration program proposed by the applicants has been modified by the field team.

CONCLUSIONS

The scheelite minerals appear to be concentrated in bands of varying widths and were observed over a large area.

Two surface exposures of tactite seem to justify further exploration:

1. The West exposure located near the bottom of the hill and designated as ORE BODY No. 1 on the map (fig. 2).

2. The Southeast exposure located near the top of the hill and designated ORE BODY No. 2 on the map (fig. 2).

The engineers have concluded that the best area to explore would be the No. 1 ore body, for the following reasons:

1. A bulldozer cut has been made by the lessees closely adjacent to the exposure. This cut has exposed a portion of the tactite and would save time and money in preparing another location for the adit or for a crosscut.

   The area is accessible by present roads.

2. This location would be much more practical for work during the winter months as snow conditions would probably close the road leading to the No. 2 ore body.

3. Inspection of the two ore bodies by mineralight indicated approximately the same quantity and quality of the scheelite mineralization in the tactite.

4. Considerable new roads would have to be constructed to reach the No. 2 orebody.

RECOMMENDATIONS

The examining engineers recommend that the No. 1 orebody be explored by driving an adit in a southeasterly direction for a length of 150 feet. From suitable locations off this adit, drive two crosscuts in a northeasterly direction for a length of 100 feet each. The longitudinal distance between the two crosscuts to be approximately 100 feet. This exploration is adjacent to the area designated as "Present Workings" (fig. 2).

Additional exploration of the No. 1 orebody is recommended by driving a crosscut in an easterly direction, elevation 7,535 feet, to crosscut the northeast end of the exposure for a distance of 200 feet.

Resume of costs:

Adit - 150 feet @ $45.00/ft	$ 6,750.00
Crosscutting - 400 feet @ $45.00 . . .	18,000.00
	$24,750.00

It is further recommended that the contract be written on a footage or unit basis and that the lessees furnish all necessary equipment and supplies. It is estimated the above work could be completed in 118 working days.

If the above exploration is successful, then a second stage is recommended for the exploration of orebody No. 2, situated at the southeast end of the property (fig. 2). This work is to consist of:

1. Crosscut the northeast end of the exposure at elevation 8,155 feet for a distance of 125 feet.

2. At about the center of the exposure, drift southeast for a distance of 100 feet.

3. At the southeast end of drift, b, crosscut the formation in an easterly and westerly direction for a total distance of 75 feet.

Resume of costs:

Crosscutting - 200 feet @ $45.00/ft.	$ 9,000.00
Drifting - 100 feet @ $45.00/ft.	4,500.00
	$13,500.00

It is estimated that the above work could be completed in 118 working days.

Total costs:	Stage 1	$24,750.00
	Stage 2	13,500.00
		$38,250.00

Government participation @ 75% = $28,687.50

In addition to the exploration of Stage 1 and Stage 2, provision should be allowed in order to further explore orebodies No. 1 and 2 and other favorable exposures by means of crosscuts, drifts, raises, winzes or diamond drilling. These phases of exploration would not be undertaken unless Stages No. 1 and 2 were successful and the location of such work would be determined by prior exploration. If the proposed exploratory work is successful in exposing tungsten ore, then provision should be made for:

200 feet of raising @ $40.00/ft	$ 8,000.00
2,000 feet of diamond drilling @ $6.00/ft.	$12,000.00

The location of the additional work, described as above, and the advisability of the exploration, is dependent upon the results obtained from Phase 1 and Phase 2.

The exact lengths of the proposed crosscuts and drifts are estimated as the maximums to be expected. The program should be sufficiently flexible to allow necessary changes as evidenced by rock formations

encountered.

Any such changes, additions, or alterations of the proposed exploration program should be made only after due consideration and mutual agreement between the applicant and representatives of the DMEA.

The applicant could probably utilize the services and equipment of the contractors who are presently engaged in exploring orebody No.1. Sufficient and adequate equipment is on hand (owned by the contractors) to complete the job. Therefore, no additional equipment purchases should be necessary and the construction of additional housing is not required.

The location of the proposed adits should be mutually agreed upon by the applicant and Government prior to starting the work. The location of the various crosscuts should also be determined by the field team after detailed study of the formations developed by the adit levels.

The applicant's consulting engineer should devote his entire time to the project and furnish adequate maps, reports and also take sufficient samples of the ore exposures to assist the field team in further evaluation of the property.

DETAILED COST ESTIMATE

Personnel:

		Per day
1	Mine Engr., Supt. @ $600.00/mo.	20.00
1	Cook @ $300.00/mo.	10.00
4	Miners @ $15.00/ea.	60.00
2	Trammers @ $14.00/ea.	28.00
2	Outside men (misc. helpers)@ $13.00 ea. . .	26.00
10		$144.00
	Add 15.2% insurance	21.89
	Total labor	$165.89

Labor @ 7 feet advance per day . . . . . $ 23.70/ft.

Drifting and crosscutting - total 825 feet.
5-day week, advance 7 feet per day = 118 days = 4.5 months.
(Note: Allow 1.5 months additional time due to isolation of mine, weather and road conditions).

	Per foot
Supervision, labor, insurance	$23.70
Powder, caps and fuse	3.65
Timber - wedges	1.00
Compressor supplies	2.00
Steel and bits	2.00
Repairs	1.50
Lubricating oils and greases	.50
Installing mine track and ties	.50
Installing air and water lines	.50
Assaying.	.43
Transportation (supplies to camp, etc.)	1.50
Monthly rental of equipment	2.58
	$39.86
Add 13% for delays in progress, rock conditions, increased costs of labor and supplies.	5.17
	$45.03

Total cost of project	$38,250.00
Government participation @ 75%	28,687.50

The operator will furnish all equipment.

Compressor	$ 2,500.00
one? → Drifter drill, column, arm, etc.	750.00
Air and water hoses.	100.00
Water Pressure tank.	50.00
Mine rail, spikes, fish plates, bolts . . .	1,000.00
Air lines	160.00
Water line	90.00
Mine cars	600.00
Truck, 4-wheel drive (2nd hand)	2,000.00
Pick-up truck	1,875.00
Tools	300.00
Building for office and storage, change room	1,500.00
Mucking machine	3,500.00
Battery charging generator	250.00
Vent tube	375.00
Gas engine and blower	500.00
Battery type locomotive	5,000.00
Office equipment	800.00
	$21,300.00

$\frac{\$21,300.00}{60}$ = $355.00 per month - 6 months = $2,130 = $2.58/ft.

GEOLOGY

The rocks in the area are thin-bedded limestone and shale of Paleozoic age that have been intruded by a granodiorite stock. Both the granodiorite and the sedimentary rocks are cut by aplite dikes from 5 to 200 feet wide, and quartz veins as much as 8 inches wide that strike northwest and dip steeply northeast. The limestone and shale have an average strike of N. 50° W. and dip 50°-60° SW.

At some places, near aplite dikes, the limestone has been metamorphosed to tactite and the shale to hornfels. Locally, scheelite has been introduced into the tactite and to a limited extent into some of the quartz veins.

ORE DEPOSITS

The scheelite occurs in two or more layers of tactite that are separated by barren hornfels (fig. 2). Scheelite is distributed along bedding planes, in garnet and epidote seams, and is also disseminated throughout several tactite layers. The tactite is largely covered by slope wash and crops out sporadically along the strike and down the dip.

SAMPLING

Sample No.	Length of sample feet	Percent WO_3	Percent Mo	Ounces/Ton Au	Ounces/Ton Ag	Description
BM-424	16	0.45	0.02	Tr.	Tr.	Chip sample of exposure of tactite 32 feet in width.
BM-425	10	0.37	0.01*	Tr.	Tr.	East bank of bulldozer cut 75 feet north of BM-424.
BM-426	16	0.19	0.01	Tr.	Tr.	Southeast bank of bulldozer cut on west slope of hill.
BM-427	10.6	*0.01	0.01	Tr.	Tr.	North end of east bank of bulldozer cut; wide exposure of tactite.
BM-428	7.0	0.13	0.01*	Tr.	Tr.	East bank of bulldozer cut near center line of proposed adit.
BM-429	7.8	0.42	0.01	Tr.	Tr.	Tactite exposure in bulldozer cut 75 feet east of BM-428.
BM-430	15	0.21	0.01*	Tr.	Tr.	Surface exposure; bold outcrop of tactite and quartz, N.20°W; 100 feet from BM-429.
BM-431	10	0.05	0.01*	Tr.	Tr.	At south end of BM-428.
BM-432	14	0.53	0.03	Tr.	Tr.	Surface exposure at approximate location of portal of proposed adit. N.30°E. - 100 feet from BM-431.
BM-433		0.42	0.02	Tr.	Tr.	General chip sample of surface exposure; 6 feet wide at bottom of hill. N. 60° E. - 150 feet from BM-432.

*Less than.

Inspection by mineralight indicated that the samples secured were representative of the exposures which had been partially cleared for examination.

The bulldozer cuts had been principally made through the loose overburden and all of the cuts were partially caved and filled to the extent that a fully detailed examination was not possible.

No development or exploration had been done on the greater part of the surface exposures and therefore chip sampling was the only method that could be used.

From the size of the exposures, it is considered that the only accurate means of sampling would be by large quantites which could be crushed to a uniform size and an automatic sample secured.

ORE RESERVES

There are no measured ore reserves at the Knowles property. An indicated reserve of 14,000 tons is exposed in the areas of B-B', C-C', and D-D' (fig. 2) where scheelite-bearing tactite is exposed for 10 feet down dip on the surface, assuming one-fourth of the tactite contains scheelite in minable quantities. An equal amount of ore may be inferred in the block extending an additional 10 feet down dip.

The weighted average of all samples taken was 0.29 percent WO_3.

Indicated ore	-	14,000 tons
Inferred ore	-	14,000 tons
Total	-	28,000 tons

DIAMOND DRILL HOLE DATA

The drilling program conducted by the owners was not properly laid out or efficiently executed. The core boxes are not numbered and the log sheets are incomplete. Three cross sections in the most favorable areas are shown in fig. 4 and were reconstructed from the diamond drill hole data. The diamond drill data are as follows:

DD Hole No.	Bearing	Inclination	Depth in feet	Rock Type
1	N. 53° E.	35°	0-17	Waste[1]
			17-33	Scheelite-bearing tactite
			33-55	Granite
2	N. 53° E.	60°	0-13	Waste
			13-38	Scheelite-bearing tactite
			38-95	Waste
3		90°	0-25	Waste
			25-49	Scheelite-bearing tactite
			49-54	Waste
4	S. 53° W.	70°	0-41	Waste
			41-88	Scheelite-bearing tactite
5	E.	45°	0-57	Waste
			57-58	Scheelite-bearing tactite
			58-125	Waste
6	N. 70° E.	45°	0-78	Waste
			78-90	Scheelite-bearing tactite
			90-125	Several 2-3 feet leads
7	N. 40° E.	50°	0-64	Waste
			64-79	Scheelite and waste
8	N. 40° E.	45°	0-142	Granite
9	N. 45° E.	70°	0-180	Waste
			180-237	Scheelite and waste
			237-377	Scheelite-bearing tactite
			377-387	Limestone
10	N. 40° E.	50°	0-113	Limestone
			113-305	Granite
11	N. 37° E.	50°	0-70	Waste
			70-85	Scheelite-bearing tactite
			85-142	Waste
12	N. 30° E.	50°	0-35	Waste
			35-59	Altered limestone and granite
			59-65	Scheelite-bearing tactite
13	N. 30° E.	50°	0-43	Waste
			43-74	Altered limed granite carrying 6 ft. scheelite

DD Hole No.	Bearing	Inclination	Depth in feet	Rock Type
14	N. 40° E.	45°	0-100	Waste
			100-162	Altered lime and garnet carrying 4 feet scheelite
15	N. 30° E.	45°	0-67	Waste
			67-117	Altered lime & granite carrying 4 feet scheelite
16		40°	0-17	Waste
			17-59	Scheelite-bearing tactite
			59-82	Waste

1/ Tactite, hornfels limestone and granite where not specified.

PROPOSED EXPLORATION

Exploration to date has consisted of diamond drilling and trenching which has not yielded adequate information to delimit the ore blocks. The examining engineer and geologists have proposed a four stage exploratory program. Stage 1 and 2 consists of drifting, crosscutting, raising on orebody No. 1. Stage 3 consists of drifting, crosscutting and raising on orebody No. 2. Stages 1, 2, and 3 would determine the thickness and continuity of the scheelite-bearing tactite and provide access for systematic sampling to establish the average grade of the ore.

Contingent upon the success of stages 1-3, stage 4, consisting of 2,000 feet of diamond drilling down dip and approximately 200 feet of raising on the most favorable beds encountered, would give valuable data on the occurrence and distribution of scheelite at depth.

PROPERTY

The Knowles brothers together with Price Montrose hold 24 mining claims by right of location. These claims are unsurveyed and are reported to be situated in the Alder Mining District.

Mr. Harold Culp, geologist and supervising engineer for the lessees, states that a survey of the 6 or 7 claims covering the best exposures, will be made and a claim map prepared to accompany the application for Government assistance.

LOCATION

The mining property is adjacent to the Montrose Mining Co. and is approximately 18 miles east of Nevada State Highway No. 43 at Wild Horse, Nev.

HISTORY AND DEVELOPMENT

The Knowles brothers and Montrose have prospected the claims by diamond drilling to a depth of 140 feet. Such drill cores that are available were inspected by mineralight by the examining engineers. While the engineers have no personal knowledge of the location of the drill cores inspected, a considerable amount of the said cores showed various concentrations of scheelite, probably varying from 0.1% to 0.75% WO_3.

The present lessees have prospected at various places by means of large bulldozer cuts the majority of which have failed to reach the objectives and therefore have failed to disclose much information. No production has been made from the property.

APPLICANTS

The lessees have had a very limited experience in any type of mining operations and no experience in mining and milling tungsten ores. Mr. Harold Culp, geologist, and one of the lessees expects to supervise the exploration and operations.

The engineers recommend that actual supervision be placed under a competent mining engineer or geologist who is thoroughly familiar with the development of a tungsten mine and the treatment of such ores.

POWER

There is no transmitted electric power available at the site of the proposed exploration work. However, a high tension power line, owned and in use by the Idaho Power Co., is situated approximately 1½ miles northeast of the mining claims. Electric power could probably be obtained when the scale of operations justified the expense.

For the proposed exploration work, the applicants expect to use machinery powered by Diesel or gasoline motors.

WATER

An adequate quantity of water is presently available from a small stream approximately 1,000 feet from the portal of the proposed adit at orebody No. 1. The water would have to be hauled via truck and barrels to the mine. It is considered probable that sufficient water could be developed from this same source for the operation of a milling plant.

MANPOWER - SUPPLIES

A few experienced miners are presently available at Mountain City, Nev., and a moderate quantity of mining supplies may also be obtained in that town.

HOUSING

There are no facilities on the property to house workmen. The few employees required for the exploration program could be accommodated in an adjacent cabin owned by the Montrose brothers.

CLIMATE - ROAD CONDITIONS

The property is situated in an isolated area with altitudes ranging from 7,200 feet to 8,200 feet above sea level. Severe weather conditions and heavy snows are to be expected from November through March.

The roads are unimproved mountain roads having a heavy gradient. Travel over the road from the mine to Nevada State Highway No. 43 will be difficult during the winter and spring months and at times will be impossible.

It would be advisable to maintain sufficient supplies on hand during the winter months to avoid delays and interruptions in the work and inconvenience to the men.

METALLURGY

The lessees contemplate the construction of a suitable milling plant adjacent to the No. 1 orebody where an adequate mill site is available, or the acquisition of the idle Rio Tinto mill at Mountain City, Nev., presently owned by the Anaconda Copper Co. The use of this mill would require hauling the ore a distance of approximately 24.5 miles over an unimproved road that would be difficult and at times impossible to travel during the winter months.

The Rio Tinto mill is equipped with the following machinery:

Traylor, jaw type, primary crusher, about 18 inches by 24 inches, V belt driven by electric motor. (Looks to be in good condition).

Conveyor belt to steel ore bin. (Belt in poor condition. Bin okey).

Short head Symons cone crusher (4-foot). (Looks to be in good condition).

4- by 6-foot vibrating screen. (Fair condition). (New screens on hand).

Conveyor belt to steel ore bin. (Looks to be in good condition).

Marcy ball mill, size 86; no liner plates in mill. Belt driven by 250-horsepower electric motor. (Looks to be in good condition).

Dorr duplex classifier. (Looks to be in good condition).

24 Denver sub "A" flotation cells; iron tank. (Motors and rotors appear okey; the iron tanks are nearly completely worn out and would have to be replaced).

8 Fagregren flotation cells. (Same condition as the Denver sub "A" cells).

2 Belt and bucket elevators. (Fair condition).

1 Oliver filter. (Partially dismantled; would have to be rebuilt or replaced, if used).

3 40-foot thickener tanks, steel tank; located outside plant. (Appear to be in good condition).

The main part of the mill building is approximately 50 feet to 60 feet wide by approximately 150 feet in length; steel beam and post construction, covered with corrugated sheets. All in excellent condition. The construction of the separate crushing plant is the same as the main mill building.

The mill is reported to have had a capacity of 500 tons of crude ore per 24 hours and was closed down in 1947.

An adequate supply of water could be obtained from an old mine shaft adjacent to the mill and the Idaho Power Co. maintain a high tension power line to a transformer station adjacent to the mill.

Electric motors which drive all of the mill machinery are in place and reported to be in good condition.

The main bank of transformers have been removed and would have to be replaced. It will also be necessary to install a water pump in the mine and probably a water line from the pump to the mill.

Several buildings, in good repair, are closely adjacent to the mill, for use as warehouse, shops, office, etc.

Employees could probably live in Mountain City, Nev., about $1\frac{1}{2}$ miles from the mill.

To secure maximum use of this mill it would be necessary to accumulate a large stockpile of ore during the summer months in order to compensate for delays and interruptions in hauling ore during the winters.

The lessees plans for the construction of a milling plant or the possible acquisition of the Rio Tinto mill, are only tentative at this time and cannot be completed until tungsten ore of sufficient quantity and grade has been established by exploration and development.

One sample of ore consisting of approximately 500 pounds, obtained by the lessees from the No. 2 orebody and submitted by them for metallurgical testing, has been treated by means of gravity concentration and flotation by the Hydrometallurgical and Ore Dressing Branch of the U. S. Bureau of Mines, Region III. Copies of this test are made a part of this report. The examining engineers were not present when this sample was secured but an inspection by mineralight would indicate that the sample was probably not representative of the exposure.

The advantages of acquiring the Rio Tinto mill (if acquisition is possible) would be principally in the time saved in construction and installation of necessary machinery. The disadvantages presently considered are the excess capacity of the mill, cost of operating such a large plant and the cost of ore haulage.

The advantages of a mill at the mine would principally be in the lower cost treatment of a lower grade ore. However, in the isolated area of the mine, it will be necessary to supply adequate housing for the men and installation of sufficient power and water.

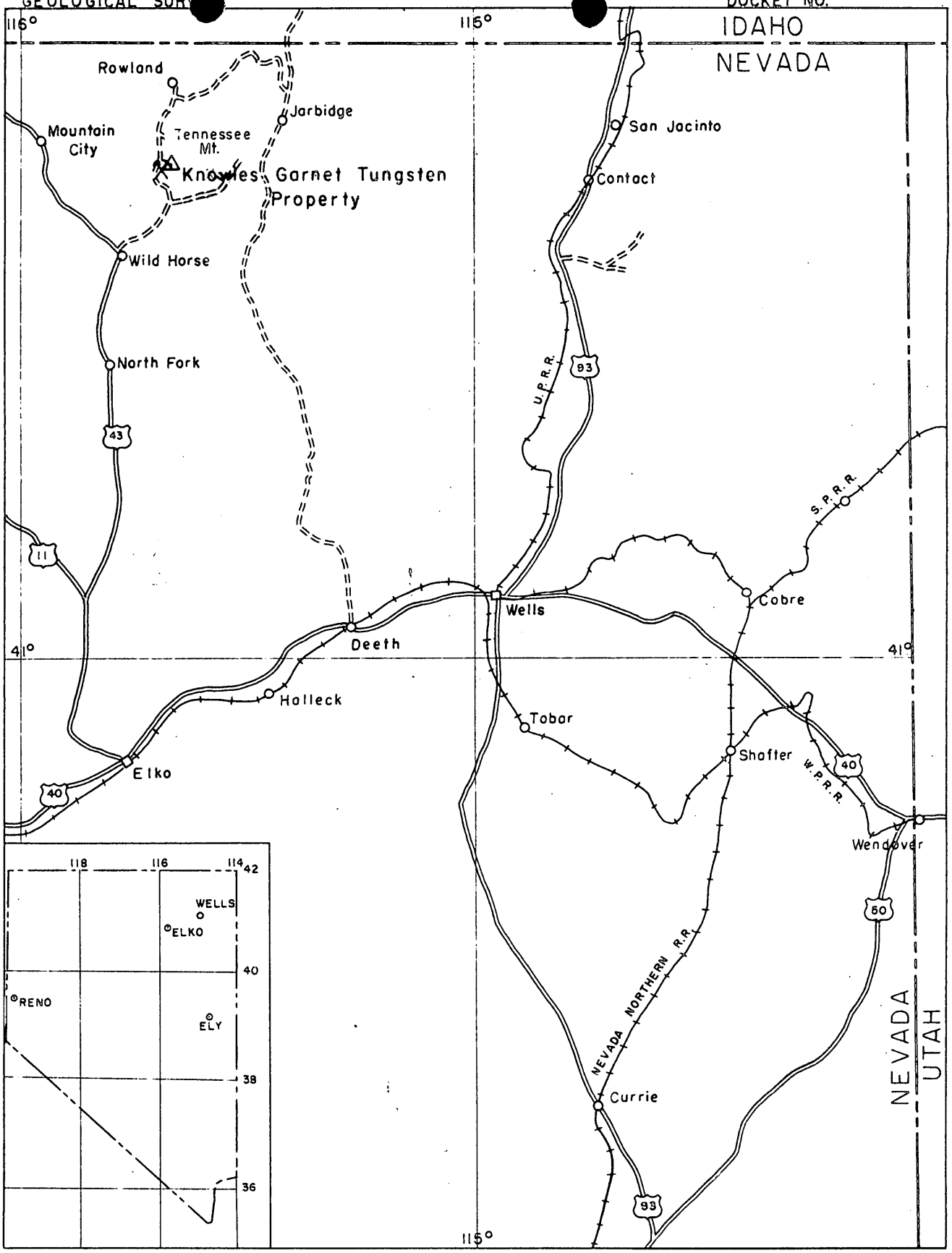


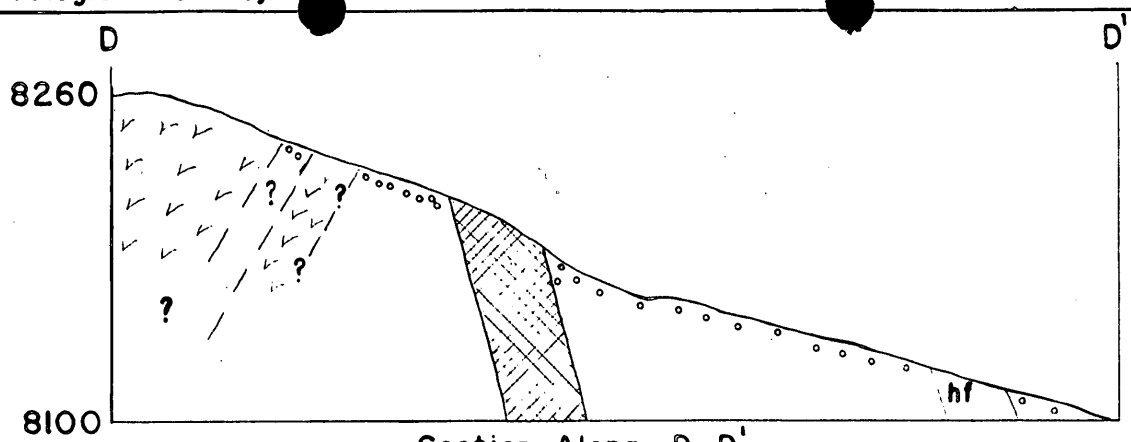
FIG. 1 INDEX MAP OF NEVADA

0 10 20 30 40 Miles

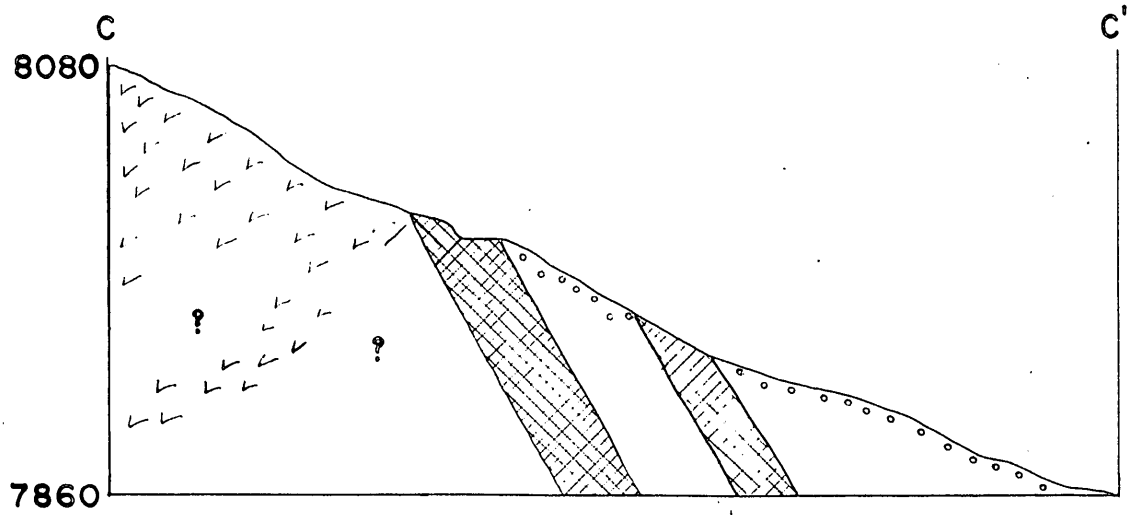
Scale 1:1,000,000

U. S. Department of The Interior Defense Minerals Exploration Administration

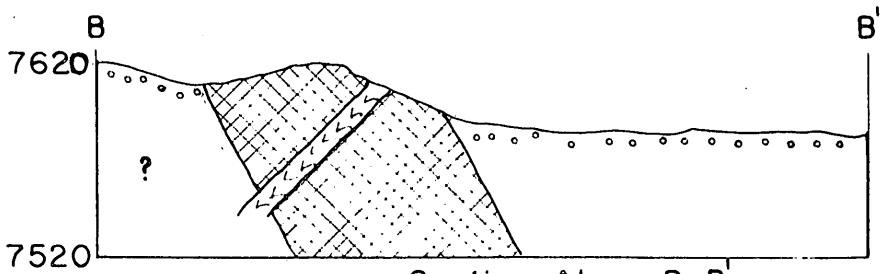
Geological Survey Docket no.



Section Along D-D'



Section Along C-C'



Section Along B-B'

Explanation

covered

Scheelite bearing Tactite

Tactite & hornfels undifferentiated

intrusive

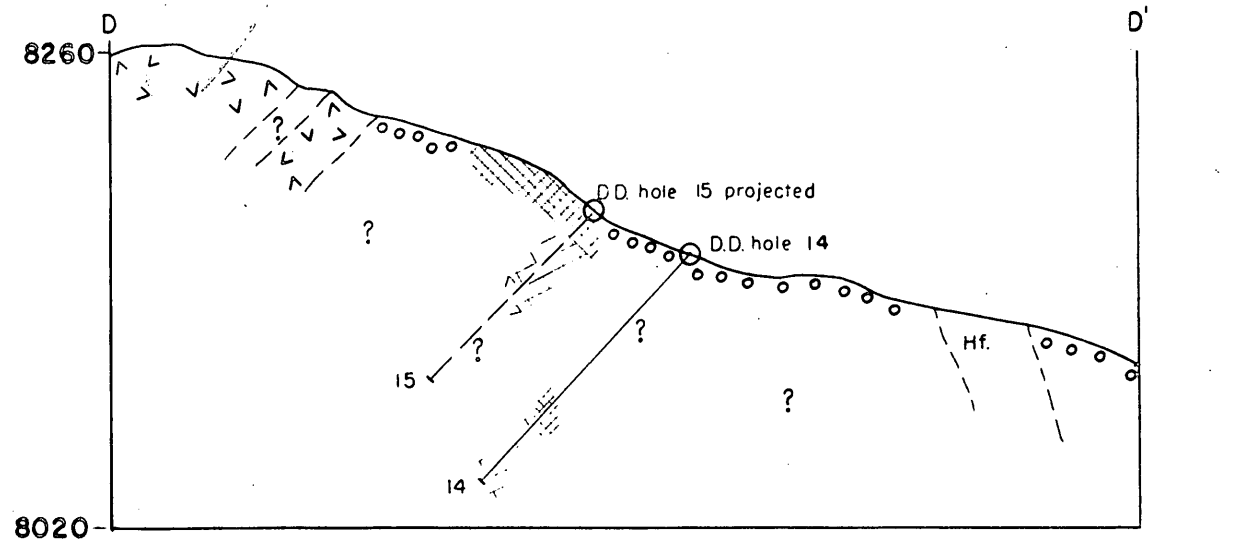
Geologic Sections of Knowles Garnet Tungsten Property, Alder mining District Elko County, Nevada

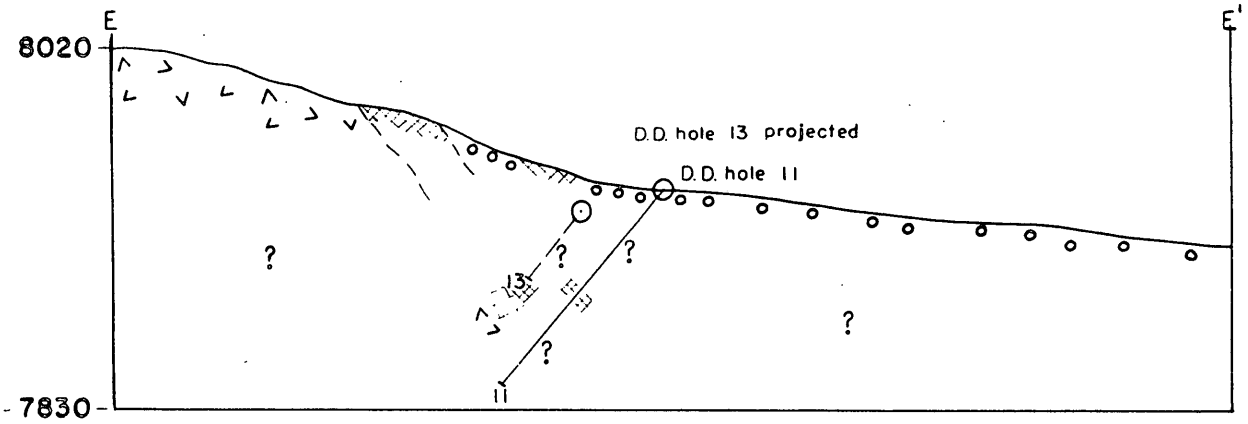
0 100' 200' 300 FT

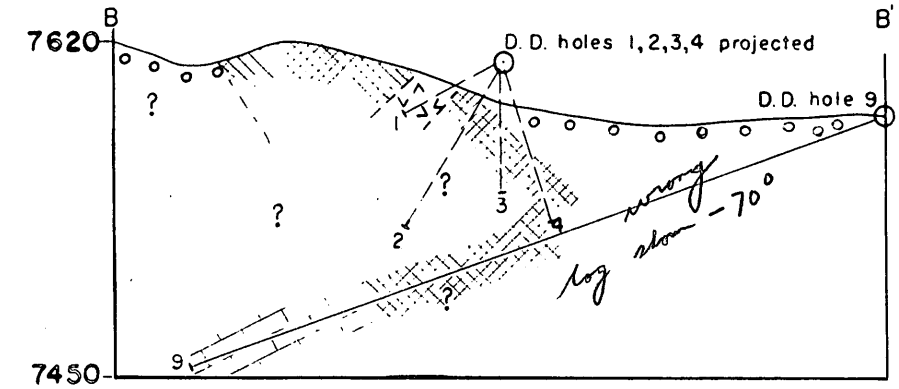
scale

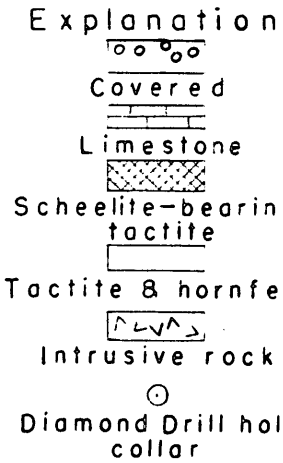
fig. 3

Geology by R. M. Smith & D. C. Laub









Geologic Sections of Knowles Garnet Tungsten Property, Alder mining District Elko County, Nevada

0 100 200 300 FT.
Scale

Fig. 4

sections from Diamond Drill hole Data
Geology R.M. Smith & D. C. Laub

(C O P Y)

Figure 5.

October 22, 1952

Re-O-2.82 - Garnet Tungsten Ore, Mountain City, Nevada
(Ray Summers, Box 423, John Day, Oregon) Mining Branch

This sample was received through the Mining Branch for concentration tests in connection with a proposed field project.

The ore carried about 1.4 percent WO_3 as scheelite. The gangue minerals were garnet, hornblende, quartz, and calcite. The scheelite occurred in part in fairly coarse grained form and also in fine-grained disseminated particles. Optimum liberation required grinding to minus 150-mesh, but considerable scheelite was liberated after crushing to minus 10-mesh.

Gravity concentration tests were made on ore crushed to minus 10-mesh and hydraulically classified, using the laboratory Wilfley table. Some low-grade concentrates were produced with considerable middlings, and sand tailings. The coarser middlings were reground to minus 35-mesh, reclassified and concentrated on the table to produce more low-grade concentrates, and good tailings. The secondary slimes were combined with the primary slimes and tabled, but results were not satisfactory.

The combined table concentrates were sized by screening and treated on the high-intensity magnetic separator. A recovery of 50 percent on the original ore was obtained from the plus 150-mesh portion in a product carrying 57.39 percent WO_3.

Detailed data of the gravity concentration and magnetic separation are shown in the following tables:

Gravity concentration on Wilfley table

Product	Weight, percent	WO_3, percent	Distribution of WO_3, percent
Sand concentrates	12.52	8.80	82.75
Sand tailings	64.46	.07	3.45
Slime concentrates	.90	5.35	3.62
Slime middlings	5.92	.73	3.25
Slime tailings	16.20	.57	6.93
Total slimes	23.02	.80	13.80
Composite	100.00	1.33	100.00

Magnetic separation of sand concentrates

Product	Weight, percent	WO_3, percent	Distribution of WO_3, percent
+ 150-mesh	1.16	57.39	50.06
Magnetic	6.78	.32	1.63
- 150-mesh			
Nonmagnetic	1.02	22.87	17.51
Magnetic	3.56	5.07	13.55
Composite	12.52	8.80	82.75

The minus 150-mesh material did not yield satisfactory nonmagnetic concentrates.

The sand table tailings, amounting to 64.46 percent of the original weight and carrying .07 percent WO_3, representing 3.45 percent loss, could be discarded. The slimes and magnetic separation products other than the plus 150-mesh nonmagnetic concentrates would require regrinding of the plus 150-mesh portions to minus 150-mesh and treatment by flotation. This flotation feed would amount to about 36 percent of the original ore, and would carry 1.8 percent WO_3, representing 46.5 percent of the original tungsten content of the ore.

Flotation tests

Several flotation tests were made on the ore, at minus 100-mesh and minus 150-mesh grinds. The lowest rougher tailings obtained at the coarser grind were 0.13 percent WO_3, while at minus 150-mesh, tailings running 0.04 could be made.

By cleaning the rougher concentrates in three stages, final concentrates carrying 31 percent WO_3 were made. Gross recovery was about 98 percent of which the cleaner concentrates represented 80 percent while 17 percent remained in the cleaner tailings for retreatment. These cleaner tailings amounted to 16 percent of the original weight of ore, and under suitable plant operating conditions would probably yield most of their tungsten contents in final concentrates of satisfactory grade.

The reagents used for flotation were in pounds per ton of ore:

Soda ash,	1.0	- for conditioning
Quebracho,	0.1	- for conditioning
Quebracho,	0.05	- in cleaning
Oleic acitd,	0.25	- as collector
Aerosol OT85,	0.05	- for modifying oleic acid
B-23,	0.25	- as frother

Detailed data of the flotation were:

Flotation Test 3, minus 150-mesh grind

Product	Weight, percent	WO_3, percent	Percent Distribution of WO_3
Cleaner concentrates	3.90	31.05	80.70
Combined cleaner tailings	16.15	1.58	17.03
Rougher tailings	79.95	.04	2.27
Composite	100.00	1.50	100.00

The gravity and magnetic separation concentrates which carried 57.39 percent WO_3 also contained 1.25 percent Mo.

The flotation concentrates which carried 31.05 percent WO_3, carried 0.80 percent Mo.

Molybdenum was present as the mineral powellite, which also contains tungsten. No molybdenite was noted in the ore.

FILE COPY
SURNAME:

Selfridge.
Chapman.

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

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

JAN 2 1953

Re: Docket No. DMEA 2820 - Tungsten
Garnet Tungsten Mining Company
Garnet #1 and Garnet #2 Claims
Elko County, Nevada

Dear Mr. Miller:

Your memorandum of December 18, 1952, at hand, with three copies of an application for exploration assistance on the above-mentioned property.

We note in your Region III report that an examination was being made as of November 1, 1952.

In reviewing the application we find the following items should be more clearly defined:

(1) A few elevations would give a more definite picture of the work that has been done and work applied for.

(2) Would it be possible to get permission from the owner to split the diamond drill cores and have them assayed?

(3) We believe that the size of the project should be cut to about 1/2 or 1/3 of the amount of work proposed. It would appear that this work should start on the Garnet #1 claim where the better showings were found.

(4) The costs appear to be excessive. Under the application the cost amounts to about $60.00 per foot of drifting, crosscutting, or raising. It appears that the overall cost should not exceed $40.00 per foot.

(5) No mention is made as to how the equipment is to be procured. Is it to be furnished by the contractor or operator, or is it to be rented or purchased?

We are enclosing two copies of a memorandum by the Commodity Division of the U. S. Geological Survey.

Further processing of this application will be held in abeyance until we have received the examination report.

Sincerely yours,

Frank E. Johnson (GHB)

Chairman, Operating Committee

Enclosures

J.H. 1-2-53

Approved:

J. H. Hedges (GHB)

Member, Bureau of Mines

A. R. Kinkel, Jr. (GHB)

Member, Geological Survey

Copy to: Docket
Admn. Read. File
Field Team, Reg. 3
Op. Committee
Code 400
D. M. Lemmon, USGS
R. W. Geehan, USBM

FARutledge/ls 12/31/52

IN REPLY REFER TO:

G-MD-CF

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

GCS 12/30/52

December 29, 1952

Memorandum

To: G. C. Selfridge

From: M. D. Crittenden

Subject: DMEA 2820 (Tungsten)
Garnet Tungsten Mining Company
Mountain City, Nevada

The Proposal

The applicants propose to spend about $150,000 to equip and explore by 2,300 feet of drifts and 100 feet of winze, a recently discovered tungsten prospect in Sec. 16 and 17, T. 45 N., R. 56 E., Elko County, Nevada.

The Property

The deposit is covered by two claims, the Garnet No. 1 and 2, held by location and leased to the applicants. The deposit was brought to the attention of the Survey in August, 1950, and was visited by D. M. Lemmon in September 1952, who made the following notes:

"Scheelite-bearing tactite of unknown grade is reportedly exposed for a length of 3,000 feet on the Knowles-Montrose claims west of Tennessee Mountain. A number of shallow drill holes, perhaps a dozen, were drilled by Knowles Bros. along the northwestern 1,000 feet of the zone. No map was made, and the cores were not properly sampled and assayed. Widths of tactite ranged from nothing to 45 feet. The deposit dips 45 to 55 degrees southwest, and could be mined in part from open pits. Surface exposures are poor. An adit along the contact from Tennell Creek would in a short distance give backs of several hundred feet. Apparently much of the exposed tactite is barren; the mineralized parts contain 0.3 to 0.5% of WO_3 according to various estimates and assays.

In section 8, the Montrose Mining Co. is driving an adit which is expected to strike ore 20 feet ahead of the present face, which is 210 feet from the portal. On the surface, scheelite is present in beds that dip gently into a vertical granite contact. Montrose hopes the mineralization will

Copy retained 400

follow down the contact rather than selectively replace the various beds crossed.

Representatives of a number of mining companies have examined the properties. Knowles Brothers have recently changed their plan to move the Star Tungsten Mill from Harrison Pass to the property in favor of using this mill elsewhere, and have again offered the property to Bradley Mining Co. Jack Bradley, Tony Mecia, and Charlie Clark have seen the claims for Bradley Mining Co. and were favorably impressed according to Mecia and Clark.

I did not examine the area in ultraviolet light. My impression was that there was a good chance for workable ore bodies in the area, particularly on the Knowles-Montrose claims. Geologic mapping of about 15 square miles, much more extensive prospecting, some surface stripping, and considerable sampling need to be done before the area can be properly evaluated."

Development

The present lessee reports (and illustrates on the map) 1,500 feet of bulldozer trenches covering parts of three orebodies, and a short adit, extending beneath the discovery monument on the Garnet No. 2 claim. Eight samples are reported. Three on the Garnet No. 2 orebody indicate a grade of .16 to .18 percent WO_3, and are very consistent. The samples on the No. 1 claim range from .35 to 1.42 percent WO_3, over widths of 8 to 14 feet.

No samples are reported from the adit, and it seems unfortunate that underground work was started on the poorest of the showings, as judged by the surface samples.

Recommendation

In view of the favorable impression Dwight had of the area, and the assays ranging from 0.35 to 1.42 percent WO_3 on the Garnet No. 1 claim, I believe some exploration this area may be warranted. The present application should be modified in several ways, however, such as providing realistic rental and depreciation values, and for proportional costs on overhead and office.

Consequently I recommend that the Field Team be requested to check-sample the existing openings, and if the results are favorable to work out with the applicant a modified exploration program on the basis of present sampling. They may wish to begin on the Garnet No. 1 claim rather than on the larger bur apparently lower grade showings on the No. 2 claim.

Restricting the exploration in the first stage to 600 feet and reducing the cost to about $30 per foot should make the first stage total about $25,000.

M. D. Crittenden

From memorandum by D. M. Lemmon, USGS, to G. C. Selfridge on Docket No. 2680, dated September 17, 1952.

"Drilling in 1951 on the Knowles Brothers property to the south of the Montrose Mining Company's Apex claims, in which Montrose is interested, was not properly executed. Holes were placed haphazardly, cores were not logged, sampled, or properly stored, and no maps were prepared.

A careful examination should also be made of the Knowles Brothers claims, which presumably have the best possibilities for tungsten ore in the district. DMEA has no application at present, but will doubtless receive one eventually."

This property was referred to Field Team for examination Sept. 19, 1952, even though an application had not been received.

The Region III report showed that an examination was being made as of November 1, 1952.

An application was received December 22, 1952 and docketed as DMEA 2820.

FAR

December 23, 1952

Mr. R. E. Summers
Garnet Tungsten Mining Company
Mountain City, Nevada

Subject: DMEA-2820
Re: Exploration Assistance
Knowles-Montrose

My dear Mr. Summers:

The receipt of your application dated December 10, 1952 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2820 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2820 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams, Chief
Operation's Control and
Statistics Division

25451

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

December 23, 1952

Memorandum

To: Executive Officer, DMEA Field Team, Region III

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 III.

DMEA-2820 - Garnet Tungsten Mining Company

ROBERT E. ADAMS

Robert E. Adams, Chief
Operation's Control and
Statistics Division

FARutledge'lm
9/19/52

FILE COPY 400
SURNAME:

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

Rutledge
Selfridge by Martin
Miller

Mr. H. G. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

SEP 22 1952

Re: Knowles Brothers Property
Island Mining District
White County, Nevada

Dear Mr. Miller:

Several field team examinations have been made of tungsten prospects in the Island Mining District and others have been scheduled. It has been called to our attention that the most favorable prospect in the area, the Knowles Brothers' property, will probably be the subject of a DMEA Exploration Application. Therefore, we feel that an examination and field team report on this property is warranted at this time for the following reasons:

1. Members of the field team will be in the area making examinations of adjacent properties.

2. An examination should be made soon if one is to be made this field season.

3. The Knowles Brothers' property is said to have the most merit of the known prospects in the area.

The field team should contact the Knowles Brothers prior to the examination and discuss with them their proposed plan of exploration. It is understood that the exploration already completed by the Knowles Brothers was not properly laid out or efficiently executed. This should be considered since it is probable the field team will be required to modify any plan of the operators to conform with the best practice and DMEA regulations.

Sincerely yours,

9-22

(signed) FRANK E. JOHNSON
Chairman, Operating Committee

Approved:

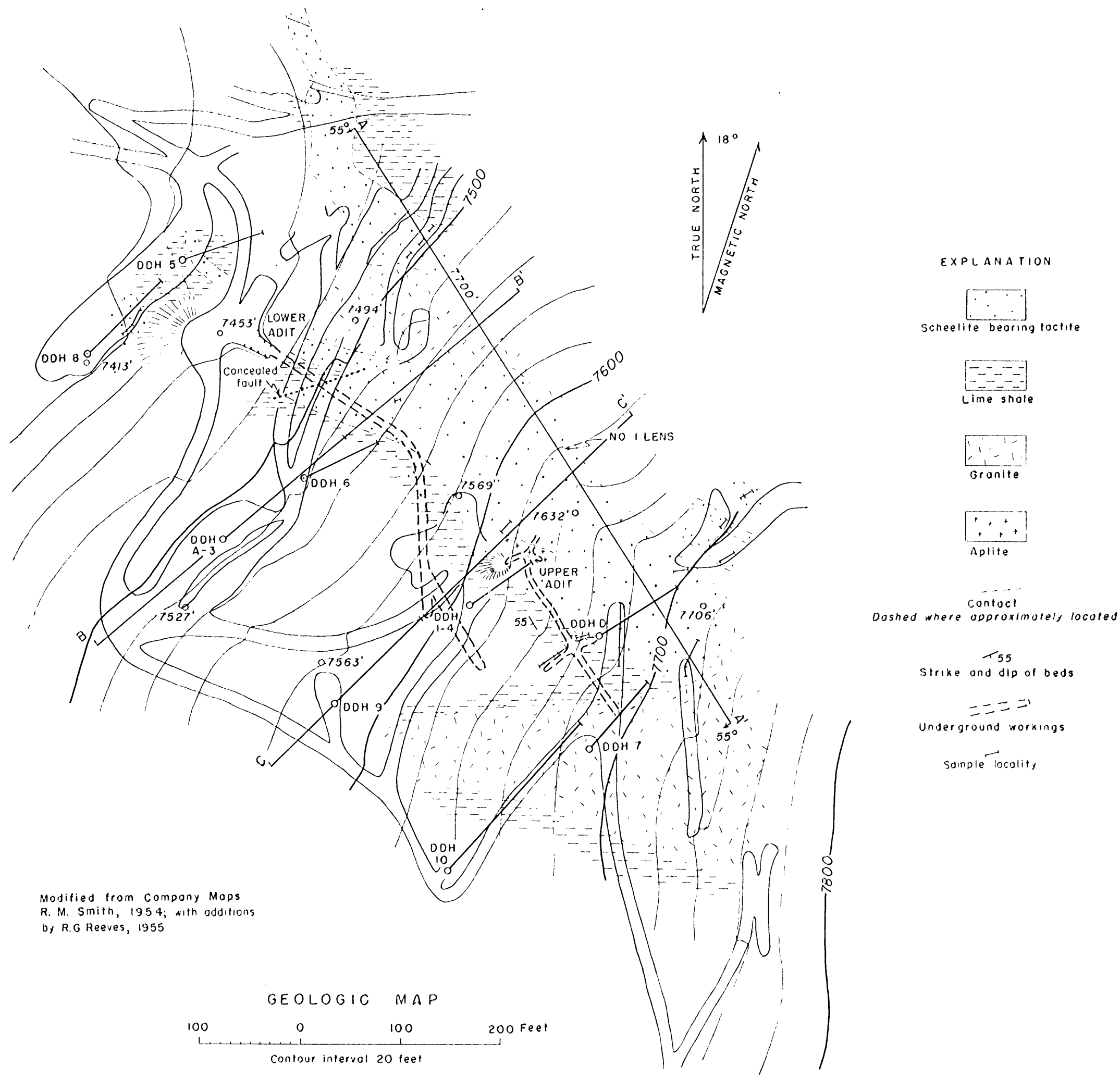
W. E. Hedges
Member, Bureau of Mines

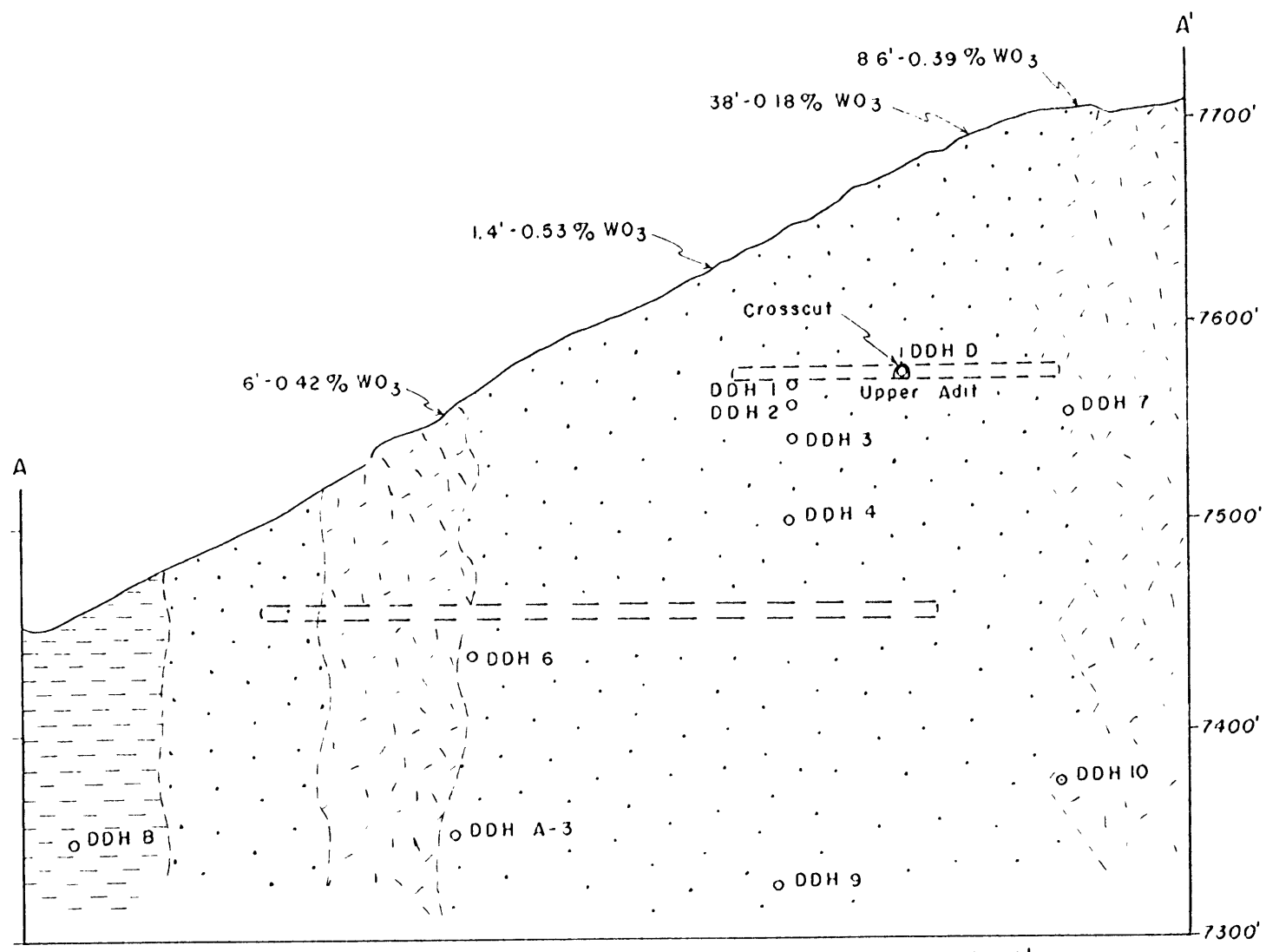
E. F. Thayer
Member, Geological Survey

Sas

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2820
(TUNGSTEN)
Idm E-556





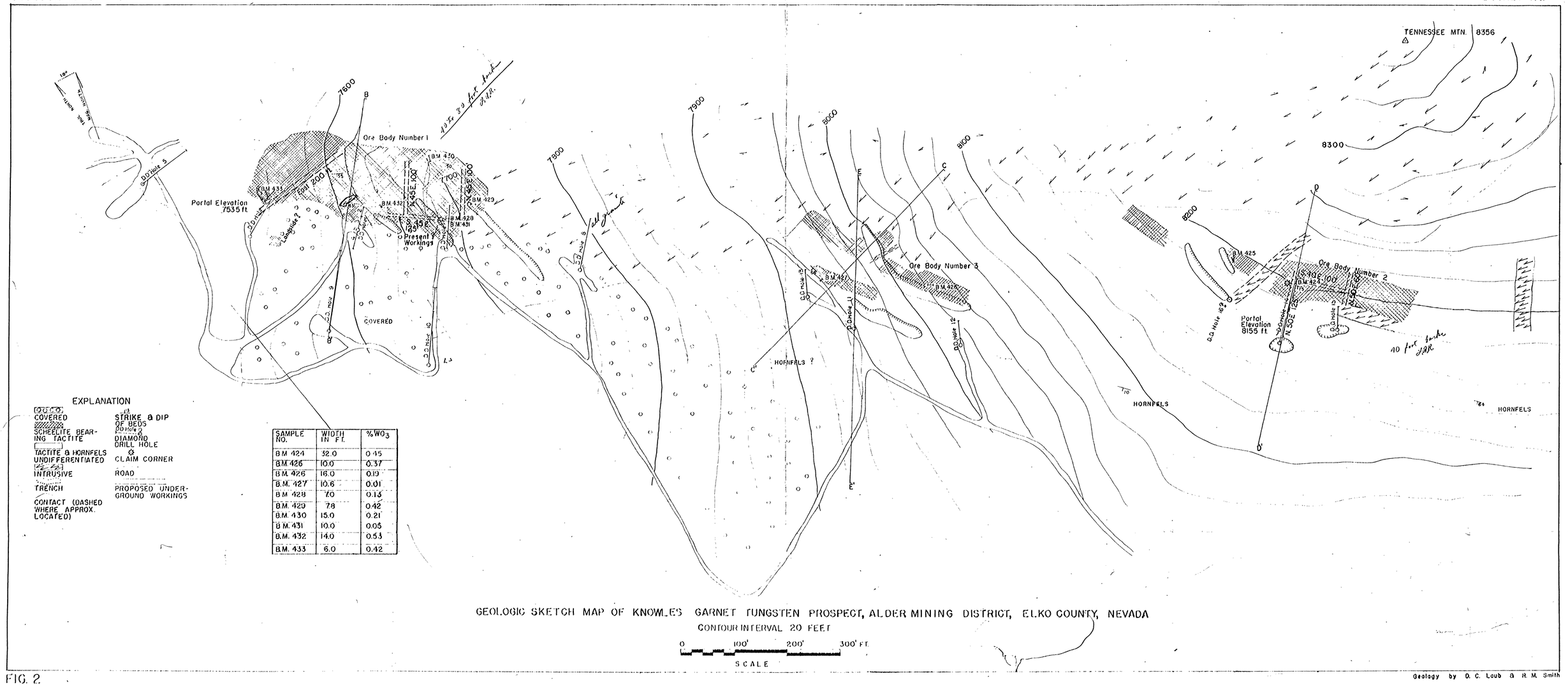
LONGITUDINAL SECTION ALONG INCLINED PLANE A-A'
(SECTION INCLINED 55° SW) NO. I ORE BODY

GARNET TUNGSTEN MINE, ELKO COUNTY, NEVADA

FIGURE 3

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO.



SAMPLE NO.	WIDTH IN FT.	%WO_3
B.M. 424	32.0	0.45
B.M. 426	10.0	0.37
B.M. 426	16.0	0.19
B.M. 427	10.6	0.01
B.M. 428	7.0	0.13
B.M. 429	7.8	0.42
B.M. 430	15.0	0.21
B.M. 431	10.0	0.05
B.M. 432	14.0	0.53
B.M. 433	6.0	0.42

GEOLOGIC SKETCH MAP OF KNOWLES GARNET TUNGSTEN PROSPECT, ALDER MINING DISTRICT, ELKO COUNTY, NEVADA

CONTOUR INTERVAL 20 FEET

FIG. 2

Geology by D. C. Loub & R. M. Smith