DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 300 — DMEA NO. 2440

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- [ ] Withdrawn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

Right Side

- [x] Project summary (final)
- [x] Work Completed analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semi-Annual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab) - memo only
- [ ] 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. 4 : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. 3 : Royalty material

Reported Inactive 12/28/59

17963

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., and the Executive Officer, Region I, Spokane, Washington, pertaining to Contract No. Ida-E300, Docket No. DMEA-2440 (Tungsten), dated April 17, 1952, with

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Lost Creek Mine located in Beaverhead County, Montana, during the period March 1, 1956, through April 13, 1960.

A certification of discovery or development was issued on May 17, 1956, and, in accordance with Amendment No. 3 to the contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 11 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final cost audit dated January 2, 1957, indicated accepted costs under the exploration contract amounting to $66,950.00 with the Government's contribution, on a 75 percent basis, being $50,212.51.

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

This review established the total sales of tungsten concentrates for the period to be $8,887.06. Royalty due the Government at rates specified in the contract is $444.35.

A prior Royalty Audit Certificate dated June 6, 1956, found the sales subject to Government royalty through February 29, 1956, to be $124,090.10 which added to the sales for this subsequent period make a total of $132,977.16. The royalty amount as of February 29, 1956, was:

Total Royalty Due	$6,204.51
Total Royalty Paid	6,204.51
Balance of Royalty Due	$ -0-

At April 13, 1960, the royalty account of this project was found to be:

Total Royalty Due	$6,648.86
Total Royalty Paid	6,648.86
Balance of Royalty Due	$ -0-

C. E. Fisher

April 13, 1960 C. E. Fisher, OME Auditor

SCOPE OF REVIEW AND REASONS THEREFOR

My review included a computation of the royalty settlement made in August 1957 applicable to ore stockpiled during 1955 and milled in August 1956. It was determined that the settlement made was in agreement with the special formula for computing the Government's royalty as set forth in the Termination Agreement dated November 20, 1956. A tabulation showing the Operator's production and computation of royalty paid to date follows:

Item	Prior Audit	Stockpiled Ore	Totals
Tons of ore	19,869.80	1,250.64	21,120.44
Short ton units WO_3	2,850.68	233.87	3,084.55
Unit price (Formula)	$ 43.53	$ 38.00	$ 43.11 Av.
Value	$124,090.10	$8,887.06	$132,977.16
Royalty - 5%	$ 6,204.51	$ 444.35	$ 6,648.86

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

(1) Semi-annual reports of investigations by representatives of the Field Team, Region I, and other documents in the files indicate that no mining operations have been conducted at the property since 1955 and that proper royalty has been received by the Government on all production from the land described in Article 2 of the contract since April 17, 1952; and

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

April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Minerals Engineering Company

Address P. O. Box 957

Grand Junction, Colorado

Exploration Contract No. Idm-E300 Docket No. DMEA-2440

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

The last activity at this property was in August 1956, when 1,250.64 tons of stockpiled ore was milled. Royalty due, computed on basis of the formula set forth in the termination agreement, was paid in August 1957.

April 13, 1960
Date

S. W. Zoldok
Mining Engineer

S. W. Zoldok

53362

[illegible] MINERALS ADMINISTRATION
[illegible] ADMINISTRATION AND AUDIT DIVISION

2440

[illegible] AUDIT SECTION

I have examined the production records and sales documents pertaining to the sales of tungsten concentrates for the period April 17, 1952 to February 29, 1956, by

W/M

Minerals Engineering Company
P. O. Box 1[illegible]
Grand Junction, Colorado

produced from the Last Chance Mine, Beaverhead County, Montana, on which royalties are due the United States Government under the terms of Contract [illegible], Docket No. [illegible]-2440 (Tungsten), dated April 17, 1952, including Amendments Mod. 1, 2 and 3.

My examination was made in accordance with generally accepted standards applicable in the circumstances.

The audit established the total sales of tungsten concentrates for this period subject to [illegible] royalties to be $124,[illegible].10. Royalty due the United States Government at 5 percent is $6,[illegible].51. The royalties paid and balance due are as follows:

Total Royalties Due	$6,[illegible].51
Total Royalties Paid	[illegible]
Balance Royalties Due	$ [illegible]

June 6, 1956

F. H. Reading, Auditor

Royalty Audit

FIRST ROYALTY AUDIT REPORT

I. INTRODUCTION

On May 15 and 16, 1956 an audit was made of the production, sales, and royalty accounts and records of

Minerals Engineering Company,
A corporation organized and existing
under the laws of the State of Colorado
P. O. Box 1951
Grand Junction, Colorado

pertaining to the sales of tungsten concentrates during the period April 17, 1952 to February 29, 1956, produced from property known as the Lost Creek Mine, Beaverhead County, Montana, on which royalties are due the United States Government under the terms of Contract Idm-8300, Docket No. IMEA-2440, as amended.

The following listed employees of the Operator rendered full cooperation, which greatly facilitated the audit:

Mr. Glen Wilson,	Ass't. Secretary
Mr. Russ Kilsbury,	Ass't. Treasurer
Mr. Clyde Rattleton,	Office Manager
Mr. L. G. Collins,	Chief Accountant

Mr. Robert Parent, C.P.A., partner in the firm of Glenn and Parent, C.P.A.'s, which firm audits the Operator's records, was present part of the time.

II. GENERAL INFORMATION

The project was resumed under authority of Amendment No. 3 for the period of September 1, 1953 to May 17, 1954; work was not resumed thereafter; and costs, subject to audit, through August 31, 1953 were $66,950.00, with the Government's contribution on a 75 percent basis being $50,212.51.

As of the date of the audit a certification of discovery or development has not been made, but Annex I, which is a part of Amendment No. 3, provides the Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2 of the contract, regardless of any certification of discovery or development, from the date of the contract until the lapse of time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government is fully repaid, whichever occurs first. By letter dated April 12, 1955, the Operator proposed a basis for making royalty payments on production; by letter dated September 9, 1955, the Executive Officer, IMEA Field Team, Region I, N.W., proposed an alternative basis, under which settlement would be made at the rate of $43.53 per unit of concentrates produced at the Glen Montana Mill; and by letter dated April 30, 1956, the Administrator authorized the Executive Officer to accept settlement for past and future concentrates on such basis pending formalization of an amendment to the contract.

The production records and assay reports are maintained at the mine office near Glen, Montana. The information is reported to the Grand Junction office of the Company, where it is incorporated in the records. A complete and comprehensive set of records are maintained at the Grand Junction office.

The day the audit was started, that is on May 16, 1956, a certification of discovery or development was issued and, in accordance with Annex I, royalty will be payable for a period of eleven years from the date of the contract or until the amount contributed by the Government is repaid, whichever occurs first.

III. SCOPE OF AUDIT AND FINDINGS

A. Conferences with Examining Engineer

In lieu of a conference with the examining engineer, correspondence with the Executive Officer, DMEA Field Team, Region I, N.W. District, discloses the following facts:

The Operator stockpiles ore subject to royalty repayment, and maintains records so that segregation and identification are adequate.

The Operator commingles production subject to DMEA royalties with exempt production, but the allocation of the commingled production is equitable in the opinion of the Executive Officer, DMEA Field Team, Region I, N. W. District.

The Operator does not stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period.

Assay controls in effect are adequate, and the manner of disposing of production gives the Government its fair royalty return.

At the present time periodic examinations are not being made as exploration was halted in September, 1953, but monthly reports prepared by the Operator for his own use indicate that the Operator is properly reporting his production of ore subject to DMEA royalties.

At this particular property, the Operator does not buy from or sell to other Operators.

B. Audit of Settlement Statements

In lieu of an audit of settlement sheets, examination of the records of the company was made, as outlined later in this report.

The examining engineer advises that ore produced from project property is stockpiled separately on a temporary basis. This ore is sampled and assays made to determine the average WO_3 content. The total units of WO_3 content of the concentrates produced is the related percentage of project ore milled to the total ore milled for the month.

The Operator was conducting mining operations concurrently with exploration work, including mining from land other than that described in Article 2 of the contract. The mining engineer and the Executive Officer of DMEA Field Team, Region I, report that adequate records were maintained of the tonnage produced from all sources. In addition to ore mined, ore is purchased from other sources and milled with the ore produced. Allocation of concentrates produced is maintained on a satisfactory basis in the opinion of the Executive Officer, DMEA Field Team, Region I, N. W. District. Concentrates are shipped to Salt Lake Tungsten Company, refined, and the end product sold to G.S.A.

During the course of the audit a detailed transcript of tons, mined, and WO_3 content of concentrates milled was prepared from monthly reports and is included in my working paper file.

Total tons mined (19,869.80) were verified by tracing tons mined on the project property, as reported by the Montana Mine office of the Operator, to the monthly cost reports of the Operator maintained in the Grand Junction office. Verification of WO_3 content was limited to tracing the WO_3 content as reported by the Montana Mine office of the Operator to the monthly cost reports maintained by the Operator in the Grand Junction office.

IV RECEIPTS

A summary analysis of the Operator's production and sales subject to DMEA royalties follows:

Tons produced		19,869.80
WO_3 content		
Low grade units	1,642.61	
High grade units	1,188.07	
Total units produced	2,830.68	
2,830.68 units @ $43.53 per unit		$124,090.10
Royalty on $124,090.10 @ 5%		$6,204.51
Royalties Paid in 1954	$ 173.94	
Royalties Paid 4/3/56	6,030.57	
Total Royalties Paid		6,204.51
Royalties Due		$ -0-

.14% WO_3 recoverable

The audit has confirmed the accuracy and propriety of the royalty payments to the Regional Finance Officer applicable to concentration sales during the period April 7, 1952 to February 29, 1956. It has also determined that all indicated sales during such period have been accounted for properly.

June 6, 1956

F. H. Bowdoin, Auditor

Check Sheet of Examining Engineer

Operator's Name Minerals Engineering Company

Address P. O. Box 1951

Grand Junction, Colorado

Exploration Contract No. Ida-8300 Docket No. DMEA-2240

		Check One Yes	No
1. (a)	Does the Operator stockpile ore subject to royalty repayment?	X (only temporarily)	X
(b)	If so, is segregation and identification procedure adequate?	X	
2. (a)	Does Operator commingle production subject to DMEA royalties with exempt production?	X	
(b)	If so, do you consider the allocation of the comingled production equitable?	X	
3. (a)	Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
(b)	If so, are adequate records maintained on such material to protect the Government's interest?	X	
4.	Do you consider the assay controls in effect are adequate?	X	
5.	Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	If disposal is according to our agreement.	
6.	Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA royalties?	At present we are not getting any report, but a monthly report operator prepares for his own use does give this.	
7.	Does the Operator buy from or sell to other Operators?	Not at this property - he does at his Salt Lake City refinery.	
8.	Comment on any item 2 (b) to 6 if answer is No.		

Date April 10, 1956

A. E. Weissenborn
~~Mining Engineer~~ Exec. Officer
DMEA Field Team, Region I
Northwest District

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

Holt
Martin
Rubin
Sawyer
"Appd. Sol. Off."
Nelson
Chambers
Selfridge
Kiilsgaard
Geehan
Johnson

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

To: Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Pursuant to the provisions of Exploration Project Contract No. Idm-11300, dated April 17, 1952 (Docket No. DMEA-[illegible]), hereinafter called the "Contract", between the Minerals Engineering Company 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.

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

Drifting, crosscutting, and diamond drilling have indicated a substantial quantity of low grade to marginal tungsten-bearing tactite occurring in limestone and dolomite along and near faulted contacts with quartz monzonite.

SPHOLT:foc:esf 5/15/56

cc to: Docket
Code 400
Admr. Read. File
Code 100 - Mr. Johnson
Code 800 - Mr. Chambers
VARIOUS LESSORS (per transmittal letters)
Operating Comm.

THE UNITED STATES OF AMERICA

By O. M. Mitchell
Administrator, Defense Minerals Exploration Administration

Dated MAY 1 7 1956

R.W.Geehan, USBM
~~Robert Holliday, USBM~~
T.H.Kiilsgaard, USGS
C.A.Fredell, EPS,GSA
Hon. Mike Mansfield, USSENATE
Hon. James E. Murray, USSENATE
Hon. Lee Metcalf, H. of Repr.
FINANCE OFFICER

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

1/9/57 WSM 400

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Minerals Engineering Company
Grand Junction, Colorado

pertaining to Exploration Project Contract No. Idm-E300, Docket No. DMEA-2440, dated April 17, 1952, including amendment Nos. 1 to 3 inclusive, including a Termination Agreement dated November 20, 1956 with an effective date of May 18, 1954, covering a project for the exploration of tungsten for the months of May 1952 to August 1953, on property known as the Lost Creek Mine, located in Beaverhead County, State of Montana.

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

(a) All of the costs incurred ($66,950.00) 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	$66,950.00
Exceptions	None
Total Accepted Cost	$66,950.00

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 Fifty thousand two hundred twelve and 51/100 Dollars

— $50,212.51 —

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.

C. A. Turner

C. A. TURNER, Auditor

January 2, 1957

RECEIVED FEB 17 1956

Docket copy

TERMINATION AGREEMENT

It is agreed this 20th day of November, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Minerals Engineering Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E300 (Docket No. DMEA-2440), dated April 17, 1952, as amended, hereinafter called the "Contract," that:

1. Effective May 18, 1954, the Contract and all obligations of the parties are terminated, except as otherwise provided herein.

2. The Government shall contribute only to the agreed unit costs of work performed prior to said effective date.

3. In Article 7 of the Contract, that part of the second sentence beginning with the word "Provided," is deleted.

4. Paragraph e. of Annex I to Amendment No. 3 is revised to read as follows:

> "As here used, 'net smelter returns,' 'net concentrator returns,' and 'other amounts realized from the sale or other disposition,' mean gross revenue from sales without any deductions whatsoever, except that at a sale price of $63.00 per unit of contained WO_3 before computing the amount of royalty due the Government on sales of production the sum of $19.47 first shall be deducted from the gross sale price of each unit of contained WO_3. The deduction shall increase or decrease as the sale price per unit of contained WO_3 changes from $63.00, based upon the following formula:
>
> $$\left(\frac{\text{Sale price}}{\$63.00} \times \$19.47\right)$$
>
> (For example, if the gross sale price per unit of contained WO_3 is $55.00, as at present, the Government's royalty after deducting $\frac{\$55.00}{\$63.00}$ of $19.47, which is $17.00, shall be 5 percent of $38.00). If the production is not sold, the quoted phrases in the first sentence of this paragraph e. mean the market value of the production 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."

5. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and liens for its payment, as revised in paragraph 4 of this termination agreement, records, audits, and recovery of any overpayment, are preserved.

Robinson
Chapman
Martin
Talbot
Selfridge
Hoffman

6. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

By C. M. Stevens
Administrator, Defense Minerals
Exploration Administration

MINERALS ENGINEERING COMPANY

By [illegible]

Title Treas

Docket Copy

EXPLORATION PROJECT CONTRACT
MINERALS ENGINEERING COMPANY
DOCKET NO. DMEA-2440

AMENDMENT NO. 3

It is agreed this 17th day of February, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Minerals Engineering Company, hereinafter called the "Operator," that Exploration Project Contract Idm-K300, Docket No. DMEA-2440, dated April 17, 1952, as amended, hereinafter called the "Contract," is further amended, effective September 1, 1953, as follows:

1. a. Work under the Contract shall be suspended during the period beginning September 1, 1953, and ending not later than May 17, 1954.

b. No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government.

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

d. The Government shall not contribute to any costs of rehabilitation or repair which in its opinion would not have occurred if there had been no suspension of work.

2. In Article 3 of the Contract form, the period "18 months" is deleted, and the period "28 months" is substituted.

3. The provisions of Annex I, attached hereto and made a part hereof, are substituted for the provisions of Article 6 of the Contract form.

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 A Mittendorf
Administrator, Defense
Minerals Exploration
Administration

Potter
Hoffman
Chamberlin

MINERALS ENGINEERING COMPANY

By R B Sullivan
Vice Pres

EXPLORATION PROJECT CONTRACT
MINERALS ENGINEERING COMPANY
DOCKET NO. DMEA-2440

Defense Minerals Administration
RECEIVED
MAR 18 1954

ANNEX I

The following provisions are in lieu of Article 6:

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

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten* years (or other period fixed by this 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 amounts realized from the sale or other disposition of any such production (including any bonuses, premiums, allowances, or other benefits), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) percent of any such net amounts, plus one-half ($\frac{1}{2}$) 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 ($1\frac{1}{2}$) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

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

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

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

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

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

Docket Copy

MINERALS ENGINEERING COMPANY
Docket No. DMEA 2440 (Tungsten)
Contract No. Idm-E300

Amendment No. 2

It is agreed this 1st day of October, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Minerals Engineering Company, Grand Junction Colorado (Docket No. DMEA 2440 - Tungsten), each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E300 of April 17, 1952, between the parties hereto be modified and amended as set forth below. The effective date of this amendment shall be October 1, 1952.

In Exhibit "A", under "Description of Work", add the following:

6. In order to supplement information obtained by crosscutting, and more adequately to guide the overall exploration program, a maximum of 2,000 feet of underground diamond drilling shall be performed. The total footage to be drilled shall be distributed over approximately 40 diamond drill holes located in "B" and "H" levels. All drill holes shall be cored. Holes shall be carried in the AX diameter, unless drilling conditions necessitate a reduction to the EX diameter, and all diamond drill holes, as well as the handling and disposal of all diamond drill hole cores, must meet with the approval of the Government engineers.

In Exhibit "A", under "Estimated costs of the Project", add the following:

2,000 feet of diamond drill holes @ $5/ft. - $10,000.00

Change the "Total estimated cost" to $121,280.00.

Change the "Government participation, 75% of total estimate" to $90,960.00.

In Article 4 of the contract, change the figure $83,460.00 to $90,960.00 and the figure $111,280.00 to $121,280.00.

Executed in sextuplicate the day and year first above written.

MINERALS ENGINEERING COMPANY
(Operator)

By Blair Burwell
President

THE UNITED STATES OF AMERICA

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

as to Subsidy
Chandler

October 28, 1952

Memorandum

so

To: Miss Lanahan, Control & Statistics Division, DMEA

From: Hazel Berry, Operating Committee, DMEA

Subject: Amendment to Contract

Attached is the docket copy of Amendment No. 1, dated 9/25/52, DMEA-2440, Idm-E300 (tungsten), Minerals Engineering Company, which has been reviewed and approved by the Iron & Ferro Alloys Division, Contract Adm. & Audit Division, and the Legal Division.

Hazel

Attachment.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

[redacted]
So. 157 Howard Street
Spokane 4, Washington

October 17, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Docket DMEA-2440 (Tungsten)
Minerals Engineering Company
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Johnson:

Enclosed herewith are the original and two signed copies of Amendment No. 1 to the subject contract, with attached justification.

A copy of the amendment has been retained by the Operator, a copy is being placed in the files of this office, and by a carbon copy of this letter, the Regional Finance Officer's copy is being sent to him.

Sincerely yours,

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

Enclosures

cc: OUBM (2)
Reg. Finance Officer, w/encl.
Myers

AMENDMENT NO. 1

It is agreed this 29th day of Sept. 1952, between the the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Minerals Engineering Company, Grand Junction, Colo. (Docket No. DMA 2440 - Sunglow)

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract [illegible] of Apr. 17 1952 between the parties hereto be modified and amended as described in Exhibit [illegible], attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be September 1 1952.

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

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

Executed in sextuplicate the day and year first above written.

MINERALS ENGINEERING COMPANY
(Operator)

By Blair Butwell
President

The United States of America

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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[illegible]ALS ENGINEERING COMPANY
Docket No. [illegible]&A 2640 (tungsten)

Contract Idm-1300

Amendment No. 1

Exhibit "A"

In Exhibit "A" of Contract Idm-1300, under "Description of Work" add the following:

> Crosscutting as described in Items 3 and 5 with regards to "H" and "G" * levels, shall not be limited to westward exploration of the footwall, but may also include easterly crosscutting to explore additional tactite zones.

The purpose of permitting crosscutting to the east is to facilitate exploration. New geologic evidence indicates that the distribution of tungsten-bearing tactite is more complex than had been thought when the original contract was written.

The total amount of crosscutting originally authorized in the contract will not be increased by this proposal, nor will the total fund as specified in the contract be increased.

The cross-sectional dimensions and cost per foot of all crosscuts will remain the same as originally specified in the contract.

It is understood that the locations, directions, and lengths of all crosscuts must meet with the approval of the Government engineers.

*With approval of the Field Team, the lower level was actually portaled from "G" cut rather than "G-1" cut in order to more effectively prospect the mineralized zone.

MINERALS ENGINEERING COMPANY
Docket No. DMSA 2440 (tungsten)
Contract 1dm-300

JUSTIFICATION FOR AMENDMENT NO. 1

Underground exploration done to date has demonstrated that geologic conditions underground are more complex than had been anticipated. This amendment permits crosscutting into the hanging wall as well as into the footwall, particularly to check on the presence of other tungsten tactite beds in the hanging wall of the zone.

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2440

COMMODITY Tungsten

Idm-E-300

RECEIVED
APR 21 1952
U. S. G. S.
SPOKANE, WASH.

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

Docket Copy

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 17th day of April, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Minerals Engineering Company, a corporation organized and existing under the laws of the State of Colorado, P. O. Box 957, Grand Junction, Colorado.

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Beaverhead, described as follows:[3] The Lost Creek Mine, comprised of the unpatented Sugar Loaf Quartz Lode Mining Claims Nos. 1 to 29 inclusive, situated in the unorganized Utopia Mining District approximately 6.0 miles northwest of Navy, Montana. The claims are recorded in Book 126 in the office of the clerk and recorder of said county and state (See attached claim map).

the Operator represents and undertakes:[4]

of an undivided interest,

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

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

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

ARTICLE 3. *Exploration project.*—The Operator, within Ninety (90) 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 18 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 $83,460.00, which is 75 percent of $111,280.00, 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

Minerals Engineering Company
(Operator)

By Blair Burwell
President

By C. Mitteadorf
Acting Administrator
Defense Minerals Exploration
Administration
Hoffman (form)
Chamberlin

I, A. F. Boyd, certify that I am the secretary of the corporation named as Operator herein; that Blair Burwell, President, 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.

A. F. Boyd

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXPLORATION PROJECT CONTRACT
MINERALS ENGINEERING COMPANY
LOST CREEK MINE
DOCKET NO. DMEA-2440

Exhibit "A"

Description of the Work

Time Schedule: 0 - 12 months

1. Widen, rebuild and extend to the extent necessary to accomplish the proposed exploration work, approximately four miles of the present bulldozer truck trail, located on the north side of the canyon, to the portal sites of the two adits that are to be driven as noted below.

2. Starting in the vicinity of the H Cut, drive a 1000-foot adit, approximately 8' x 9' in the clear, southward to explore the H-I ore zone along its strike (see attached map). The adit is to be driven at or near the east or hanging wall side of the ore zone and is not to extend beyond the south property line.

3. In the above adit, drive six crosscuts, approximately 8' x 9' in the clear, aggregating not more than 350 feet, westward approximately 35 feet each, to explore the ore zone to its footwall at intervals of approximately 150 feet, and extend two of the crosscuts a maximum of 70 feet farther to explore the low-grade garnet zone that lies between the ore zone and the granite.

4. Starting in the vicinity of the C-1 Cut, drive a 1,200-foot adit, approximately 8' x 9' in the clear, southward to explore the C-D-E ore zone along its strike (see attached map). The adit is to be driven at or near the east or hanging wall side of the ore zone.

5. In the above adit, drive eight crosscuts, approximately 8' x 9' in the clear, aggregating not more than 400 feet, westward approximately 30 feet each to explore the ore zone to its footwall at intervals of approximately 150 feet and extend two of the crosscuts a maximum of 80 feet farther to explore the low-grade garnet zone that lies between the ore zone and the granite.

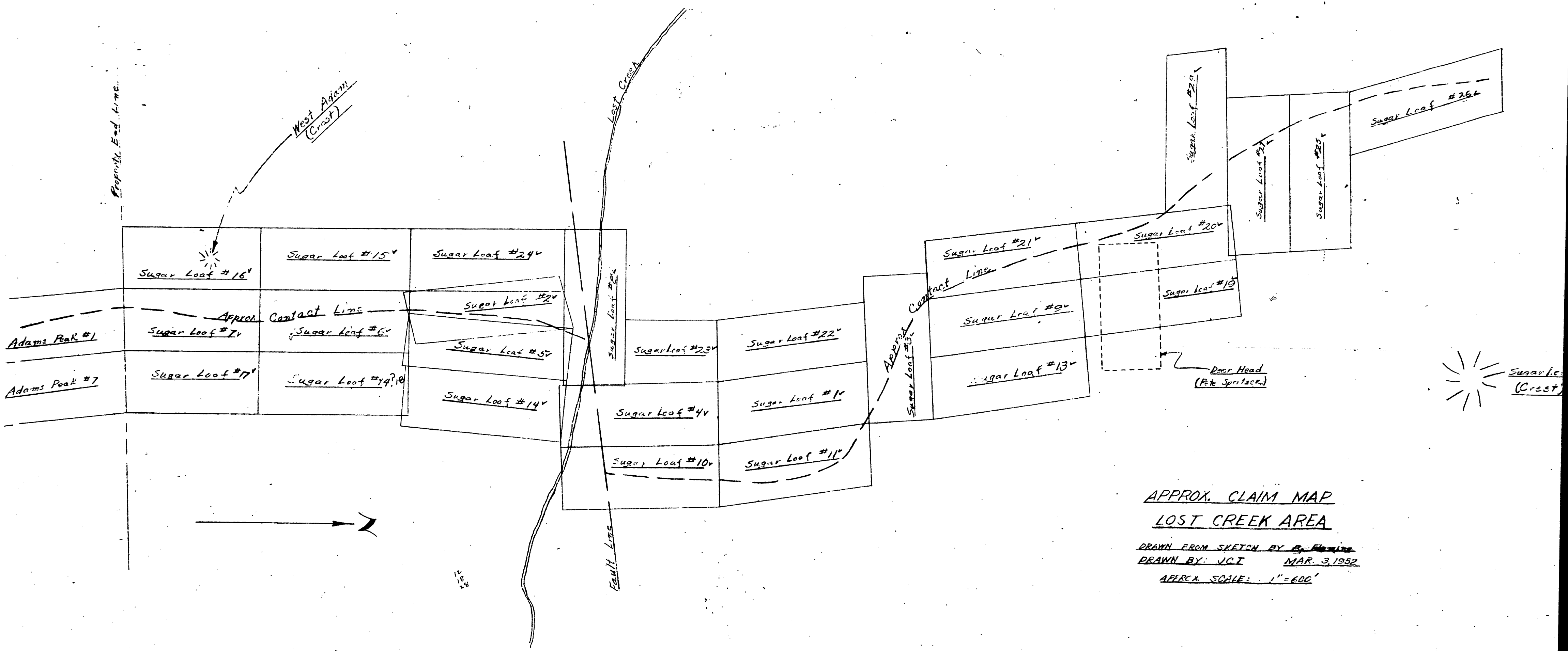
Estimated Costs of the Project

1/ Road work as described in Item 1 of the Description of the Work	$ 8,030.00	
2,950 feet of adit and crosscut, as described in Items 2, 3, 4, and 5 of the Description of the Work, at $35.00 per foot	103,250.00	
Total estimated cost		$111,280.00°
Government participation, 75% of total estimate		$ 83,460.00°

The items marked thus (°) are allowable maximums.

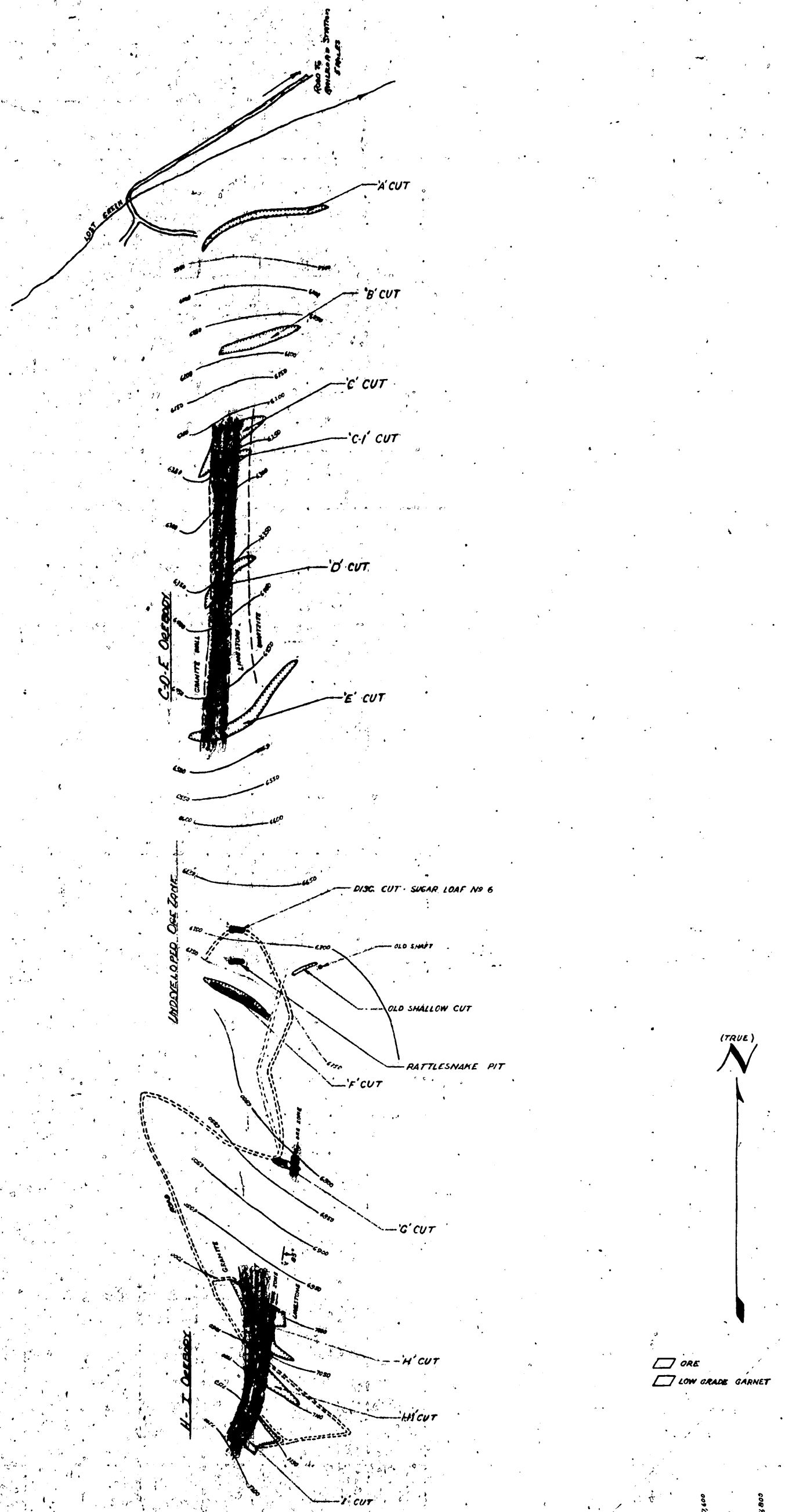
Minerals Engineering Company will carry the costs of engineering, sampling, accounting, and the erection of all necessary buildings in conjunction with its surface stripping, development, and mining program.

1/ The road work is considered to be a unit of work at the agreed price of $8,030.00, but with the approval of the Government Field Team, the Operator may present vouchers for the Government's contribution for road work in two stages of approximately 50 per cent of the completed work for each stage.



APPROX. CLAIM MAP
LOST CREEK AREA

DRAWN FROM SKETCH BY ~~B. Fowler~~
DRAWN BY: JCI MAR. 3, 1952
APPROX. SCALE: 1" = 600'



NOTES:
1. BEARINGS FROM SOLAR OBSERVATION.
2. ELEVATIONS ARE RELATIVE ONLY

MINERALS ENGINEERING CO.

SUGAR-LOAF-CLAIMS
LOST-CREEK-GROUP
(LOCATED 27-MILES N.W. OF DILLON, MONTANA)

SCALE: 1IN=200-FT. | JAN. 11, 1952

DRAWN BY: JAMES C. TERNAHAN JR.
(FROM: SURVEYS & DRAWINGS BY H.D. CLARK)

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2440
Metal or Mineral
Date Received 3-24-52
Amount $
Participation (Government %)

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Name and address of applicant

Date March 12, 1952

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

DMA Docket Number (if available) _____

INSTRUCTIONS

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

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

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

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

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

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

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 24 1952

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Minerals Engineering Company
(Name of company)

By Blair Burwell
(Signature of authorized official)

March 12, 1952
(Date)

President
(Title)

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

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

1. (a) The lode claims located in the Utopia (unorganized) Mining District, County of Beaverhead, State of Montana, described as follows:

Sugar Loaf Quartz Lode Mining claims numbers one (1) through Twenty-nine (29) inclusive.

The property is commonly known as the Lost Creek Property from its location in Lost Creek Canyon.

1. (b) See attached Mining Lease and Agreement.

1. (c) Exploration to be conducted on claims, Sugar Loaf No. 2, No. 6, No. 7, No. 8, No. 14, No. 15, No. 16, No. 17, No. 18 and No. 24.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

2. (a) Tungsten and Molybdenum.

2. (b) The ore lies on a contact between a granite batholith on the West and limestone beds on the East. As near as can be determined, until diamond drilled, the dip of the beds at Lost Creek is approximately 85° East. The contact bearing is S 9° E and extends for a distance of approximately 5000 feet. From an aerial map which the Bureau of Mines at Dillon, Montana have in their possession the contact zone appears to be an extension of the contact zone at Brown's Lake.

In September and October, 1951, Minerals Engineering Company conducted a preliminary exploration program on the property as shown on the accompanying maps. Ten dozer cuts (B, C, C-1, D, E, F, G, H, I and J) were made crosscutting the garnetized zone from the granite to the lime walls. The overburden was removed and numerous samples of the ore were taken. A copy of the assays as reanalized is enclosed, and the assay results are recorded on the maps as shown.

The list includes the pertinent samples of the ore zone. A great number of small character samples of the low grade Footwall Zone are not included as they were small and taken for character samples only.

The property has two ore bodies, the lower known as CDE ore body and the upper known as the HIJ ore body. These are shown on the small map.

(The maps sent with the application need not be returned.)

The HIJ ore body is located at the southermost portion of the ore body near West Adam Peak and the greatest amount of sampling and trenching has been done on this ore body. As shown on the accompanying map the following surface samples were taken:

No.	Location	Width Feet	Sample Size	% WO3 Union	% WO3 Ledoux	% WO3 McCarthy
1	I Cut at Discovery Pit Sugar Loaf No. 7	15	25 Lbs.	.36	.53	
2	Dump Sample at Discovery Pit	-	20 Lbs.	.33		
3	Composite 10 Ft. below Discovery Pit	15	75 Lbs.	.26		

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

No.	Location	Width Feet	Pounds Sample Size	Union % WO3	Ledoux % WO3	McCarthy % WO3
4	Composite 10' below Sample No. 3	45	100	.39		
5	1000 Pound Samples taken at 8 Ft. intervals, across the vein in Center of I Cut	45	1000	.34		
			1000	.07		
			1000	.15		
			1000	.21		
			1000	.22	99 = .20	
6	Composite Sample taken 40 feet below Discovery Pit	45	100	.46		
7	Surface Sample by Carl Martin taken between I and H Cut	-	200	.45		
8	Composite Sample taken across the vein 30' below the road Location H Cut	32	200	.25		
9	Surface Float Sample taken over area from H Cut to G Cut a distance of 400 feet	40	25	.50	value?	

Second ore body is located on the slope to the South of the bottom of the canyon, and is opened up by cuts C, C-1, D and E, covering a distance of 1100 to 1200 feet. A large scale composite sample was taken by blasting approximately 100 tons of material across the vein; and a composite was prepared for a flotation test by crushing approximately 4000 pounds of material from this cut. This sample gave .22% WO3 by Bureau of Mines Albany, .17% WO3 by Union Assay, and the calculated value from flotation tests varied between .22% WO3 and .34% WO3. From three flotation tests the heads calculated from concentrates and tails averaged .25% WO3.

The detail of samples is as follows:

No.	Location	Width Feet	Pounds Sample Size	Union % WO3	Ledoux % WO3	Lewis Walker % WO3	U.S.V. % WO3
1	East 20 Feet of E Cut	20	500	.16		.28	.16
2	West 20 Feet of E Cut	20	500	.18		.48	.16

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

2. (b) Continued.

No.	Location	Width Feet	Pounds Sample Size	Union % WO3	Ledoux % WO3	Lewis Walker % WO3	U.S.V. % WO3	Bureau of Mines % WO3
3	East 17' D Cut	17	500	.06		.31	.21	
4	Center 17' D Cut	17	500	.11		.35		
5	West 17' D Cut	17	500	.19		.22		
6	West 15' C-1 Cut	15	500			.21		
7	East 10' C-1 Cut	10	600	.32	.32	.37	.14	.40
8	CDE Composite reject from all samples Cuts CDE			.17		.34		.22
9	West End C-1 Cut	20	50	.35				

Samples taken in gouge material in Lower C Cut not significant as the material broken up, therefore not included.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

3. (a) We propose to develop tunnels to be driven as follows:

1. A development drift on the HI ore body beginning in the vicinity of the H Cut and extending approximately 1000 feet southward to explore the ore body in the direction of West Adam Peak.

2. The development of an exploratory tunnel to be driven at a suitable location at the C-1 Cut for a distance of 1200 feet in asoutherly direction to explore the downward extension of the DE ore occurrence. In addition to the tunnel, we propose to crosscut to the East and West alternately at intervals of 100 to 150 feet, depending upon the underground conditions. It is estimated that the cost of this drifting will be $35.00 per foot. We propose to drive a large tunnel using diesel equipment, trackless loading devices, and Minerals Engineering Company will pay the difference between the standard tunnel size permitted for exploration and the larger size (approximately 8 x 9) which is required when using underground diesel loaders.

In addition to the underground exploration by drifting, we propose to drill a number of angle Diamond Drill holes from the surface and underground as follows:

3,000 feet of drilling HIJ ore body.

3,000 feet of drilling CDE ore body.

Drilling on CDE ore body should be started on the granite side, on the South side of the sheer zone, where local conditions would justify. This hole to be a South 45° East direction and to be so inclined as to cut the ore at a distance of 100 feet below the exploratory tunnel.

The topography on the West side of the ore lens is more favorable for drilling in order to take advantage of the slope to obtain a greater depth.

Included is $8000.00 for widening and rebuilding of the present bulldozer truck trail located on the North side of the canyon. This is to cover the work on approximately four miles of road.

Tunnels (3500') @ $35.00/ft. Includes, labor, supervision, blasting supplies, ventilation, transportation, supplies (excepting pipe)	$122,500.00
Diamond Drilling (6000') @ $7.50/ft.	45,000.00
Road Work	8,000.00
Operating Equipment (see 7b)	
3500' - 2" Black Pipe	1,220.00
3500' - 1" Black Pipe	650.00
	$177,370.00

35/ft
186/ft

3. (b) It will require three months to start the project and approximately twelve months to complete it.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

4 See attached maps.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

5. There are no existing facilities, buildings, installations or fixtures on the property except one tent which is not available to Minerals Engineering Company

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

6. The necessary buildings will be erected for account Minerals Engineering Company.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

7. (a) None

7. (b)

3500' - 2" Black Pipe	$ 1,220.00
3500' - 1" Black Pipe	650.00
	$ 1,870.00

7. (c) All other equipment will be furnished by Minerals Engineering Company, in conjunction with the surface stripping and mining performed by them.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

8. Labor Schedule:

4 Miners @ $2.00/hour each	)	
2 Miner Helpers @ $1.50/hour	)	or alternate Labor Contract driving drifts
1 Compressor Man @ $1.75/hour	)	

1 Mechanic $2.00/hour
1 Truck Driver @ $1.50/hour
1 Shovel loader operator @ $2.00-$2.25/hour
2 Diamond Drillers @ $2.00-$2.25/hour each
2 Diamond Drill Helpers @ $1.75-$2.00/hour each

1 Superintendent @ $700.00/month	)	1/2 time on Exploration
1 Shift Boss @ $500.00/month	)	1/2 time account Minerals Engineering Company

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

9. In conjunction with our surface stripping, development and mining program, Minerals Engineering Company will carry the costs of engineering, sampling and accounting.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

10. (a) $45,000.00

10. (b) Yes

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

11. The MF-100 application previously filed for access roads has been withdrawn and incorporated in this exploration project proposal.

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Name and address of applicant

Date March 11, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAR 28 1952

4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production _____

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

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Blair Burwell	President D	4,000	over 100,000	13,000		None	
R. G. Sullivan	Vice-Pres D	7,200	"	10,000		"	
A. P. Boyd	Secretary	6,000	"	1,000		"	
W. G. Haldane	Treasurer D	2,400	"	8,000		"	
Richard Warren	Director	None	"	10,000		"	
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 150,000	$ 125,000	$ 1.00	125,000	.01 per share
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Company has Uranium production but these figures are not available because of security reasons.				
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

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

12. Ore or Mineral Reserves:

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

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

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

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

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	400,000	0.35 WO_3	$16.00	$14.40	$13.20
Indicated (probable)	2,850,000	"	"	"	"

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

MINERALS ENGINEERING COMPANY
(Name of company)

By Blair Burwell
(Signature of authorized official)

March 11, 1952
(Date)

President
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

Form MF-100, Minerals Engineering Company, March 11, 1952

1. (a) Uranium Ore - Colorado operations; Tungsten Ore - Montana Operations.
   (b) Vanadium - Colorado operations.

2. Uranium mines in Colorado. Is part owner of Climax Uranium Company equipped with mill at Grand Junction, Colorado. Drilling operations consist of 15 Mounted Diamond Drill rigs, 5 mounted deep-hole wagon drills, 65 trucks, and other auxiliary equipment.

   (a) Colorado is a developed mine. Montana 250' shaft Greenstone.
   (b) Montana 150' crosscuts - Greenstone mine.
   (c) Montana 75' - Greenstone.
   (d) 18 Surface pits and trenches.

3. Colorado mines and operations not described. Montana follows:

   (a) Lost Creek 6 miles NW from Navy, Montana; Greenstone 5 miles NW from Apex; Montana Stations on O.S.L. RR 50 miles SW of Butte, Montana.
   (b) Utopia Mining District (Lost Creek) and Birch Creek Mining District (Greenstone).
   (c) Township 4S, Range 10W, Section 11, 14 and 23.
   (d) Beaverhead County, Montana.

4. (a) Montana operations not in operation. In development stage.
   (b) Lessee - Option on Greenstone
   Lessee on Lost Creek

5. Montana, none; Greenstone developed for copper, unsuccessful. Property will be in production in April 1952.

6. The company was organized in 1948 and has been operating since its organization. Mr. Burwell, the president, and general manager of the company, has been actively engaged in the mining business for 33 years. The last 13 years he has been operating tungsten mines, mills and refineries for United States Vanadium Company, and his present company. Mr. George Griswold, who will have active consulting management, has been operating mills for 30 years and is a very well-known metallurgist with many patents to his credit. Mr. Estley A. Julian and Mr. Frank Eichelberger, associated with Mr. Burwell as consultants, and owners of the American Alloy Metals Inc., are mining engineers of 45 years' experience.

7. (a) Little work was done on the claims of the Lost Creek and Greenstone property until this summer and fall when an extensive development program was carried out resulting in the uncovering of a very large deposit of tungsten ore on the surface.

   (b) Very little work on any neighboring properties because no market existed for tungsten ore or concentrates until 1951.

7. (c) Please see reports of Mr. Jack Harlan, Bureau of Mines, and United States Geological Survey.

8 & 9 Answered on Form.

10. No ore has been mined or shipped.

11. It is expected to begin mining in April 1952, and shipping 200 to 300 tons per day to the Butte Manganese Mill - Known formerly as Plancor 1804.

12. Deposits are large contact metamorphic deposits occurring on limestone. Granite contacts on the east side of a large granite batholith.

13. County road - gravelled runs to U. S. Highway 91, a distance of 6 miles. It is 1 mile to P. O. of Glen - 8 miles from Melrose - 20 miles from Dillon - and 40 miles from Butte.

14. Water supply from Lost Creek and Birch Creek. A large ever-flowing stream more than sufficient at all seasons of the year.

15. Electric Power is available 5 miles away. Diesel power is used today.

16. Colorado operations not applicable. Tungsten operations on exploratory basis only. No employees at present due to winter weather.

17. 4 Compressors; 1 Diesel power loader; 6 Rock drills; steel and auxiliary equipment; 3 Diamond drill rigs; 1 Diesel-powered wagon drill, awaiting weather conditions to move to property.

18. This is a large outcrop of surface ore and many thousands of tons will be mined as a quarry operation.

C O P Y

MINING DEED

I, BLAIR BURWELL, of Grand Junction, Colorado, in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration, the receipt of which is hereby acknowledged, DO HEREBY GRANT, SELL, AND CONVEY To MINERALS ENGINEERING COMPANY, a Colorado corporation, of Grand Junction, Colorado, all of my right, title and interest in and to the following unpatented mining claims, to-wit:

The Sugar Loaf Quartz Lode Mining Claims Nos. 1 to 28, inclusive, situated in Utopia Mining District (unorganized), Lost Creek Basin Area, in the County of Beaverhead, State of Montana; the certificates of location thereof being duly of record in Book 126, pages 181, 171, 321, 183, 185, 187, 167, 323, 169, 325, 189, 277, 275, 273, 271, 269, 267, 265, 263, 261, 259, 257, 375, 255, 253, 251, 373, 371, 369, 367, and 365, in the office of the clerk and recorder of said county and state;

Together with all of my right, title, and interest in and to that certain mining lease and agreement in which Carl Guidici, Henry Meine, and R. M. Fleming are lessors, and the said Blair Burwell, lessee, said instrument being duly of record in Book 72 of Leases at page 437.

WITNESS My hand this 11 day of March, 1952.

(Signed) BLAIR BURWELL

STATE OF MONTANA,)
:
COUNTY OF BEAVERHEAD,)

On this 11 day of March, in the year 1952, before me, the undersigned notary public, personally appeared Blair Burwell, known to me to be the person whose name is subscribed to the within and foregoing instrument and acknowledged to me that he executed the same.

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

(Signed) LEONARD SCHULZ
Notary Public for the State of Montana
Residing at Dillon, Montana
My commission expires Feb. 4, 1955.

C O P Y

MINING DEED

I, ~~R.~~ Geary M. FLEMING, a single man, of Dillon, Montana, in consideration of the sum of Five Thousand Dollars ($5,000.00), the receipt of which is hereby acknowledged, DO HEREBY GRANT, SELL, AND CONVEY to BLAIR BURWELL, of Grand Junction, Colorado, all of my right, title, and interest in and to the following unpatented mining claims, to-wit:

The Sugar Loaf Quartz Lode Mining Claims Nos. 1 to 28, inclusive, situated in Utopia Mining District (unorganized), Lost Creek Basin Area, in the County of Beaverhead, State of Montana; the certificates of location thereof being duly of record in Book 126, pages 181, 171, 321, 183, 185, 187, 167, 323, 169, 325, 189, 277, 275, 273, 271, 269, 267, 265, 263, 261, 259, 257, 375, 255, 253, 251, 373, 371, 369, 367, and 365, in the office of the clerk and recorder of said county and state;

Together with all of my right, title and interest in and to that certain mining lease and agreement in which Carl Guidici, Henry Meine, and R. M. Fleming are lessors, and the said Blair Burwell, lessee, said instrument being duly of record in Book 72 of Leases at page 437.

WITNESS My hand this 28 day of February, 1952.

(Signed) R. M. FLEMING

STATE OF MONTANA,)
) ss.
COUNTY OF BEAVERHEAD,)

On this 28 day of February, in the year 1952, before me, the undersigned notary public, personally appeared R. M. FLEMING, known to me to be the person whose name is subscribed to the within and foregoing instrument and acknowledged to me that he executed the same.

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

(Signed) LEONARD SCHULZ
Notary Public for the State of Montana
Residing at Dillon, Montana
My commission expires Feb. 4, 1955.

C O P Y

GEORGE M. FLEMING,
a single man

-To-

BLAIR BURWELL,
of Grand Junction,
Colorado

OPTION TO PURCHASE.

Dated December 15th, 1951

Filed for Record, Dec. 17,
1951, at 10:27 A.M.

Recorded in Book 117 of
Miscellaneous Page 340

Consideration $500.00

KNOW ALL MEN BY THESE PRESENTS:

That I, GEORGE M. FLEMING, a single man, of Dillon, Montana, for and in consideration of Five Hundred Dollars ($500.00) to me in hand paid by BLAIR BURWELL, of Grand Junction, Colorado, the receipt of which sum is hereby acknowledged, agree as follows:

1. I hereby give and grant to the said Blair Burwell, his heirs and assigns, the exclusive right or privilege of purchasing all of my right, title and interest in and to the following described unpatented lode mining claims, situated in the Utopia (unorganized) Mining District, Beaverhead County, Montana, to-wit:

Sugarloaf Quartz Lode Mining Claims Numbers
One (1) through Twenty-nine (29) inclusive.

2. The option price for my interest in and to said property is Fifty Thousand Dollars ($50,000.00) and upon election to purchase, shall be due and payable in cash.

3. Notice of election to purchase hereunder by the said Blair Burwell, his heirs and assigns, shall be in writing and shall be given to me at Dillon, Montana, on or before December 15, 1961. Such notice shall be deemed to have been fully given if mailed, first class postage prepaid, registered, to George M. Fleming, Dillon, Montana.

4. Said mining claims are presently in the possession of the said Blair Burwell under the terms and conditions of a certain mining lease and agreement dated August 30, 1951, wherein Carl Guidici, Henry Meine and R. M. Fleming are Lessors, and the said Blair Burwell is Lessee. I am entitled to share in the rents and royalties paid under and pursuant to the terms of said lease; and I agree that any moneys hereafter received by me pursuant to said lease shall be a credit on the option purchase price hereinabove mentioned. I further agree that the sum of

$500.00 paid as a consideration for this option, shall likewise be a credit upon said option purchase price in the event the said Blair Burwell, his heirs or assigns, elect to exercise said option.

5. I agree to forthwith execute and deliver to the First National Bank of Dillon, Montana, a duplicate original of this agreement, together with a good and sufficient quitclaim deed wherein and whereby I quitclaim to the said Blair Burwell all of my right, title and interest in and to said mining claims. Said depository bank shall retain said quitclaim deed for delivery to the said Blair Burwell, his heirs and assigns, upon, and only upon the full and complete payment by him on or before the 15th day of December, 1961, of said option purchase price. All payments hereafter made by the said Blair Burwell, his heirs and assigns, shall be made to said depository bank. In the event the said Blair Burwell, his heirs and assigns, shall fail to pay said option purchase price on or before said date, said depository bank shall at once surrender, upon demand therefor, said quitclaim deed; and the said Blair Burwell, his heirs and assigns, shall not be entitled to the return of all or any part of the moneys theretofore paid pursuant to the provisions hereof, and such moneys shall in such event be deemed and considered as the consideration for this option.

6. I agree to furnish to said depository bank a true statement of any and all lease moneys received by me pursuant to the terms of the above mentioned lease, promptly as the same are received.

7. Time is of the essence of this option.

GEORGE M. FLEMING

STATE OF MONTANA)
) ss
COUNTY OF BEAVERHEAD)

Acknowledged December 15th, 1951, by GEORGE M. FLEMING, Leonard A. Schulz, Notary Public for State of Montana. Residing at Dillon, Montana, My Commission expires Feb. 4, 1952. (NOTARIAL SEAL).

COPY

MINING LEASE AND AGREEMENT

THIS MINING LEASE AND AGREEMENT, Made and entered into this 30th day of August, A. D. 1951, by and between CARL GUIDICI, HENRY MEINE and R. M. FLEMING, all of the City of Dillon, State of Montana, as parties of the FIRST PART, and hereinafter denominated as LESSORS, and BLAIR BURWELL of the City of Grand Junction, State of Colorado, as party of the SECOND PART, and hereinafter denominated as LESSEE,

W I T N E S S E T H;

WHEREAS, the LESSORS now own and hold, free and clear of all liens, encumbrances, demands and adverse claims, except the claim or right of one PETER SPICER, of Dillon, Montana, which said right and claim is herein acknowledged and by all parties hereto duly recognized, the possessory title, under the mining laws of the United States and the State of Montana, in and to the unpatented lode mining claims located in the Utaopia (unorganized) Mining District, County of Beaverhead, State of Montana, described as follows, to-wit:

Sugarloaf Quartz Lode Mining
Claims Numbers One (1) through
Twenty-nine (29) inclusive, and

WHEREAS, the LESSORS are desirous of leasing and letting said claims, and all thereof, to the LESSEE upon the terms and conditions hereinafter recited, and the said LESSEE is desirous of leasing and taking all of said claims of and from said LESSORS, upon said terms and conditions,

NOW, THEREFORE, in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter expressed and by the LESSEE to be kept and performed, the said LESSORS do hereby let, lease and

demise unto the said LESSEE the above described mines, mining claims and mining properties, together with all appurtenances, rights and franchises thereunto belonging, or in anywise appertaining, including any and all appertenant water and timber rights.

TO HAVE AND TO HOLD unto said LESSEE for the term of ten (10) years from the date hereof, expiring at noon on the 30th day of August, A. D. 1961, unless sooner forfeited or determined through the violation of any covenant or agreement herein required to be performed by the said LESSEE, but with the right and option of renewal for a like period of ten (10) years upon the same terms and conditions as in this Lease and Agreement recited, if this said Lease and Agreement is fully performed by the LESSEE and the property is in operation at the expiration of the original term herein let and demised.

In consideration of such demise, the LESSEE covenants and agrees with the LESSORS as follows, to-wit:

A. To pay to the LESSORS within fifteen (15) days after the execution and delivery of these presents, and prior to entering into the possession of said properties, the sum of FOUR THOUSAND DOLLARS ($4000), lawful money of the United States of America, said payment as made to be credited by said LESSORS as advance payment on royalties as hereinafter provided.

B. To thereupon enter upon said mines, mining claims and premises and investigate the same, including the performance of sampling, excavation of pits, trenches and open cuts, or underground work, and other work including engineering and geological work necessary to develop the properties for mining, and to conduct said work and all thereof in a continuous manner with

due diligence and in accordance with sound mining practices, unless prevented by inclement weather or acts of God beyond which the LESSEE has no control, and, in connection with all of such preliminary work, to expend not less than the sum of TEN THOUSAND DOLLARS ($10,000), and upon application of said LESSORS, said LESSEE further agrees to make a satisfactory showing as to how said sum has been expended upon said properties.

C. To either reliease of record the said LESSORS from this Lease adn Agreement by written notice to them to such effect on or before the 1st day of April, A. D. 1952, or, on or before said date, to give written notice to said LESSORS of election to proceed under the terms of this said Lease and Agreement, and thereafter carry out and fulfill, as LESSEE, the terms, covenants and conditions as follows, to-wit:

I. (a) To pay to said LESSORS as rents or royalties, and in the manner hereinafter set forth, upon all tungsten, ores, minerals, and materials mined and stockpiled from said demised premises, a royalty advance in the sum of FIFTY CENTS (50¢) per wet ton of Two Thousand (2000) pounds, said royalty advance to be credited to the milling royalty as next hereinafter recited.

(b) To pay to said LESSORS as rents or royalties, and in the manner hereinafter set forth, upon all tungsten, ores, minerals and materials mined and milled from said demised premises, a royalty in a sum equal to FIVE PER CENTUM (5%) of the gross millhead without deduction, said gross millhead without deduction being determined for the purposes of this Lease and Agreement by taking the tungsten (and/or other mineral) content ascertained by weights and assays and multiplying this initial factor by the average previous monthly price for said tungsten (and/or other mineral) as

recited in the Engineering & Mining Journal, or other standard publication containing price quotations currently, plus the total of then existing governmental subsidies awarded, and for the purpose of this royalty to then ascertain FIVE PER CENTUM (5%) of this final figure.

II. To pay to said LESSORS all royalties and royalty advances on production as aforesaid on a monthly basis, excepting as hereinafter qualified, commencing on the 1st day of each and every succeeding month following such stockpiling or milling.

III. To pay to said LESSORS commencing the 1st day of April, A. D. 1952, and on the first day of each and every month thereafter to and including the 1st day of December, A. D. 1952, a minimum royalty in the sum of TWO THOUSAND DOLLARS ($2000) per month, all of which royalty shall be considered as advance royalty and be credited by the said LESSORS on future milling royalties found due and owing, all as hereinbefore set forth, and such minimum monthly royalty shall be payable and paid until such time as the production from the mining properties herein let and demise equals and/or exceeds the monthly minimum royalties as in this sub-paragraph set forth. In the event that following payment of said royalty advance as herein set forth a default in production, from any cause, results, advances theretofore paid the said LESSORS by the said LESSEE shall be retained by said LESSORS as and for a reasonable rental for said properties and as liquidated damages and not considered as a forfeiture.

IV. To thereafter, and during the life of this Lease and Agreement, and any extension thereof under the option terms hereinbefore granted, to pay to said LESSORS a minimum royalty from and after the first day of January, A. D. 1953, in the sum of THREE THOUSAND FIVE HUNDRED DOLLARS

($3500) all as in Paragraph III immediately above set forth, PROVIDED, NEVERTHELESS, that during the months of January, February, and March of each and every succeeding year during the term hereof, said LESSEE may, at his exclusive option, pay said minimum royalty on either a monthly basis as aforesaid or await the expiration of the quarter, or any portion thereof, to make said payment, with provisions in default of production as in said Paragraph III contained.

V. To thereafter, and during the entire life of the Lease and Agreement, or extension thereof, to perform according to law all necessary annual assessment work on all of said mining claims and file the necessary affidavits on or before the due date thereof in each and every year during the term hereof. In the event of further locations of claims or fractions of claims at the instance of the LESSEE, the same shall be taken in the names of the LESSORS, but the same immediately thereupon shall be considered included in the every term and provision of this Lease and Agreement, and to furnish to the LESSORS, from time to time, and as compiled and prepared, copies of all maps, reports, assays and other date resulting from the examination and investigation of such mines, mining claims and mining properties, and to allow the LESSORS and/or their agents, at any reasonable time, to enter in and upon said mines, mining claims and mining properties for purposes of inspection and general investigation, and at any time to take samplings from said mines, mills or stockpiles for the purpose of assay, or otherwise, and said LESSORS shall be given upon receipt duplicate copies of all assays, pulps, reports, and other information in relation to the operation of said properties, and to take out, carry and maintain full industrial insurance for any and all persons employed in or upon said

premises by the LESSEE, and to conduct all operations so as to comply fully with the laws of the State of Montana, and the United States, relating to mining, safety regulations and in every other respect, and to conduct any and all operations in approved mining fashion, and not to commit waste nor permit the filing or assertion of materialmen's liens, mechanic's liens or other encumbrances against any of said properties, and to post notices in at least three (3) conspicuous places on the mining property showing that the property is being operated by the LESSEE and that all creditors must look to the said LESSEE for payment of any accounts incurred after operations commence by the LESSEE, and to hold harmless the LESSORS, and each of them, from any and all claims or demands arising or growing out of the exploration, development or operation of said properties by the LESSEE, and to comply with the Federal and State Laws in regard to Social Security, Unemployment Compensation and withholding of taxes.

VI. All payments to the LESSORS herein to be by the LESSEE made, shall be timely made by said LESSEE as herein agreed, to the credit of the LESSORS at the State Bank & Trust Company, at Dillon, Montana.

VII. In the event of the erection of concentrating mill by the LESSEE or his assigns, or at the instance of either, on or near the properties herein let and demised, first priority in processing shall be and is hereby afforded and given the ores from the premises herein leased, to the then existing capacity of said mill.

VIII. Upon violation of any covenant or covenants hereinabove recited, this Lease and Agreement, at the option of the LESSORS or their agents, may thereupon, after sixty (60) days due notice in writing to the LESSEE at 801 4th Avenue, Box 957, Grand Junction, Colorado, and provided

the deficiencies complained of therein have not been corrected within said period by the LESSEE, enter upon said premises and dispossess all persons occupying the same hereunder, and the said LESSORS shall thereupon, in case of such termination, retain all considerations theretofore received by them as liquidated damages for non-performance, and as an exclusive remedy, but, the LESSEE shall have the right to remove his machinery and equipment, not of a real nature, from said properties for a period of ninety (90) days after any such termination, but, all subject, however, to the express condition that termination of this Lease and Agreement may not be given by the LESSORS, and the said Lease and Agreement may not be terminated by them because of any failure to perform on the part of the LESSEE in the event conditions in the tungsten market are such as to prevent or preclude the mining of such ore on a profitable commercial basis, after the LESSEE has provided all usual facilities to market or treat the raw material and market it, the understanding in this behalf being that all minimum monthly royalties and all other covenants and conditions, except the assessment work, on the part of the LESSEE shall be suspended during any such adverse market condition, but immediately upon the improvement of the market conditions to the point of economic feasibility for mining operations, the LESSEE to be required to perform all covenants and conditions heretofore set forth. In the event of disagreement between the parties hereto as to the existence of conditions permitting such cessation of operations as in this paragraph set forth, or in the event of disagreement between said parties as to any term or provision in this Lease and Agreement contained, the matter or matters in issue shall be presented for final determination and arbitration to an Arbitration Committee as hereinafter set up, and

all parties hereto do irrevocably covenant and agree to abide and be bound by the resulting determination of said Arbitration Committee.

IX. For the purpose of avoiding litigation and to arbitrate any differences arising between the respective parties hereto in relation to the terms of this Lease and Agreement and interpretations of the same, as covenanted and agreed above, an Arbitration Committee shall be convened and constituted immediately upon said issue arising, to be selected and composed as follows, to-wit: the said LESSORS shall select one member of said Committee and the said LESSEE shall select a second member thereof, and the two members thusly selected shall select a third, and all matters in dispute shall be submitted to this said Committee for arbitartion, and the parties hereto mutually agree to abide the determination of said Committee. In the selection of Committee members the interested parties shall select individuals learned by virtue of education and experience in the mining industry.

X. The LESSEE shall have the right to assign this Lease and Agreement without the necessity of obtaining the approval of the LESSORS, but the assignee must fully and without qualification carry out and comply with all of the terms, covenants and conditions of this said Lease and Agreement.

XI. Time is expressly made the essence of this Lease and Agreement, together with each and every covenants and agreement to be performed, and each and all of said covenants and agreements as herein contained are agreed and recited to be material.

XII. This Lease and Agreement shall be binding upon the respective parties hereto, and upon their heirs, executors, administrators, and assigns.

Executed in duplicate, and immediately effective upon delivery.

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

/s/ Carl Guidici (SEAL)

/s/ Henry Meine (SEAL)

/s/ R. M. Fleming (SEAL)

LESSORS

/s/ Blair Burwell (SEAL)

LESSEE

STATE OF MONTANA,)
) ss.
County of Beaverhead.)

On this 30th day of August, A. D. 1951, before me, DONALD J. SMITH, a Notary Public in and for the State of Montana, personally appeared CARL GUIDICI, HENRY MEINE, R. M. FLEMING and BLAIR BURWELL, all known to me to be the persons whose names are subscribed to the within and foregoing Lease and Agreement, and each for himself acknowledged to me that he did executed the same for the uses and purposes therein recited.

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

/s/ Donald J. Smith

Notary Public for State of Montana.
Residing at Dillon, Montana

(Notary Seal)

My commission expires
January 10, 1952

(Montana Seal)

STATE OF MONTANA)
County of Beaverhead) ss. 81390 (Indexed)

I hereby certify that the within instrument was filed in my office on the 10 day of Nov. A.D. 1951 at 40 min. past 11 o'clock, A. M. and recorded on page 437-44 of Book 72 of leases Records of Beaverhead County, Montana.

Attest my hand and seal.

/s/ Dora E. Schmittroth, County Recorder

by /s/ Betty Ann Mussetter, Deputy

Fees $5.05

COPY

DOCKET
400 SURNAME

Chapman
Holt
Martin
Nelson
Chamb

May 7, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Certification of Discovery or Development
Docket No. DMEA 2440 - Tungsten
Mineral Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Ide-E300

Operator: Minerals Engineering Company, Mr. Blair Burwell, President, Box 1951, Grand Junction, Colorado

Property Ownership: The Sugar Loaf Quartz Lode Mining claims Nos. 1 to 29 inclusive, are owned by Carl Guidici, Henry Maine and R. M. Fleming, of Dillon, Montana, who on August 30, 1951, made a Lease and Agreement with Blair Burwell of Grand Junction, Colorado, on the aforesaid claims. By document dated February 28, 1952, R. M. Fleming sold all his interest in the same claims to Blair Burwell. By a document dated March 11, 1952, Blair Burwell assigned all his interest in the Lease and Agreement and aforesaid claims to the Mineral Engineering Company.

Contract: Executed April 17, 1952, for road building, drifting and crosscutting (2,950 feet), at a cost of $111,200.00, Government participation 75%, $83,360.00. Amendment No. 1 allowed for changes in directions of crosscutting. Amendment No. 2 added 2,000 feet of diamond drilling at an additional cost of $10,000.00, making a total of $121,200.00, Government share 75% $90,960.00. Amendment No. 3 granted a recess.

Work Completed: Road work, drifting 1,082 feet, crosscutting 421 feet and diamond drilling 1,263 feet, at a total cost of $66,950.00*, Government share $50,212.50*.
(*) Subject to audit.

History and Production: There was little work on the property prior to the date of the contract. No production was made prior to the contract.

180.
3 677

10/26/66

Mr. Johnson:

Tom Lehrkind of Congressman Olsen's office (Montana) extension 6409, phoned and said they have a letter from a Mr. Carl Giudici, Dillon, Montana, who wants information concerning a DMEA contract in 1952, as to terms and conditions and whose signatures appear on the contract (Beaverhead County, Montana). The letter did not give the name of the operator, nor the docket number.

He said Giudici leased the land to Blair Burwell and Minerals Engineering Company, Grand Junction, Colorado.

Mr. Lehrkind said he understood that information could not be released under certain circumstances, but if we could locate such a contract he would appreciate a phone call from you.

I checked on the cross-reference cards with Catherine Curtin and she could not locate anything on Burwell, nor Minerals Engineering Company for Beaverhead, County, Montana.

DME & A - 2490 (Tungsten)
Cont. No. E 300 - Dated 4/10/52
Lost Creek Mines gla

12/12/66 - Tel. Tom Lehrkind and gave him pertinent available data regarding contract.

FY

Geology: Along contact metamorphic zones of limestones and intrusives, tactites have been formed and show some scheelite mineralization.

Ore Value & Tonnage: Except for relatively small pockets and sheets, the grade of the ore is indicated to be about 0.19 percent WO_3 or lower, which under present conditions is sub-marginal to marginal in grade. 19,870 tons have been mined and shipped to February 29, 1956, which probably averaged about 0.19 percent WO_3. No definite figures are available as to indicated or inferred tonnage reserves.

Comments: The Operator returned unsigned the mutual termination agreement submitted to him with letter of April 5, 1955, but in view of his acceptance of the royalty settlement submitted to him by the Field Team a new termination agreement should be prepared now. However, certification should not be delayed on that account.

Certification: As recommended by the Field Team, a certification of discovery or development was prepared by this Division on May 7, 1956.

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

SPHolt/foc
5/7/56
cc to: Docket
Code 400
Admr. Read. File

☐ Audited

☐ Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12-22-54
Incl. Voucher for August 1953

☐ Actual Cost

☑ Agreed Unit Costs

Name Minerals Engineering Co
LOST CREEK MINE

Docket No. 2440

State Montana

Commodity Tungsten

Idm-E No. 300

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	feet 2950	103,250.00	feet 150.3	52605.00	52,605.00
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond Ax to Ex	2000.00	10,000.00	1263	6,315.00	6,315.00
Surface Excavation		Job 8,030.00		Job 8,030.00	Job 8,030.00
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$121,280.00		$66,950.00	$66,950.00

TERMINATION AGREEMENT MAILED 3/11/55
(PSEUDO-CERTIFICATION)

Prepared by [signature]

71626

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 16 1960

DATE	INITIALS	CODE
5-12	gad	220
5/16	[illegible]	800
"	~~Halt~~	500
		225

One (2)

So. 157 Howard Street
Spokane 4, Washington
May 12, 1960

Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Gentlemen:

For your information and files is enclosed a copy of a Report of Royalty Review dated April 13, 1960, on sales of minerals from property referred to as the Lost Creek mine located in Beaverhead County, Montana, during the period March 1, 1956, through April 13, 1960.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME
Region I

Enclosure

cc: Fiscal Section w/orig. Report of Royalty Review
Contract Admin. & Audit Div., OME
OME(2)
USBM w/Thermofax copy of report
DRF

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

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 22 1957

DATE	INITIALS	CODE
8/22	C	220
		225

August 19, 1957

Mr. W. S. Martin
Acting Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Martin:

In reference to our letter to you of July 29, 1957, and in further reference to your letter of July 19, 1957, regarding royalty in the amount of $444.35 due the Government by the Operator on ore mined in 1955 and milled during August 1956, Minerals Engineering Company sent a check to this office under date of August 9, 1957, for the entire amount.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

cc: USBM(2)
USBM(AD)
Turner
CPF

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 26 1957

DATE	INITIALS	CODE
8/26	C	220
8/26	WSM	400

So. 157 Howard Street
Spokane 4, Washington

August 19, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMFA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mrs. Long:

Attached is Check No. 2842 (Voucher No. 3047) dated August 9, 1957, for $444.35 which has been received from Minerals Engineering Company of Grand Junction, Colorado, which represents royalty due the Government on ore mined in 1955 and milled during August 1956.

A copy of a letter dated August 9, 1957, from Mr. Clyde Nettleton, Office Manager, Minerals Engineering Company, is also attached.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

Royalty

ATTACHMENTS REC'D 8-20-57 (DATE)
BY A. L.
ROYALTY PMTS. TO DATE $6648.86

MI[illegible]RALS ENGINEERING C[illegible]PANY
P. O. BOX 1951
G[illegible]ION, COLORADO

August 9, 1957

Mr. A. E. Weissenborn
Executive Officer
U. S. Geological Survey
DMEA Field Team
South 157 Howard Street
Spokane, Washington

Re: [illegible] (Tungsten)
[illegible] Beaver Head Co.,
[illegible]
[illegible] 1300

Dear Sirs

[illegible]

[illegible] COMPANY

[illegible]
Office Manager

cc: Blair Burwell
C. A. Walt

[illegible]

[illegible]

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

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 1 1957

DATE	INITIALS	CODE
8/1	P.K.	220
8/1	WSM	400

July 29, 1957

Mr. W. S. Martin
Acting Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Martin:

This will acknowledge receipt of your letter of July 19, 1957, asking whether the Operator has been requested to pay royalty in the amount of $444.35 due the Government on ore mined in 1955 and milled during August 1956.

We have written Minerals Engineering Company asking for this overdue royalty and three copies of our letter of July 24, 1957 are enclosed.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: USBM (2)
USBM (AD)
Turner
CPF

FILE COPY
DMEA
RECEIVED AUG 31 1957

DATE	INITIAL	CODE
8/1	NSG	400

1201 N. Division St.
Spokane 2, Washington

July 24, 1957

Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Gentlemen:

Our recent royalty inspection of the cited contract disclosed that 1250.64 tons of stockpiled ore was milled during August 1956 from which was recovered 233.87 units of WO_3.

The gross sale price per unit of WO_3 during August 1956 was $55.00. A formula for computing the Government's percentage royalty on production is incorporated in the Termination Agreement of this contract. Using this formula, the Government's royalty on the above production amounts to $444.35 (subject to audit).

Please remit the amount due in order that your royalty account may be kept current. Checks should be made payable to Defense Minerals Exploration Administration and mailed to A. E. Weissenborn, Executive Officer, DMEA Field Team, South 157 Howard Street, Spokane 4, Washington.

By Field Team, Region I

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

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

cc: DMEA (3)
USGS (2)
USBM (AD)
Turner
Docket

Form 7
(2-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/17	Fisher	800
7-17	Chambers	800
7/17	Chapman	400
7/19	Martin	130
"	Bowman	110
"	Rottendorf	100
7/19	P.K.	220
		225

JUL 19 1957

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

The Semi-Annual Report of Certified Project for the period January 1 to June 30, 1957, indicates that $444.35 royalty is due to the Government from Minerals Engineering Company in connection with 233.87 units of WO_3 recovered from ore mined in 1955 and milled during August, 1956. It is stated that the amount due has been computed in the manner provided in the Termination Agreement dated November 20, 1956, on basis of prevailing price of tungsten trioxide in August, 1956.

Will you please advise whether the Operator has been requested to pay this royalty and the results of your efforts at collection?

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (HB)

APPROVED:

O. M. Bishop (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard (HB)
Member, Geological Survey

Copy to: Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. Holliday, USBM
Mr. Martin
Mr. Chambers

CEFisher/ama
July 17, 1957

8623

440

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

July 8, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 11 1957

DATE	INITIALS	CODE
7/11	C	220
		225

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

Dear Mr. Selfridge:

Enclosed are four copies each of 50 royalty inspection reports prepared by engineers of the Bureau of Mines for the period January 1 to June 30, 1957.

Our recent royalty inspection of the Minerals Engineering Company docket, DMEA-2440 (tungsten), indicates that some ore was milled in August 1956 which the Operator failed to report and on which no royalty was paid the Government. Consequently, our semi-annual royalty report for the period January 1-June 30, 1957 will be delayed until we investigate this matter further.

Our royalty report on Peter Antonioli, DMEA-3278 (manganese), will also be delayed pending the receipt of certain information necessary to complete it.

We will transmit the two additional reports as soon as possible.

Sincerely yours,

Wing G. Agnew

Wing G. Agnew
Acting Executive Officer
DMEA Field Team, Region I
Northwest District

Enclosures

cc: USGS (2)
USBM (AD)

DMEA Form 7
(12-56)

2440

Mailed after hours

OFFICIAL FILE COPY

Date	Surname	Code
5/29	Mittendorf	100
6-4	C	225
		225

MAY 29 1957

Received by mail

Mr. Blair Burwell
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Dear Mr. Burwell:

Thank you for your letter of May 14 expressing your willingness to cooperate with Mr. Argall in his current plan to record some selected DMEA case histories.

I presume George will contact you directly in due time.

Thanking you again for your cooperation, and with kindest personal regards,

Sincerely yours,

C. O. Mittendorf (for)

Administrator

COMittendorf/esf
5/29/57
Copy to: M&F
Admr. R. File
Mr. Mittendorf

8623

xxxxxxxxxxxxxxxx
1201 N. Division Street
Spokane 2, Washington

February 14, 1957

OFFICIAL FILE COPY
D M E A
RECEIVED FEB 21 1957

DATE	INITIALS	CODE
2/21	C	220
2/21	[illegible]	800
		225

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I, NW
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mrs. Long:

Work completed under the contract was done to the satisfaction of the Government and the contract was terminated effective November 20, 1956. A final report evaluating the results of the exploration program has not been received from the Operator. However, it is felt that such a report would add very little to the information we already have on this project, and the requirement making necessary the submission of a final engineering report by the Operator is hereby waived.

The Government has no interest in supplies or equipment purchased for use on the project.

The project was certified on May 17, 1956.

A final Report of Review has not been received.

As all contract requirements have been met, it is requested that final settlement of our account with the Operator be made.

Sincerely yours,

Wing G. Agnew, Acting Exec. Officer
DMEA Field Team, Region I, NW

cc: Survey (2)
DMEA (2)
Contract Admin. & Audit Div.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

February 7, 1957

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are two copies of a letter dated January 2, 1957, from Mr. C. A. Walt, treasurer, with a little note, both of which are self-explanatory. We are enclosing the original and four copies of the Termination Agreement first issued by the Washington office (August 29, 1956) which is signed by Blair Burwell, president. The duplicate of the agreement transmitted to us with your letter of November 20, was signed by Mr. C. A. Walt and distribution was made with our letter of December 10, 1956. You will recall that Minerals Engineering Company stated that they had never received the first Termination Agreement.

It is rather amusing that after all our difficulty in obtaining a termination agreement, we now have not one but two. The Operator has kept copies of both. We trust that the existence of two agreements, identical except for date, will cause no complications.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosures

cc: USBM (2)
USBM (AD)

MINERALS ENGINEERING COMPANY

P. O. BOX 1951

GRAND JUNCTION, COLORADO

2 January 195[illegible]

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE

Mr. A. E. Weissenborn, Exec. Officer
[illegible] Certification Survey
[illegible] 157 Howard Street
Spokane 4, Washington

Dear Mr. Weissenborn

We are attaching executed copies of Termination Agreement forwarded by your office to the attention of Blair Burwell, President, September 18, 1956.

Thank you very much for your cooperation. We are

Sincerely,

MINERALS ENGINEERING COMPANY

C. A. Walt,
Treasurer

Archive
File

NOTE: Attn: Mr. Weissenborn, Exec. Officer

I am sorry we had to ask you for the second copies of the Termination Agreement. The original showed up in one of Mr. Burwell's files a few days ago and it is the one executed and returned to you.

CAW

Government Copy

OFFICIAL FILE COPY
D M E A
RECEIVED FEB 11 1957
DATE | INITIALS | CODE
2/11 WSM 400

TERMINATION AGREEMENT

It is agreed this 29th day of August 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Minerals Engineering Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E300 (Docket No. DMEA-2440), dated April 17, 1952, as amended, hereinafter called the "Contract," that:

1. Effective May 18, 1954, the Contract and all obligations of the parties are terminated, except as otherwise provided herein.

2. The Government shall contribute only to the agreed unit costs of work performed prior to said effective date.

3. In Article 7 of the Contract, that part of the second sentence beginning with the word "Provided," is deleted.

4. Paragraph c. of Annex I to Amendment No. 3 is revised to read as follows:

"As here used, 'net smelter returns,' 'net concentrator returns,' and 'other amounts realized from the sale or other disposition,' mean gross revenue from sales without any deductions whatsoever, except that at a sale price of $63.00 per unit of contained WO_3 before computing the amount of royalty due the Government on sales of production the sum of $19.47 first shall be deducted from the gross sale price of each unit of contained WO_3. The deduction shall increase or decrease as the sale price per unit of contained WO_3 changes from $63.00, based upon the following formula:

$$\left(\frac{\text{Sale price}}{\$63.00} \times \$19.47\right)$$

(For example, if the gross sale price per unit of contained WO_3 is $55.00, as at present, the Government's royalty after deducting $\frac{\$55.00}{\$63.00}$ of $19.47, which is $17.00, shall be 5 percent of $38.00.) If the production is not sold, the quoted phrases in the first sentence of this paragraph c. mean the market value of the production 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.

Duplicate of one on file different date

5. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and liens for its payment, as revised in paragraph 4 of this termination agreement, records, audits, and recovery of any overpayment, are preserved.

6. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals
Exploration Administration

MINERALS ENGINEERING COMPANY

By Blair Burwell

Title President

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

RECEIVED DEC 17 1956 D.M.E.A.

December 10, 1956

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

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are the Government, Docket, and Division copies of a Termination Agreement executed by the Minerals Engineering Company.

By copy of this letter other copies of the Termination Agreement are being distributed.

Sincerely yours,

D. R. MacLaren
D. R. MacLaren
for: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW Dist.

Enclosures

cc: Finance Office w/encl.
USBM (2)
Turner

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

RECEIVED DEC 3 1956 DMEA

November 26, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Air Mail
Certified, RRR

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

Reference is made to previous correspondence regarding a Mutual Termination Agreement and particularly to your letter of November 1, 1956, in which you state the Agreement previously sent you had become lost.

Our Washington office has prepared a duplicate Agreement (original and six copies enclosed) of the same Termination Agreement sent to you with our letter of September 18, subject to the same conditions as before. As mentioned before, the enclosed Termination Agreement is in lieu of one offered you on April 5, 1955, certain provisions of which you found unsatisfactory. Your new Agreement clarifies the methods of figuring royalties so that there should be no possibility for misunderstanding by either party.

If the terms and conditions of this Agreement are satisfactory to you, please sign all copies. Retain the one marked "for the Operator" and return the rest to this office promptly so that the contract can be formally terminated. If the terms and conditions of the Agreement do not have your approval, please return the original and all copies to this office with your comments.

By Field Team, Region I, NW District

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

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

cc: DMEA(2)
USBM (2)
USBM (AD)
Turner

cw

DOCKET
SURNAME
Chapman
Martin
Talbot
Selfridge
Bjornson

400

NOV 20 1956

Mr. A. R. Meisenburg, Executive Officer
DMEA Field Team, Region I - NW District
Room 157 Federal Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-8300

Dear Mr. Meisenburg:

Reference is made to the subject docket and to your letter of November 5, 1956, transmitting copies of letter of November 1, from Minerals Engineering Company, advising you, in reply to your inquiry of October 29, that their office had not received the Termination Agreement enclosed with your letter of September 18, 1956.

We are, therefore, enclosing a duplicate(original and five copies)of the same Termination Agreement, signed by the Administrator for the Government, subject to the same conditions set forth in our letter of August 29, 1956.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

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

W. P. Williams (WPW)
Member, Geological Survey

TLChapman:fec / 11/14/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. I - NW Dist.
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Enclosures

R.C.S.

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

RECEIVED NOV 7 1956 D.M.E.A.

November 5, 1956

Air Mail

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300 (compl.)

Dear Mr. Selfridge:

Enclosed are two copies of a letter from Minerals Engineering Company, dated November 1, 1956, which is self-explanatory.

We wrote Mr. Burwell September 18, sending him the Termination Agreement; on October 29 we sent a follow-up letter (air mail, certified, return receipt requested) asking him to return it. It seems we will have to start all over again and get a reissue of the Agreement.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I, NW Dist.

cc: USBM (2)
USBM(AD)
Turner

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

November 1, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I, NW Dist.
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

RECEIVED NOV 7 1956 D.M.E.A.

DMEA

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Sir:

Pursuant to your letter of October 29, regarding a Mutual Termination Agreement signed by the Administrator for the Government, dated September 18, I wish to advise that this agreement was not received by us and was apparently lost. I have checked with our other departments and the agreement was not received by them. Therefore, would you please send us another set of copies so that we may take care of the completion of same.

Yours very truly,

MINERALS ENGINEERING COMPANY

Rose L. Carver
Secretary/Blair Barwell

rlc

xxxxxxxxxxxxxxxxxx

So. 157 Howard Street
Spokane 4, Washington

RECEIVED
NOV 1 1956
D.M.E.A.

October 29, 1956

Air Mail
Certified, Return
receipt requested

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

With our letter to you of September 1[illegible], we enclosed the original and six copies of a Mutual Termination Agreement signed by the Administrator for the Government. To date we have not received the signed copies from you.

To reiterate, this termination agreement is in lieu of one offered you on April 5, 1955, certain provisions of which you found unsatisfactory. The new agreement clarifies the method of figuring royalties so that there should be no possibility for misunderstanding by either party.

However, if the agreement is not satisfactory to you please return all copies with your comments. If it is satisfactory, we would appreciate your returning the signed agreement immediately.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I, NW Dist.

cc: DMEA (2)
USBM (2)
USBM(AD)
Turner

Miner 2440

MINERALS ENGINEERING'S TUNGSTEN
PROPERTIES MAKE EXCELLENT RECORD - The Mining Record
page 6, October 4, 1956 issue.

Grand Junction, Colo. -- Minerals Engineering Co. reports net realized income of $466,251 for the first six months of 1956, equal to 61 cents a share on 765,951 shares outstanding. The firm's realized net for the 12 months ended December 31, 1955, was $918,424 or $1.20 a share.

R. G. Sullivan, vice president, said that following signature of the new tungsten purchase program by President Dwight D. Eisenhower, the firm has started delivery of 10,000 units monthly by each of its two mines.

Initial deliveries will be against July and August operating months , during which tungsten operation were curtailed and finally suspended because of the demise of the original strategic minerals program.

The ore in concentrates arrives for final processing at Salt Lake Tungsten Co. refinery in Salt Lake City. Minerals owns 50 per cent interest in this property with Sylvania Electric Products Corp.

Mr. Sullivan said that the initial 18½ million dollar appropriation for the tungsten program would be used up by the forepart of 1957 and supplemental funds are needed.

"Several of the western senators and congressmen already are laying plans for securing additional appropriations when the new Congress meets in January," Mr. Sullivan said.

Mr. Sullivan said Minerals recently acquired the Red Button tungsten claims 50 miles northwest of the firm's Glen, Mont., mill. "Their location, ease of open pit mining and grade of ore will permit us to increase deliveries to 10,000 units monthly."

Mr. Sullivan said that drilling of a small portion of the ore body to date showed "positive existence of 100,000 tons of 1.18 per cent (WO_3(tungsten). Such ore would produce a net operating profit before taxes of an estimated $4,100,000." he said.

Mr. Sullivan said that at the Sonora Province, Mexico, tungsten properties, equipment orders had been placed for construction of a 400 ton a day mill. Operations will start early next year and initial deliveries will be made to England, under previously announced credit arrangement with English financiers in March 1957.

"We believe that our Mexican properties have several times the value of the Brown's Lake (Glen, Mont.) property, which will pass the 10 million dollar production figure some time in September (1956)."

Meanwhile, drilling of reserves on the Carter iron ore properties

near Dillon, Mont., continue, disclosing a magnetite body of indicated 200 million tons of which 52 million tons has 30 percent iron content.

Mr. Sullivan said that milling potentials at this property have created serious interest from possible consumers and cost studies are going forward with eye to sales contracts being completed.

xxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

September 18, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

Enclosed are the original and six copies of a "Mutual Termination Agreement" for the above-referenced contract, signed by the Administrator for the Government.

This termination agreement is in lieu of one offered you on April 5, 1955, certain provisions of which you found unsatisfactory. The new agreement clarifies the method of figuring royalties so that there should be no possibility for misunderstanding by either party. If the terms and conditions of this agreement are satisfactory to you, please sign all copies, retain the one marked "Operator's Copy," and return the others to this office promptly so that the contract can be formally terminated. If the terms and conditions of the agreement do not have your approval, please return the original and all copies to this office.

By Field Team, Region I, NW District

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

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

Enclosures

cc: DMEA (2)
USBM (2)
USBM (AD)

DOCKET
SURNAME

400 Chapman
Martin
Talbut
Selfridge
Fitzsimmons

? 9 1956

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

Re: Docket No. DMEA 2449 - Tungsten
Minerals Engineering Company
Lost Creek Property
Beaverhead County, Montana
Contract No. Idm-2308

Dear Mr. Weissenburg:

Enclosed are the original and five copies of a "Mutual Termination Agreement" for the above referenced contract, signed by the Administrator for the Government.

If the terms and conditions of this proposed agreement are satisfactory to you and the operator, all six copies are to be signed by the operator and the usual distribution made.

If any of the terms and conditions of the proposed agreement do not have your approval or that of the operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JG)

APPROVED:

FRANK D. LAMB (JG)
Member, Bureau of Mines

J. E. Nelson (JG)
Member, Geological Survey

Enclosures:

TLChapman/fcc / 8/22/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
Ft. REG. I - NWD
R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Docket copy

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Minerals Engineering Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-8300 (Docket No. DMEA-2440), dated April 17, 1952, as amended, hereinafter called the "Contract," that:

1. Effective May 18, 1954, the Contract and all obligations of the parties are terminated, except as otherwise provided herein.

2. The Government shall contribute only to the agreed unit costs of work performed prior to said effective date.

3. In Article 7 of the Contract, that part of the second sentence beginning with the word "Provided," is deleted.

4. The first sentence of paragraph c. of Annex I to Amendment No. 3 is replaced by two sentences, as follows:

> "As here used, 'net smelter returns,' 'net concentrator returns,' and 'other amounts realized from the sale or other disposition,' mean gross revenue from sales without any deductions whatsoever, except that before computing the amount of royalty due the Government on sales of production the sum of $19.47 first may be deducted from the gross sale price of each unit of contained WO_3 (for example, if the gross sale price per unit of contained WO_3 is $55, as at present, the Government's royalty after deducting $19.47 = 5 percent of $35.53). If the production is not sold, the quoted phrases in the first sentence of this paragraph c. mean the market value of the production after it is mined in the form in which and the place where it is held."

5. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and liens for its payment, as revised in paragraph 4 of this termination agreement, records, audits, and recovery of any overpayment, are preserved.

6. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

Gubin
Lawyer
"Appd. Sol. Off."
Chapman
Martin
Talbot
Selfridge

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

THE UNITED STATES OF AMERICA

By_____
Administrator, Defense Minerals
Exploration Administration

MINERALS ENGINEERING COMPANY

By_____

Title_____

FROM SOLICITOR

AUG 17 1956

FOR SIGNATURE

400

DOCKET
Surname:
Chapman
Martin

August 8, 1956

MEMORANDUM

To: Associate Solicitor
Division of Mineral Resources

From: Iron and Ferro-Alloys Division, DMEA

Subject: Mutual Termination Agreement
Docket No. DMEA-2440, Tungsten
MineralsEngineering Company
Lost Creek property
Beaverhead County, Montana
Contract No. Idm-E300

Transmitted herewith is a rough draft for your use in preparing a termination agreement for the captioned contract.

Possibly Item 5 should be changed as the price of $43.53 was agreed to on the basis of a WO_3 price of $63.00 per unit and the price now is $55.00 per unit. If so, we need a clause in the agreement allowing for a change in price due to the new price of $55.00 per unit on WO_3, or subsequent price changes, which might be higher.

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

Attachment

cc: Docket
Code 400
~~Operxx&ommittee~~
~~AdmxxRaadxxFile~~
~~TxxKittsgaardxxWS&S~~
~~RxxWxxHoittdayxxWSBM~~

TLChapman/ls
8/6/56

DRAFT

TERMINATION AGREEMENT

It is agreed this _____ day of _____, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E300 (Docket No. DMEA-2440), dated April 17, 1952, as amended, hereinafter called the "Contract," that:

1. All work and operations provided for in said contract and amendments thereto shall be terminated as of May 18, 1954.

2. Any work or operations prosecuted or costs incurred by the Operator after May 18, 1954, shall be for the sole account of the Operator, without contribution by the Government.

3. The Operator hereby releases and agrees to save the Government harmless from all claims or demands arising out of said contract, except as herein otherwise provided.

4. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and liens for its payment are preserved.

5. The total net amount contributed by the Government is repayable on the basis that the concentrates would have a value at the Glen, Montana, mill of $43.53 a unit of contained tungsten trioxide, on any minerals mined or produced from the land described in Article 2 of the contract.

6. The Operator hereby releases and agrees to save theGovernment harmless from all claims or demands under or arising out of said contract, except as otherwise provided for in this termination agreement.

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

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

MINERALS ENGINEERING COMPANY

By _____

Title _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUL 2 - 1956

June 27, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Burwell:

We are enclosing for your information and files one copy each of the First Royalty Audit Certificate and the First Royalty Audit Report, for the period April 17, 1952 to February 29, 1956, incl.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosures

cc: DMEA (2)
USBM (2)
USBM (AD)
Brading

P.S. Although the Brown's Lake contract has long since been repaid we are still much interested in how the enterprise has turned out. Would it be possible to obtain from you the production data from the property since the start of operations there. This information would be much appreciated and would be held strictly confidential unless we obtained a written release from you.

Cer

RECEIVED
JUN 25 1956

xxxxxxxxxxxxxxxxxx
1201 N. Division St.
Spokane 2, Washington
June 20, 1956

Mr. T. H. Brading
224 New Customhouse
Denver 2, Colorado

Re: Minerals Engineering Company
Docket No. DMEA 2440
Contract Idm-E300

Dear Mr. Brading:

This will acknowledge receipt of the following files received today, relative to the subject contract.

1. Exploration contract file
2. Royalty file

Files pertaining to American Alloy Metals, Inc. Docket No. DMEA-2292, Contract No. Idm-E247, were also received today.

1. Exploration contract file
2. Royalty file.

Regards,

C. A. Turner, Auditor

cc: Jay L. Chambers

Talbert

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

JUN 11 1956

Mr. Thomas H. Breding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Royalty Audit
Minerals Engineering Company
Idm-E300, DMEA-2440

Dear Mr. Breding:

Receipt is acknowledged of the Washington copies of your First Royalty Audit Certificate and Report covering the referenced project.

The Washington copies have been corrected by this Division in the following particulars:

1. The last two lines in the first paragraph of the certificate changed to "Docket No. DMEA-2440 (Tungsten), dated April 17, 1952, including Amendments Nos. 1, 2 and 3."; and

2. The words "as operations were halted" on the first and second lines of the eighth paragraph on page 2 of the report changed to "as exploration was halted".

After these changes have been made in all other copies, normal distribution thereof is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
June 11, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.S.

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 6/6/56

REFERRED TO:

1. Mr. [illegible]
2.
3. SPH
4. Docket 2440

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: .....

Check (X) before the items needing attention.

Noted - S.P.H.

C. O. Mittendorf (fw)
Initials of sender.

GPO 16—63815-1

— Burwell — 28 per —

Docket 2440

Dec 54 — no certify — GS v Bur.

Now Sign Term agmt.

wants to settle at 28 percent instead
$63

does not sell one on that basis

June 57

How does he settle with 23 outstanding interest

Does he use (Per Return) for purposes gross income for tax purposes,

Oct 18 Bonds

Company brings in 1½%

Annex Feb 17 — Mar 17 Clarifies

Nov

Report income on basis of value

of conv rate.

under Close Down ~~3000~~) 15.00 = 20%

Docket copy
Surname: Talbut
Martin

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

Mr. Thomas H. Bruding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

MAY 24 1956

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-2300

Dear Mr. Bruding:

Reference is made to your two letters of May 21, 1956, requesting advice as to the statements to be included in the "General Information" section of your royalty audit report covering the referenced project and, also, confirmation of the settlement rate on concentrates produced.

The "General Information" section of your report should furnish information on the four points listed on pages 15 and 16 of the royalty audit manual. In other words it appears that this section should narrate that:

1. The project was resumed under authority of Amendment No. 3 for the period of September 1, 1953, to May 17, 1954; work was not resumed thereafter; and costs, subject to audit, through August 31, 1953, were $66,950.00 with the Government's contribution on a 75 percent basis being $50,212.51;

2. As of the date of the audit a certification of discovery or development has not been made, but that Annex I which is a part of Amendment No. 3, provides for the Operator or his successor in interest to pay a royalty on all production from the land described in Article 2 of the contract, regardless of such certification, from the date of the contract until six months after completion or termination of the contract or until the amount contributed by the Government is repaid, whichever occurs first; by letter dated April 12, 1955, the Operator proposed a basis for making royalty payments on production; by letter dated September 9, 1955, the Executive Officer, DMEA Field Team, Region I, Wy, proposed an alternative basis, under which settlement would be made at the rate of $43.53 per unit of tungsten concentrates produced at the Glen Montana mill; and by letter dated April 30, 1956, the Administrator authorized the Executive Officer to accept settlement for past and future concentrates on such basis pending formalization of an amendment to the contract;

3. The description and your appraisal of the adequacy of the Operator's royalty records; and

4. Subsequent to the date of the audit, that is on May 15, 1956, a certification of discovery or development was issued and, in accordance with Annex I, royalty will be payable for a period of 11 years from the date of the contract or until the amount contributed by the Government is repaid, whichever occurs first.

A review of the docket files indicates that it was the intent of the Administrator's letter dated April 30, 1956, to authorize settlement on the basis of $43.53 per unit rather than $43.53 per ton as stated therein.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
May 23, 1956

Copy to: Docket
Admr. Reading File
A. E. Weissenborn, Reg. I NW (2)
Mr. Chambers
Mr. Martin

400

DOCKET
Surname:

Chapman
Martin
"Noted" McFinn
Martin
Holliday
Leland
H. E. Johnson
Chambers
Selfridge
Mechenday

MAY 18 1956

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

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Enclosed are copies of a certification of discovery or development on the above-noted property and of related correspondence.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

Thor H. Kiilsgaard (JHB)
Member, Bureau of Mines

/s/ Robert W. Geehan (JHB)
Member, Geological Survey

cc: Docket
Code 400-Mr. Martin
Code 800-Mr. Chambers
Code 110-Mr. Johnson
Adm. Read. File
Oper. Committee
T. Kiilsgaard, USGS
~~J. H. Hedges, USBM~~ R. H. Holliday
R. W. GEEHAN, USBM
FT, Reg. I - Spokane

TLChapman/ls
1/21/55

R.C.L.

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

DOCKET
SURNAME
Holt
Chapman
Martin
Nelson
Ontin
Lemmon
"Appd. Sol. Off."
Chambers
noted: Geehan
Pulaggos

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

To: Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Pursuant to the provisions of Exploration Project Contract No. Ida-4300, dated April 17, 1952 (Docket No. DMEA-2440), hereinafter called the "Contract", between the Minerals Engineering Company 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.

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

Drifting, crosscutting and diamond drilling have indicated a substantial quantity of sub-marginal to marginal tungsten-bearing tactite occurring in limestone and dolomite along and near faulted contacts with quartz monzonite.

SPHOLT:foc 5/4/56
cc to: Docket
Code 400
Admr. Read. File
Code 100 - Mr. Johnson
Code 800 - Mr. Chambers
VARIOUS LESSORS (per transmittal letters)
Dated _____
Operating Comm.
R. W. Geehan, USBM
Robert Holliday, USBM
T. H. Kiilsgaard, USGS
xxxx C. A. Fredell, EPS, GSA
Hon. Mike Mansfield, USSENATE
Hon James E. Murray, USSENATE
Hon. Lee Metcalf, H. of Repr.
FINANCE OFFICER

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

400

DOCKET
Surname:
Chapman
Martin
Hoffland
"Nolan" McInnis

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

To: Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Pursuant to the provisions of Exploration Project Contract No. Idm-E300, dated April 17, 1952 (Docket No. DMEA-2440), 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 of a comparatively small tonnage of marginal to sub-marginal tungsten ore has been made as a result of the exploration work.

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

The exploration program employing drifting, cross-cutting, and diamond drilling, to test the possible tungsten ore occurrences in tactite formed along a contact-metamorphic region, furnished data to calculate marginal and sub-marginal ore reserves, and to make the same accessible for mining operations, from which production might be made within the 10-year period allotted by the contract.

THE UNITED STATES OF AMERICA

Dated _____ By _____

Administrator, Defense Minerals Exploration Administration

cc: DOCKET
FINANCE OFFICER
FT, REG. I - Spokane
CODE 400 - Mr. Martin
CODE 800 - Mr. Chambers
CODE 110 - Mr. Johnson
VARIOUS LESSORS (per transmittal letters)

TLChapman/ls 1/21/55

cc: ADM. READING FILE
OPERATING COMMITTEE
J. H. HEDGES, USBM
R. W. GEEHAN, USBM
T. KIILSGAARD, USGS
IRVING GUMBEL, Act. Dir., EPS, GSA
HON. MIKE MANSFIELD, USSENATE
HON. JAMES E. MURRAY, U.S.SENATE
HON. LEE METCALF, H.OF REPRESENTATIVES

DOCKET
Surname:
Chapman
Martin
"Noted" McInnis
Martin
Nelson
Rubin
Berger
Chambers
Kilsgaard
Johnson
Selfridge
Gehan

MAY 18 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1551
Junction, Colorado

INTERIOR DIST.
FEB 10 1959
SOLICITOR

Re: Docket No. DMEA 2440-Tungsten
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-K300

Dear Mr. Burwell:

Transmitted herewith is a certification of discovery or development issued under the subject contract executed April 17, 1952.

By the terms of the exploration project contract and of the certification, all production from the property described in the contract 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 $50,212.56, subject to final audit, is paid or until April 17, 1963, whichever occurs first.

Payments should be made to Mr. A. K. Weissenborn, Executive Officer, DMEA Field Team, Region I - Northwest Division, South 157 Howard St., Spokane 4, Washington. 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. Weissenborn 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 an extended period, please notify Mr. Weissenborn at 6-month intervals that no production has been made when that is the case.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Adm. Read. File
Oper. Committee
FT, Reg. I - Spokane
S. W. Lindgaar, USBM
Enclosure

cc: W. McInnis, USBM
T. Kiilsgaard, USGS
Code 400-Mr. Martin
Code 800-Mr. Chambers
Code 110-Mr. Johnson

cc: Messrs. Meine & Guidici
Mr. G. M. Fleming

TLChapman/ls
2/5/55

DOCKET
Surname:
Chapman
Martin
"Noted" Mc Innis
Martin
Nelson
Fleman
Chambers
Selfridge
Kilsgaard
Gehan

MAY 1 8 1956

Hon. Mike Mansfield
United States Senate
Washington 25, D. C.

My dear Senator Mansfield:

Because of the interest which you have previously shown in the status of our Docket No. DMMA 2440- Tungsten, Contract No. IAm-X300, with Minerals Engineering Company, on the Lost Creek Mine, Sugar Loaf claims 1 to 29 inclusive, Beaverhead County, Montana, we are pleased to inform you that we have issued a certificate of discovery or development on that property to the above-named company. Accordingly, Minerals Engineering Company will be responsible for payment of royalties to the Government on all ores shipped from the property until the indebtedness to the Government is liquidated or until April 17, 1962, whichever occurs first.

We are returning the letter of May 25, 1954, to you from your constituents, Messrs. Henry Meinke and Carl Guidici.

Enclosed is a copy of our letter advising Messrs. Meinke and Guidici of the issuance of the certificate of discovery or development indicating the results obtained by the exploration program completed by Minerals Engineering Company.

Sincerely yours,

O. O. Mittendorf

Administrator

Enclosures

cc: Docket
Adm. Read. File
Oper. Committee
FT, Reg. I-Spokane, Wash.
Code 400-Mr. Martin
Code 110-Mr. Johnson
Code 800-Mr. Chambers
W. McInnis, USBM
~~J. H. Hedges, USBM~~ R. H. Gehan
T. Kiilsgaard, USGS

TLChapman/WSMartin/ls
2/3/55

400

DOCKET
Surname:

Chapman
"Noted" Martin
McInnis
Martin
Nelson
Johnson
Selfridge
Kilsgaard
Geehan

MAY 18 1956

Hon. James E. Murray
United States Senate
Washington 25, D. C.

My dear Senator Murray:

Because of the interest which you have previously shown in the status of our Docket No. DMEA 2440-Tungsten, Contract No. Idm-2300, with Minerals Engineering Company, on the Lost Creek Mine, Sugar Loaf claims 1 to 29 inclusive, Beaverhead County, Montana, we are pleased to inform you that we have issued a certificate of discovery or development on that property to the above-named company. Accordingly, Minerals Engineering Company will be responsible for payment of royalties to the Government on all ores shipped from the property until the indebtedness to the Government is liquidated or until April 17, 1962, whichever occurs first.

Enclosed is a copy of our letter advising Messrs. Henry Heinze and Carl Guidici of the issuance of the certificate of discovery or development indicating the results obtained by the exploration program completed by Minerals Engineering Company.

Sincerely yours,

G. O. Mittendorf (for)

Administrator

Enclosures

cc: Docket
Adm. Read. File
Operating Committee
FT, Reg. I - Spokane, Wash.
Code 400-Mr. Martin
Code 11C-Mr. Johnson
Code 800-Mr. Chambers
W. McInnis, USBM
~~J. H. Hedges,~~ USBM R. H. Geehan
T. Kiilsgaard, USGS

TLChapman/WSMartin/ls
2/4/55

R.G.S.

400

DOCKET
Surname:

Chapman
"Noted" Martin
McInnis
Martin
Nelson
Chambers
Kinney
Selfridge
Kiilsgaard
Gehan

MAY 18 1956

Messrs. Henry Meine
and Carl Guidici
Dillon, Montana

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 is the same property referred to in an "Option to Purchase" held by Blair Burwell and executed by George M. Fleming on December 15, 1951, at which time Blair Burwell was already in possession of said property under a certain "Mining Lease and Agreement," dated August 30, 1951, executed by Carl Guidici, Henry Meine, and R. M. Fleming. By a "Mining Deed" dated February 28, 1952, R. M. Fleming granted, sold, and conveyed his interest in the aforesaid "Mining Lease and Agreement" of August 30, 1951, to Blair Burwell. By a "Mining Deed" executed March 11, 1952, Blair Burwell conveyed his interest in said property as described in the foregoing instruments to the Minerals Engineering Company.

Also enclosed is a copy of our letter of today to the Minerals Engineering Company.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

cc: Docket
Code 400
Adm. Read. File
FT, Reg. I - Spokane
Code 110-Mr. Johnson
Code 800-Mr. Chambers
Operating Committee

cc: W. McInnis, USBM
~~J. H. Hedges, USBM~~ R. H. Gehan
T. Kiilsgaard, USGS

TLChapman/ls
2/4/55

Hon. James E. Murray, USSenate
Hon. Mike Mansfield, USSenate
Hon. Lee Metcalf, House of Representatives

RCB

400

DOCKET
Surname:
Chapman
"Noted" Martin
McInnis
Martin
Nelson
Johnson
Chambers
Selfridge
Kiilsgaard
Buhan

MAY 18 1956

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My dear Mr. Metcalf:

Because of the interest which you have previously shown in the status of our Docket No. DMEA 2440-Tungsten, Contract No. Idm-E300, with Minerals Engineering Company, on the Lost Creek Mine, Sugar Loaf claims 1 to 29 inclusive, Beaverhead County, Montana, we are pleased to inform you that we have issued a certificate of discovery or development on that property to the above-named company. Accordingly, Minerals Engineering Company will be responsible for payment of royalties to the Government on all ores shipped from the property until the indebtedness to the Government is liquidated or until April 17, 1963, whichever occurs first.

We are returning the letter of May 25, 1954, to you from your constituents, Messrs. Henry Meinze and Carl Guidici.

Enclosed is a copy of our letter advising Messrs. Meinze and Guidici of the issuance of the certificate of discovery or development indicating the results obtained by the exploration program completed by Minerals Engineering Company.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

cc: Docket
Adm. Read. File
Oper. Comm.
FT, Reg. I-Spokane, Wash.
Code 400-Mr. Martin
Code 110-Mr. Johnson
Code 800-Mr. Chambers
W. McInnis, USBM
~~J. H. Hedges~~, USBM R. N. Buhan
T. Kiilsgaard, USGS

TLChapman/WSMartin/ls
2/3/55

R.N.B.

DOCKET
SURNAME
Holt
Martin
Nelson
Chamber
Selfridge
Killsgaard
Geehan
Hoffman

400

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

MAY 18 1956

Mr. Clarence A. Fredell, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaver Head County, Montana
Contract No. Ids-E300

Dear Mr. Fredell:

Enclosed is a copy of a certification of discovery or development for the above noted project.

Contract No. Ids-E300 was executed April 17, 1952. Expenditures up to $121,280.00 were authorized by the contract and Amendment No. 2, of which the Government's share at 75 percent was $90,960.00. The cost of the work completed was $66,950.00, of which the Government's share at 75 percent was $50,212.50 (subject to audit).

The object of the exploration program was to test the possible tungsten ore occurrences in tactite along a contact metamorphic zone. The program employed drifting, crosscutting, and diamond drilling, following trenching by the Operator to explore the above noted zone.

The contract originally allowed $8,030.00 for road work, 2,200 feet of drifting, and 750 feet of crosscutting; Amendment No. 2 granted 2,000 feet of diamond drilling. The contract was completed within the alloted expenditure for road work, 1,082 feet of drifting, 421 feet of crosscutting, and 1,263 feet of diamond drilling.

The project was justified on the belief that the tactite zone might contain up to 750,000 tons of ore averaging 0.35 percent WO_3. Exploration results did not measure up to these expectations, and only marginal ore was found by the project. Ore produced during the project, some 3,976 tons mined from the best trench showing, averaged 0.16 percent WO_3. It is estimated that an ore shoot in "B" drift contains 2,000 to 3,000 tons of ore averaging 0.30 percent WO_3 in place, or approximately 0.24 as a mining grade. By February 29, 1956, the Operator had mined and milled a total of 19,870 tons of ore probably averaging about 0.19 percent WO_3, from which 2,851 units of WO_3 were produced.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

SPHOLT:foc 5-15-56
cc to: Docket
Code 400
Code 110
Code 800

cc to: Admr. Read. File
Operating Comm.
FT. REG. I - NWD
Messrs. Geehan, USBM
Holliday, USBM

cc to: T. H. Killsgaard, USGS

R.C.S.

DOCKET
SURNAME
Chapman
Holt
Martin
Nelson
Chamberlin
noted:- Gerhon
Kulegood

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

Mr. Clarence A. Fredell, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA 2[illegible] - Tungsten
Minerals Engineering Company
Lost Creek Mine
Deer Lodge County, Montana
Contract No. Idm-[illegible]300

Dear Mr. Fredell:

Enclosed is a copy of a certification of discovery or development for the above noted project.

Contract No. Idm-[illegible]300 was executed April 17, 1952. Expenditures up to $121,200.00 were authorized by the contract and Amendment No. 2, of which the Government's share at 75 percent was $90,900.00. The cost of the work completed was $66,950.00, of which the Government's share at 75 percent was $50,212.50, (Subject to Audit).

The object of the exploration program was to test the possible tungsten ore occurrences in tactite along a contact metamorphic zone. The program employed drifting, crosscutting, and diamond drilling, following trenching by the Operator to explore the above noted zone.

The contract originally allowed $6,030 for road work, 2,200 feet of drifting, and 750 feet of crosscutting; Amendment No. 2 granted 2,000 feet of diamond drilling. The contract was completed within the alloted expenditure for road work, 1,082 feet of drifting, 421 feet of crosscutting, and 1,263 feet of diamond drilling.

The project was justified on the belief that the tactite zone might contain up to 750,000 tons of ore averaging 0.35 percent WO_3. Exploration results did not measure up to these expectations. Of the ore produced during the project, some 3,976 tons mined from the best trench showing averaged 0.16 percent WO_3. It is estimated that an ore shoot in "D" drift contains 2,000 to 3,000 tons of ore averaging 0.2h to 0.25 percent WO_3. All ore found by the project work has been marginal or submarginal in grade. To February 29, 1956, the Operator had mined and milled 19,870 tons of ore probably averaging about 0.19 percent WO_3, from which 2,851 units of WO_3 were produced.

(*) as mined, or 0.30 in place

Sincerely yours,

Administrator

CC TO: T. H. Hillegaard, USGS

cc to: Admr. Head, File
Operating Comm.
Ft. MEG. I - MDist.
Measrs. Gerhon, USBM
Holliday, USBM

5/7/56 cc to:
Docket
Code 400
Code 800
Code 110

SMROLT:fco
cc to:

DOCKET
Surname:

Chapman
Martin
"Mac" McInnis
Martin
Nelson
Chambers
Kilsgaard
Flynn
Selfridge
Kuhn

MAY 18 1956

Mr. George M. Fleming
Dillon, Montana

Re: Docket No. DMEA 2440-Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Fleming:

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 is the same property referred to in an "Option to Purchase" held by Blair Burwell and executed by George M. Fleming on December 15, 1951, at which time Blair Burwell was already in possession of said property under a certain "Mining Lease and Agreement," dated August 30, 1951, executed by Carl Guidini, Henry Heinz, and R. M. Fleming. By a "Mining Deed" dated February 28, 1952, R. M. Fleming granted, sold, and conveyed his interest in the aforesaid "Mining Lease and Agreement" of August 30, 1951, to Blair Burwell. By a "Mining Deed" executed March 11, 1952, Blair Burwell conveyed his interest in said property as described in the foregoing instruments to the Minerals Engineering Company.

Also enclosed is a copy of our letter of today to the Minerals Engineering Company.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

cc: Docket
Code 400
Adm. Read. File
FT, Reg. I-Spokane, Wash.
Code 110-Mr. Johnson
Office Committee
Code 800-Mr. Chambers

cc: N. McInnis, USBM
R. W. Rodger, USBM
T. Kilsgaard, USGS

TLChapman/ls
2/4/55

RCh.

DOCKET
SURNAME
Chapman
Martin
Chandler
Selfridge

400

APR 27 1956

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

Re: Docket No. DMEA 240 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-X300

Dear Mr. Weissenborn:

Reference is made to our conversations during your last visit here and to your letter of March 22, 1956, to Mr. Blair Burwell, President, Minerals Engineering Company, requesting his consideration of the proposal made in your letter of September 9, 1955, that royalty settlement be made on the basis of $43.53 per ton for concentrates produced at the Glen Montana mill.

The Defense Minerals Exploration Administration, because of the particular circumstances discussed in Mr. George C. Selfridge's letter to you of August 17, 1955, on the same subject, approves royalty settlement on the above basis for concentrates produced from the Lost Creek mine and authorizes you pending formalization of the agreed to amendment of the contract to accept settlement for past and future concentrates at the aforesaid rate of $43.53 per ton. unit.*

Sincerely yours,

C. O. Mittendorf

Administrator

TLChapman/foc 4-27-56
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. I - NWD
R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

* (Correction made by letter of 6/23/56 from Chambers to Brading)

C

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

RECEIVED
APR 23 1956

April 16, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District
United States Department of the Interior
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

DMEA

Dear Mr. Weissenborn:

I have your letter of April 5th addressed to the attention of Mr. Blair Burwell, our president, referring to the Lost Creek Mine. Mr. Burwell has asked me to reply.

It is perfectly agreeable with us that Mr. Brading come to make his royalty audit of the above DMEA account. Please have Mr. Brading contact Mr. Clyde Nattleton, our office manager, who in turn will introduce him to our auditor, Mr. Parent.

Very truly yours,

MINERALS ENGINEERING COMPANY

C. A. Walt
Treasurer

CAW:BM
cc Blair Burwell
T. H. Brading

RECEIVED
APR 19 1956
U.S.G.S.
SPOKANE, WASH.

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

RECEIVED
APR 1 0 1956

April 13, 1956

Air Mail

Mr. T. H. Breding, Auditor
U.S. Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA-2240 (Tungsten
Minerals Engineering Co.
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Breding:

Reference is made to your letter of March 20, 1956.

We did not think it necessary to send an engineer to obtain this information as Mr. Weissenborn is familiar with the property; therefore, he prepared and signed the enclosed check sheet.

We had not answered your letter of April 6 concerning the dates for conducting a royalty audit on this contract because we have not yet heard from Mr. Burwell. In the circumstances, I'm afraid that it won't be possible for you to do the audit prior to April 17 or 18 as you had hoped.

By Field Team, Region I, NW Dist.

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

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

Enclosure 1 (in quad.)

cc: DMEA (2)
USBM (2)
USGM (AD)
Turner

400

COPY

DMEA

224 New Customhouse

Denver 2, Colorado

March 30, 1956

WSG

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

Re: Minerals Engineering Company
Contract Idm-E300, Docket No. DMEA 2440

Dear Mr. Weissenborn:

Attached is copy of a telegram just received from Mr. Burwell, which is felt to be self-explanatory. I presume that a copy of your letter of March 22, referred to in the wire, is being forwarded to me.

Sincerely yours,

Signed: T. H. BRADING

T. H. Brading, Auditor

Enc.

THB:bh
cc-J. L. Chambers, w/copy telegram
Subject
Chron.

copies made for 400
orig. rec'd to MTT.

C O P Y

WESTERN UNION TELEGRAM

KF 146
K GJA 109 PD GRAND JUNCTION COLO # 30 1133 AMM

T. H. BRADING-DMEA AUDITOR, MINES BUREAU OF REGION III

DEFENSE MINERALS EXPLORATION ADMN

NEW CUSTOMS HOUSE DVR

WEISSENBORN OFFER MARCH 22, 1956, ACCEPTABLE AND SENDING CHECK ON LOAN IDME-300 IMMEDIATELY. WEISSENBORN ADVISED BY WIRE

MINERALS ENGINEERING COMPANY BLAIR BURWELL

PRESIDENT

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

RECEIVED
APR 6 - 1956

224 New Customhouse
Denver 2, Colorado

March 28, 1956

VIA AIR MAIL

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

Re: Minerals Engineering Company
Contract Idm-E300, Docket No. DMEA-2440

Dear Mr. Weissenborn:

On March 27, 1956 I called at the office of Minerals Engineering Company, Grand Junction, Colorado, and asked for Mr. Blair Burwell, and was advised that he was out of town. After a short wait, Mr. Clyde Nettleton, Office Manager, came out to the reception area to see me. I told him the purpose of my visit. He was very courteous and told me that he knew nothing of the records pertaining to royalties due on the subject contract but he would see what he could find out. He excused himself and apparently consulted with someone in the inner office. On his return he told me that this was a matter Mr. Burwell was handling personally and that it would be necessary to see Mr. Burwell to obtain the desired records and any information regarding the balance of royalties due.

Attached is a copy of a letter from Mr. Clyde Nettleton, Office Manager, which is felt to be self-explanatory.

Sincerely yours,

T. H. Brading, Auditor

Enc.

RECEIVED
MAR 29 1956
D. S. S.

MINERALS ENGINEERING COMPANY
P. O. Box 1951 - Phone 4280
GRAND JUNCTION, COLORADO

RECEIVED
APR 6 - 1956

March 27, 1956

Mr. T. H. Breding
DMEA Auditor
Denver, Colorado

Dear Sir:

This is to acknowledge that you were in our office today to see Mr. Burwell or Mr. Sullivan with reference to royalty payment under DMEA loan No. AMM-300, on the Lost Creek Mine at Dillon, Montana.

Since Mr. Burwell, Mr. Sullivan and Mr. Holmes are all out of town, I have agreed to have Mr. Burwell or Mr. Sullivan get in touch with Mr. Weissenborn immediately upon their return, which I am sure will not be later than March 30th.

Very truly yours,

MINERALS ENGINEERING COMPANY

Clyde Houlston

Clyde Houlston
Office Manager

CH:BM
cc A. W. Weissenborn
South 137 Howard St.
Spokane, Washington

Blair Burwell
R. G. Sullivan

RECEIVED
APR 29 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

[redacted]
No. 157 Howard Street
Spokane 4, Washington

RECEIVED
APR 2 - 1956

March 22, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-5846 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Burwell:

Reference is made to your letter of February 22, 1956. We regret that it was not possible for you to be in Washington in February as you had planned, and are sure that DMEA will be glad to talk with you at any time you are in Washington.

Under the terms of the contract, DMEA is entitled to a royalty from production from the Lost Creek deposit and is as interested as you in seeing production from the Lost Creek property if such production is economically feasible. We again suggest your consideration of the proposal made in our letter of September 9, 1955. On that basis the concentrates would have a value at the Elco, Montana mill of $43.53 a unit of contained tungsten. In effect, this allows deduction of $19.47 per unit for shipping and refining charges for the concentrate produced. We do not believe that this would place an undue burden on the operation.

Please let us know your reaction to this as we cannot keep this offer open indefinitely.

We wish to thank you for returning the unsigned termination agreement which we have forwarded to Washington.

By Field Team, Region I, NW Dist.

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

cc: DMEA (2) w/inc.
USBM (2) "
USBM (AD) "

[redacted]
U. S. Bureau of Mines

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

February 22, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

RECEIVED
APR 2 - 1956

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

I had planned to be in Washington in February to discuss the matter of the Lost Creek exploration loan, but had to postpone this visit until March 12. However, I have carefully reviewed the matter again and wish to advise you as follows:

The data furnished on November 16, 1955 is correct. Your interpretation on November 15 is also technically correct according to our DMEA Contract and Amendment No. 3. However, I wish to call your attention to the following:

The mining of 15,102.29 tons of ore, subject to royalty determination was the result of an exploratory effort to produce ore by surface pit operations at a low cost per ton. You will note that the recovered content is .146% WO_3, and the gross value realized $9.05 from which the costs of mining, milling and refining must be deducted. There is a very large tonnage of low grade ore at Lost Creek of this type and we are interested in its utilization. As we are operating a very low cost mining and milling operation at the Ivanhoe, we had hopes that we could make this "show" go on a basis of an open-pit operation.

Based upon projected costs, we anticipated that we could develop a margin of $5.50 per Unit of profit without royalty. However, if we pay a royalty to the DMEA of $0.46 per ton, according to your interpretation and as the result of our special market and refining hookup this royalty would amount to $3.15 per Unit, or about 57 per cent of our return.

Under this interpretation we were forced to discontinue efforts to operate the property.

I had intended to discuss this problem with your group to see if there is not some basis on which we can proceed. We are willing to pay the DMEA loan on any basis that we can come out, but obviously the circumstances now will prevent any further effort to develop the property on a low-grade basis, and will work against any substantial repayment of money to the government.

If you and Washington feel that we can work out something to meet this situation, we will be most glad to do so. If not, we will settle the present royalty and permanently abandon our effort to work out this solution. I would appreciate your advice.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

BB/rlc

RECEIVED
FEB 23 1956
U.S.G.S.
SPOKANE, WASH

Docket

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

March 15, 1956

Copy retained 200

WGM

Memorandum

To: Chief, Iron and Ferroalloys Division - DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist - Tungsten

Subject: Certification of Discovery
Docket No. DMEA 2440 - Tungsten
Lost Creek Mine
Beaverhead County, Montana
Minerals Engineering Company
P. O. Box 1951, Grand Junction, Colorado

Although royalty payments are frequently based on grade of ore, it does not necessarily follow that renegotiation of royalty rates is warranted after completion of the contract. This would open the way to renegotiation of every other contract in which the Government ever participated and would also entail endless bookkeeping and inspection of all DMEA mining operations.

I recommend that royalty be paid as specified in the contract.

R W Holliday
R. W. Holliday

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 N. Division St.
Spokane 2, Washington

RECEIVED
MAR 16 1956

March 13, 1956

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

We are enclosing all copies of the unsigned termination agreement which Mr. Burwell has just returned to us.

Sincerely yours,

Wing C. Agnew
Acting Executive Officer
DMEA Field Team, Region I
Northwest District

Enclosures

cc: USGS (2)
USBM (AD)

Docket Copy

TERMINATION AGREEMENT

It is agreed this 5th day of April, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Minerals Engineering Company, hereinafter called the "Operator," that Exploration Project Contract Idm-K300 (Docket No. DMEA-2440), dated April 17, 1952, as amended, hereinafter called the "Contract," is further amended, as follows:

1. Effective May 18, 1954, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the Fixed Unit Costs of work performed prior to said effective date.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

4. In Article 7 of the Contract, that part of the second sentence beginning with the word "Provided" is deleted.

5. Annex I attached to Amendment No. 3 is cancelled, and effective as of April 17, 1952, Annex II, attached hereto and made a part hereof, is substituted for the provisions of Article 6 of the Contract.

6. The total net amount contributed by the Government is repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the Contract in the manner and amount provided in Annex II attached to this Termination Agreement and for the period prescribed in paragraph b.(2) of said Annex II, a certification of discovery or development being hereby waived.

7. The Operator hereby releases and agrees to save the Government harmless from all claims or

demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

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

THE UNITED STATES OF AMERICA

By A. E. Weisenborn
Executive Officer, DMEA Field Team, Region I (Formerly Region II)

Ruth Hoffland
Martin Chapman
Hollida
Chamberlain
Mitchell

MINERALS ENGINEERING COMPANY

By_____

_____

ANNEX II

The following provisions are in lieu of Article 6 :

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

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

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

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

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

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

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

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

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

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

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

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

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

58694

IN REPLY REFER TO:

RECEIVED
MAR 1 8 1956

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

March 8, 1956

Re: DMEA 2440 Idm-E300
Minerals Engineering Co.
Lost Creek Mine
Beaverhead County, Montana
$111,280.00 - 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 applicant requested aid in exploring a tungsten-bearing tactite zone by drifting 2,200 feet on two levels and crosscutting of 50 feet at an estimated cost of $111,280.00. The contract was dated April 17, 1952. In September 1952, Amendment No. 1 permitted crosscuts to both walls of the zone without increased overall cost. In October 1952 Amendment No. 2 allowed for 2,000 feet of diamond drilling at a cost of $10,000. Amendment No. 3 extended the contract period. It was not signed by the operator.

Work done under the contract cost:

Road work		$8,030.00
Drifts	1,082 feet	37,870.00
Crosscuts	421 "	14,735.00
Diamond drilling	1,263 "	6,315.00
		$66,950.00
Government share		$50,212.50

A production of 1,500 tons, worth about $3,590, was obtained on which a royalty of $175.94 was collected. The royalty on 13,500 tons is being negotiated.

The examiners and Field Team recommend certification of the project. I concur with the recommendation.

N. E. Nelson

N. E. Nelson

Talbert
Chambers

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

FEB 24 1956

Mr. Thomas H. Brading
DMEA Auditor
324 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Brading:

By copy of your letter dated February 10, 1956, addressed to Mr. Weissenborn, this Division was advised of the deferment of your royalty audit of the referenced project pending Mr. Burwell's planned discussion with Mr. Mittendorf.

Mr. Burwell has not met with Mr. Mittendorf. Therefore, the matter was discussed today with Mr. Weissenborn during a visit to this office. Mr. Weissenborn agreed that you should proceed with the scheduled royalty audit.

It is requested that you arrange for the performance of this audit at the earliest date not inconsistent with your Region III audit duties.

Copies of this letter are being sent to Mr. Weissenborn and Mr. Traver.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
February 24, 1956

Copy to: Docket
Admr. Reading File
Mr. Weissenborn, Region I NWD
Mr. Traver, Region III
Mr. Martin
Mr. Chambers

P.G.S.

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

RECEIVED
FEB 2 7 1956

1201 N. Division St.
Spokane 2, Washington
February 23, 1956

Glenn & Parent
Certified Public Accountants
P. O. Box 1649
Grand Junction, Colorado

Re: Docket No. DMEA 2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Gentlemen:

This will acknowledge your February 15 letter concerning the amount of the Government's royalty claim against production from the Lost Creek mine for the calendar year ending December 31, 1955.

We are unable to give you even the approximate amount due since Minerals Engineering Co. has not furnished us with all production figures and other data needed to compute the royalty due. We refer specifically to the 15,102.29 tons mined which is mentioned in Mr. Blair Burwell's letter of November 16, 1955. We do not know what percentage the above tonnage constitutes of the total Lost Creek production. Mr. Burwell erroneously computed the royalty due as 2½ percent of $136,640.61 or $3,416.02 when it should have been 5 percent or $6,832.03. Please refer to our letter to Mr. Burwell dated November 18, 1955.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer
DMEA Field Team, Region I
Northwest District

Concurred in by

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

cc: DMEA (2)
USGS (2) -- USBM (AD)

Glenn & Parent
CERTIFIED PUBLIC ACCOUNTANTS
123 NORTH EIGHTH P. O. BOX 1649
GRAND JUNCTION, COLORADO

BUREAU OF MINES
FEB 1 1955
SPOKANE, WASH.

February 15, 1956

RECEIVED
FEB 27 1956

Mr. A. E. Weissenborn, Executive Officer
U. S. Department of the Interior
Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Dear Sir:

We have been engaged by Minerals Engineering Company, Grand Junction, Colorado, to audit their records for the calendar year ended December 31, 1955.

In connection therewith, please furnish us the approximate claim your department has against Minerals Engineering Company in regard to Docket No. DMEA 2440 (Tungsten), Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-E300, as of December 31, 1955.

The figures mentioned in Mr. Blair Burwell's letter to you dated November 16, 1955 are approximately the same as those in their records at the end of December. Your calculation of the amount due from Minerals based on these figures will be sufficient for us to make an accrual on their books as of December 31, 1955.

Your early reply will be greatly appreciated.

Sincerely yours,

GLENN & PARENT

By _____
Certified Public Accountant

RLP/CHB/na

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

RECEIVED
FEB 27 1956

February 23, 1956

MEMORANDUM

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region I, Northwest District

Subject: Transmittal of Figure 6, Surface Plan Map B, to final report, Docket No. DMEA-2440 (Tungsten), Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana, Contract No. E-300.

Enclosed are four copies of Figure 6, Surface Plan Map B, which was inadvertently omitted as an enclosure to the final report which was sent to you on February 16, 1956. Also enclosed is a corrected Contents and Illustrations page which should be substituted for that page in this report.

Verne C. Fryklund Jr.
Verne C. Fryklund, Jr.
For: A. E. Weissenborn

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

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Figure 5.	Geologic Map of the H Adit, Lost Creek Tungsten Deposit Showing Tungsten and Molybdenum Assays (Nov. 1954)	In pocket
Figure 6.	Surface Plan Map B	In pocket

2440

Date 2/27

Referred to:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible] Mails and Files
5. [illegible] Division
6. [illegible] Mails and Files

Note and note the report regarding:

1. See page 6 //
Noted: 400 agrees
Amend 3 signed.

2.

3.

4.

and take appropriate action.

- - - - - -

Action taken by Division:

Initials

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

RECEIVED
FEB 24 1956

February 16, 1956

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

WSM

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Selfridge:

Enclosed are four copies of a Field Team final report written by Margaret R. Lickes, Mining Engineer, Bureau of Mines, and W. Bradley Myers, Geologist, Geological Survey.

A certification of discovery has been recommended by the Field Team.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer
DMEA Field Team, Region I
Northwest District

Enclosures

cc: USBM (2)
USGS (SRO)
Myers

FINAL FT. RPT.

Reviewed by
DMEA OPERATING COMMITTEE
2-27-56
(date)

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
FEB 24 1956

FIELD TEAM, REGION I
Northwest District

FINAL REPORT

Contract Idm-E300

by

Margaret R. Lickes
Mining Engineer
U. S. Bureau of Mines

W. Bradley Myers
Geologist
U. S. Geological Survey
(Compiled by
Verne C. Fryklund, Jr.)

MINERALS ENGINEERING COMPANY
P. O. Box 1951
Grand Junction, Colorado

Docket No.:	DMEA 240
Commodity:	Tungsten
Contract date:	April 17, 1952
Termination date:	August 17, 1954

Reviewed by
DMEA OPERATING COMMITTEE
2-27-56
(date)

LOST CREEK MINE
Unorganized Utopia Mining District
Beaverhead County, Montana

Spokane, Washington

February 1956

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RECEIVED
FEB 24 1953

FINAL REPORT

MINERALS ENGINEERING COMPANY
Lost Creek Mine
Unorganized Utopia Mining District
Beaverhead County, Montana

Contract Idm-E300

* * * *

INTRODUCTION

This report describes a project conducted by Minerals Engineering Company under Defense Minerals Exploration Administration Project Contract No. Idm-E300 to explore for tungsten ore at the Lost Creek prospect, Beaverhead County, Montana. The Bureau of Mines part of the report has been written by Margaret R. Lickes; the Geological Survey portion has been compiled by Verne C. Fryklund, Jr., from maps, notes, and memoranda of W. Bradley Myers. Thus, the text may reflect to some degree Fryklund's personal viewpoint, but the maps and other factual data supplied by Myers have been used without any revision.

Summary

The purpose of the project was to explore by drifting, crosscutting, and diamond drilling, a series of tungsten-bearing tactite beds that outcrop on the Sugar Loaf claims in Lost Creek canyon. Project exploration consisted of two adit drifts with crosscuts from these drifts and underground diamond drill holes to delimit the ore body laterally. The surface above the drifts had been explored previously by bulldozer trenching.

Under the contract, a road was built to the exploration site. A total of 1,082 feet of drifting, 421 feet of crosscutting, and 1,263 feet of diamond drilling disclosed only marginal to submarginal ore in beds whose continuity was interrupted by faulting and by igneous intrusions.

Work was recessed in August 1953, and although the contract period was extended to August 17, 1954, no further work was done under the contract.

Previous to the start of the project it was known from sampling trenches and outcrops that the tungsten content of the tactite beds was not high, but it was believed that if the continuity of the ore-bearing beds could be demonstrated, then sufficient tonnage might be developed so that a large-scale open-pit operation would be profitable. Although both the tonnage and the grade of the deposit are below expectations, 15,000 tons of "ore" (0.156 percent WO_3 recovered) have been mined and milled through August 1955.

Royalty received to date totals $175.92, being 5 percent of $3,518.40, the value of 357.763 units WO_3 recovered from the first 1,526.5 tons mined and milled from the Lost Creek deposit.

Recommendations

Although the grade of the deposit is believed to be submarginal, Certification of Discovery or Development has been recommended because an attempt is being made to mine it.

Further exploration with Government participation is unwarranted unless mining by the company discloses evidence of a favorable target.

LOCATION AND ACCESSIBILITY

Sugar Loaf claims 1 through 29 are in secs. 13 and 14, T. 4 S., R. 10 W., M.P.M., Beaverhead County, Montana, in the unorganized Utopia mining district. These claims are approximately 8 miles by road northwest of Glen, Montana, which is on Highway 91 and on a branch of the Union Pacific Railroad.

Access to the claims from Glen is over 3 miles of county highway north to the Minerals Engineering flotation mill, thence 4 miles westerly over a road constructed as the first step of the project along the ridge between Rock Creek and Lost Creek, then 1 more mile down into Lost Creek Canyon.

The region is of sharp relief and is densely covered with fir and spruce. Altitude of the deposit ranges from 6,000 to 8,000 feet.

The climate is typical of the west-central mountain area of Montana. During the winter months sub-zero temperatures are frequent, and snow covers the ground much of the time.

THE PROPERTY

Sugar Loaf Quartz Lode Mining Claims 1-29 covered by the contract are recorded in Book 126, pages 181, 171, 321, 183, 185, 187, 167, 323, 169, 325, 189, 277, 275, 273, 271, 269, 267, 265, 263, 261, 259, 257, 375, 255, 253, 251, 373, 371, 369, 367, and 365 in the office of the Clerk and Recorder of Beaverhead County, Montana. When the project contract was started, the claims were owned by Carl Guidici, Henry Meine, and R. M. Fleming of Dillon, Montana, and held under lease (dated August 30, 1951, filed November 10, 1951, on pages 437-44 of Book 72 of Leases, Beaverhead County) by Blair Burwell, Grand Junction, Colorado. On December 15, 1951, Fleming gave to Burwell an option to purchase his share in the claims and on February 28, 1952, this option was exercised, Fleming's share being deeded to Burwell. On March 11, 1952, Burwell deeded to Minerals Engineering, a Colorado corporation, his lease on the property together with his claim-share purchased from Fleming.

Contract No. Idm-E300 covered the lands in all the claims, but work was performed only on the claims south of Lost Creek, namely, Sugar Loaf 2, 5, 6, 7, 8, 14, 15, 16, 17, 18, and 24.

The only work done previously on this property was a preliminary program of trenching and sampling by Minerals Engineering Company during September and October 1951. Assay values of the samples taken from 10 bulldozer trenches across the deposit ranged from 0.07 percent WO_3 to 0.50 percent WO_3.

GEOLOGY

General geology of the area has been described by W. B. Myers (Geology and mineral deposits of the northwest quarter Willis quadrangle and adjacent Brown's Lake area, Beaverhead Co., Montana: U. S. Geol. Survey Open File Report, 1952).

The area is in a part of a belt of north-trending thrust faults that extend from Utah into Montana and northward into Canada. The oldest rocks in the area belong to the Precambrian Belt series; other rocks are Paleozoic, Mesozoic, and Cenozoic in age. The granitic intrusive rocks of the area were emplaced during an interval between the Paleocene volcanic rocks and Oligocene volcanic rocks. Contact metamorphism of the Amsden formation (Upper Mississippian-Lower Pennsylvanian) by quartz monzonite intrusives is believed to have been the most important factor in the formation of the Lost Creek and other tungsten deposits of the area.

The general area has had a complicated tectonic history. The Belt rocks had been folded and faulted before deposition of the first Cambrian sediments, and one or more periods of folding and faulting have occurred in all following eras. The thrust faulting occurred in Eocene time. A portion of the quadrangle map is shown on figure 1.

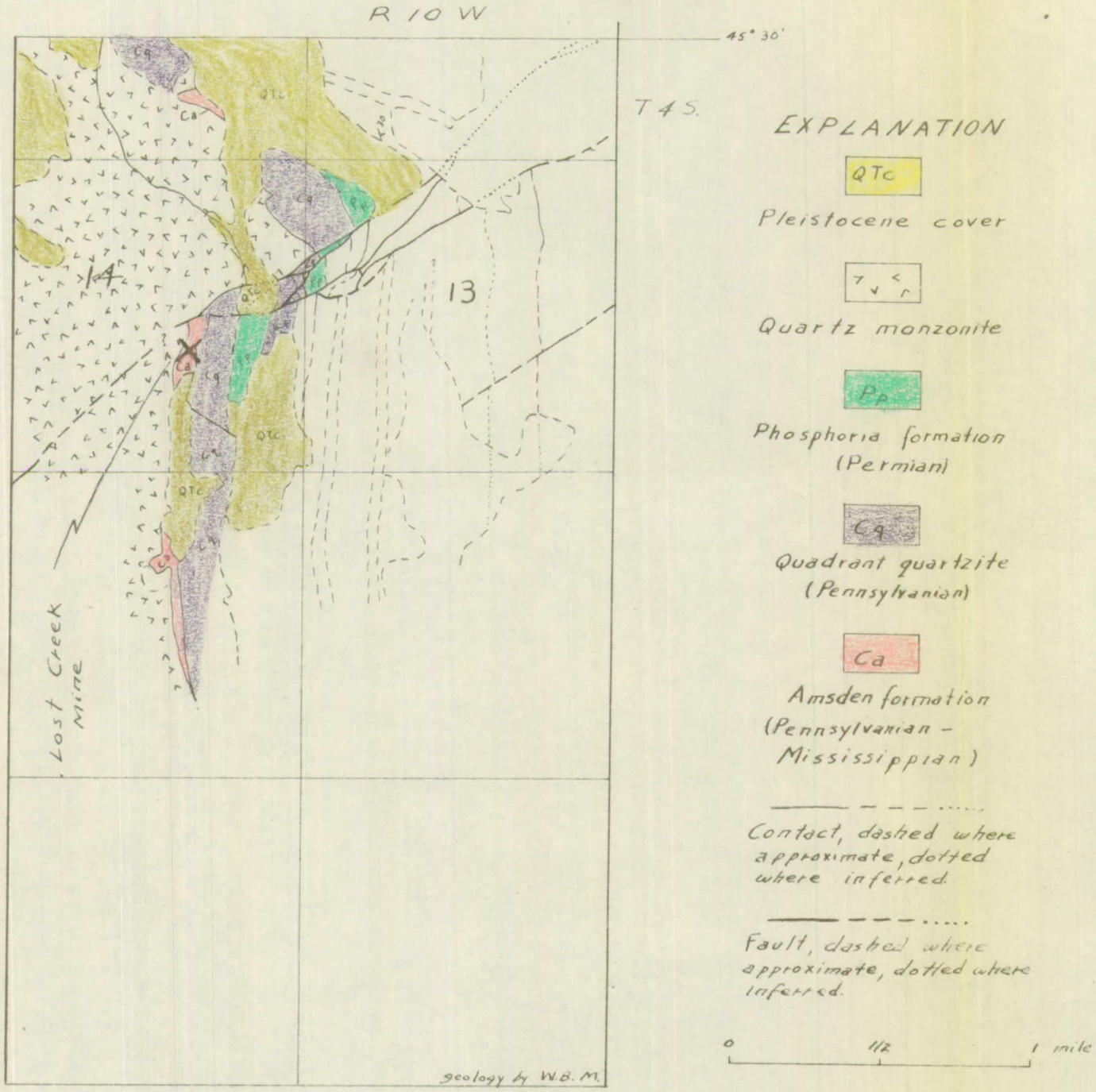

FIGURE 1

Geologic map of the vicinity of the

Lost Creek Tungsten mine, Beaverhead County, Montana

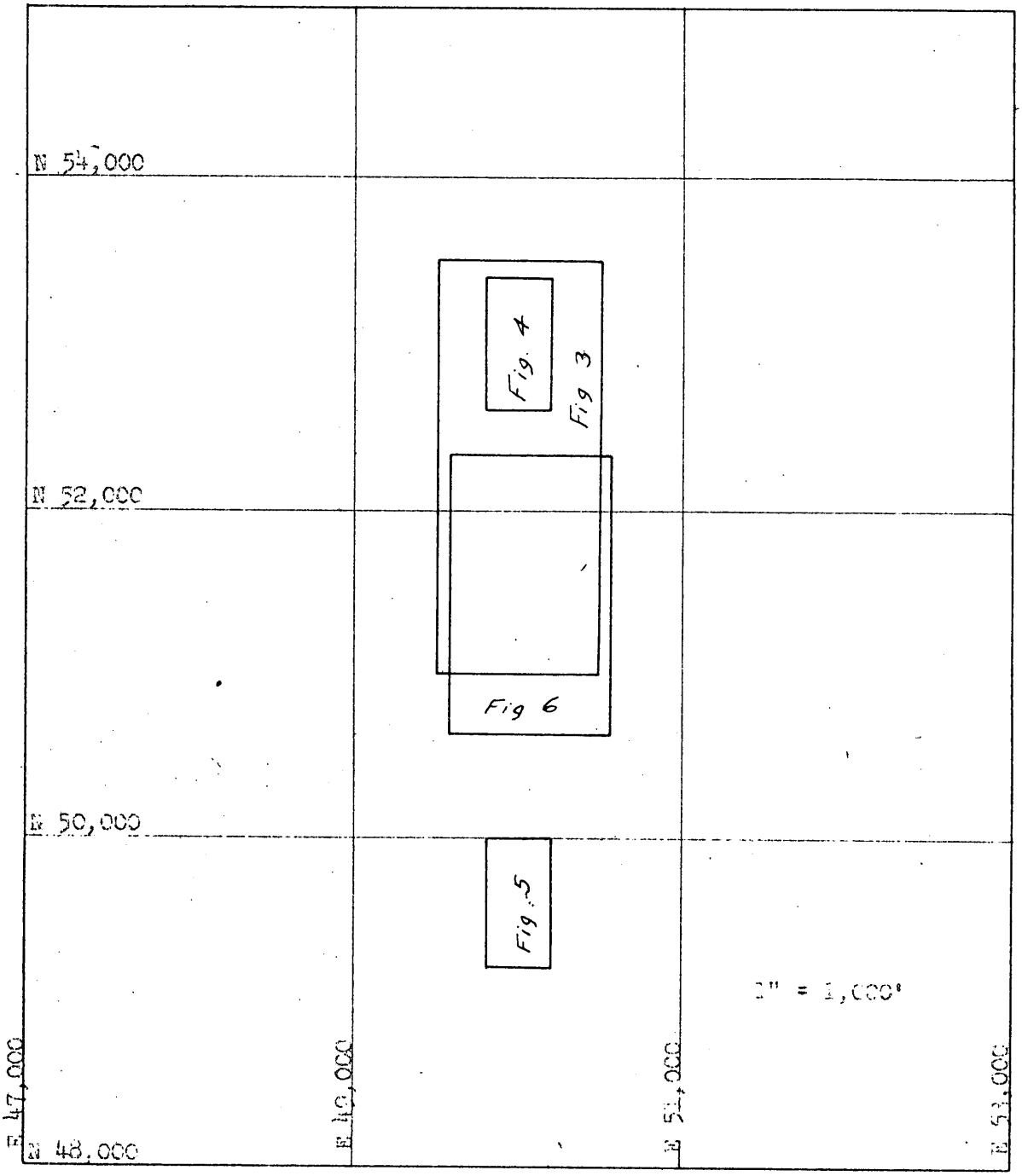

FIGURE 2

Index map showing locations of mapped areas

Lost Creek Tungsten deposit, Beaverhead County, Montana

Sedimentary formations in the mine area are: undifferentiated Tertiary rocks; Phosphoria formation (Permian); Quadrant Quartzite (Pennsylvanian); and Amsden formation (Pennsylvanian-Mississipian).

The Amsden formation, in which the tungsten deposits occur, is about 500 feet thick in the mine area and can be divided into two units of limestone and dolomite alternating with two units of shale or sandstone. A quartz monzonite pluton (here called the Mount Torrey batholith) has intruded the Amsden formation, and the formation has been metamorphosed to marble and hornfels. The contact between the quartz monzonite and the Amsden formation strikes roughly north, paralleling the bedding of the Amsden foundation and dips to the east from 40° to almost vertical; there are, however, apophyses of quartz monzonite that cut across beds.

The Quadrant Quartzite forms the hanging wall of the exploration area.

According to Myers (1952, p. 39) tungsten is "largely confined to bodies of tactite formed by additive contact-metamorphism of marble and hornfels. The dominant and ever-present component of the tactite is brown andradite garnet, typically in well-formed crystals up to a centimeter or more in diameter, which in many places makes up almost the entire volume of the rock. It is generally accompanied by more or less interstitial quartz, in some places by calcite. Epidote and/or diopside occur locally in variable amounts, accompanied in some areas by magnetite or specular hematite. The high-powellite scheelite commonly occurs as very small equant crystals, typically a few tenths of millimeter across, sprinkled through interstitial quartz and the outer shells of garnet crystals. Secondary powellite is widespread as small disseminated grains and also fills joints and fractures." Molybdenite also occurs in these zones, sometimes in important quantities.

In the H adit (fig. 5) the north-striking mineralized zone has a maximum width of about 45 feet. In the B adit (fig. 4) the mineralized zone has a maximum width of about 70 feet; as shown by the assays on figures 4 and 5, few of the samples assay over 0.20 percent WO_3. In the wider portions of the mineralized zones scheelite-bearing rock is separated by beds of hornfels that contain little scheelite; thus, there may be considerable unavoidable dilution in mining the scheelite-bearing material. (See also the section on geologic results of the exploration.)

THE PROJECT

The Minerals Engineering trenching and sampling program carried on in the autumn of 1951 indicated there might be a large tonnage of low-grade tungsten-bearing tactite but provided insufficient information to evaluate the deposit. It was hoped that this tonnage could be proved to be large enough and of a high enough grade that it could be mined by a large-scale low-cost surface operation.

The 10 trenches that had been bulldozed across the deposit (designated by the letters A through J) and surface sampling disclosed two areas that were considered worthy of further exploration; one area was designated the CDE ore body, the other, 500 feet higher and 1,800 feet south of the CDE, was called the HIJ ore body. The company proposed to explore further by driving a 1,000-foot adit drift southward beginning in the vicinity of the H cut, and another 1,200-foot adit drift beginning near the C-1 cut, together with 1,300 feet of crosscutting from these drifts, and a total of 6,000 feet of diamond drilling, 3,000 feet in each area. A road to the property would have to be built before this work could be undertaken.

The program was allowed essentially as planned except that crosscutting was limited to 750 feet, and no allowance was made for diamond drilling. The contract specified that drifting be done at or near the east or hanging wall side of the deposit and that crosscuts be limited to those driven westerly to explore the ore zone to its footwall. The project was estimated to cost $111,280.00 with Government participation of 75 percent or $83,460.00; all costs were based on unit prices.

The contract, effective for 18 months, was dated April 17, 1952. Road building was started the next day and was completed by the middle of June.

It was decided to tunnel from the B cut to explore the area under the C-1 cut, a favorable target area. Work on the B tunnel was started in June and on the H tunnel in July 1952. The first 90 feet of the B tunnel and the first 60 feet of the H tunnel were driven in broken ground that required timber. Excellent progress was made after this broken ground had been passed because the drift was then in tactite that required no support. Only one other area required timber -- a fault zone encountered at 321 feet in the B tunnel.

The first crosscut was started easterly from the H level. During September drifting was carried forward on both levels while crosscuts were driven both easterly and westerly from the H-level drift.

Because of the complexity of the geology exposed in the drifts, it was decided that crosscuts to both the hanging wall and footwall were necessary to give a maximum amount of information about the deposit.

Amendment No. 1 (dated September 25, 1952, effective September 1, 1952) added no footage but allowed crosscuts to be driven easterly to the hanging wall in addition to those already specified to be driven westerly to the footwall.

During September 1952 the Operator started further surface trenching and sampling that were done at its own expense. A new cut

was made at E-1, between E-cut and F-cut; J-cut was enlarged; and these, together with C, C-1, C-2, E and F, were sampled. The sample data are shown on figure 6; no sample assayed higher than 0.26 percent WO_3. Six hundred pounds of surface and underground samples were composited and both single and three-stage flotation tests made on this sample.

Amendment No. 2 (dated and effective October 1, 1952) added to the project work 2,000 feet of underground diamond drilling in about 40 holes at a unit cost of $5.00 per foot. This added $10,000.00 to the cost of the contract, making the total $121,280.00, with Government participation of 75 percent or $90,960.00. Diamond drilling was added to the contract to obtain information to supplement that obtained by crosscutting and to guide the exploration more adequately.

Work under the contract was recessed on December 8, 1952, because of severe winter weather. At this time the following units had been completed and remained the ultimate lengths of the units listed:

B tunnel	Footage	H tunnel	Footage
Drift	625	Drift	457
Crosscuts:		Crosscuts:	
184E	10	227E	51
184W	27	227W	68
428E	140	361E	74
428W	51		

Diamond drilling was started in May 1953. Between May and August 1953 a total of 1,263 feet of diamond drilling was done from underground stations in both tunnels, 290 feet in B tunnel and 973 feet in H tunnel. The drill holes and their geology are shown on figures 3, 4, and 5.

Work was recessed in August 1953 when the workmen were moved to the flotation mill at Glen to expedite its completion; renegotiation of the lease was going on while work was in recess. Work was not resumed.

Amendment No. 3 (dated February 17, 1954, effective September 1, 1953) extended the time of the contract from 18 to 28 months, making the termination date August 17, 1954. It allowed a recess from September 1, 1953, to May 17, 1954, and changed Article 6 of the original contract to provide that, regardless of whether or not certification is made, royalty shall be paid on all production from the property from the date of the original contract until the time within which the Government may certify the property. It also changed from 10 to 11 years the period in which royalty is due if certification be made. The company did not sign this amendment. ?

Signed copies received in DMEA on Mar. 18, 1954
Talbot

Geologic description of work completed

This section, with only slight changes, is taken from the December 9, 1954 memorandum of W. B. Myers, Geological Survey.

Exploration at the Lower Site (B adit):--B adit (fig. 4) was portaled at an altitude of 6,836 feet, about 200 feet above Lost Creek on the south wall of the canyon. The portal was located in tungsten-mineralized tactite about 30 feet east of a generally accordant contact of a large quartz monzonite pluton with the overlying contact-metamorphosed limy sediments of the Amsden formation (late Mississippian-Pennsylvanian in age). Although surface exposures were poor and very largely confined to several shallow bulldozer cuts, it was expected that the south-trending steeply east-dipping sediments would be relatively unbroken. It was hoped exploration would indicate that large areas of these contact-metamorphosed sediments might constitute low-grade tungsten ore.

Unfortunately, however, exploration has shown that most of the explored ground contains only slight amounts of tungsten and, further, that the continuity of such low-grade mineralized areas as do exist is very uncertain.

Exploration has disclosed that the tactite zone is sheared by strong, generally south-trending faults subparallel to but commonly steeper than the sedimentary bedding. The obvious movement on these faults is post-tactite and post-mineral, but some pretactite and pre-intrusive faults have been mapped and indirect evidence suggests that many or most of the post-mineral faults were active earlier.

The effect of this faulting has been not only to break up the continuity of beds and of mineralized rock but to create zones of heavy ground which would hamper any low-cost methods of underground mining.

In addition, exploration has developed a more complex distribution of intrusive rocks than could have been justifiably inferred from the limited surface exposures. This distribution is thought to be largely the result of faulting, both pre- and post-intrusive in age. The result is to reduce further the minability of the deposit.

A study of figure 4 will show that nothing that would normally be considered a commercially minable ore shoot has been exposed in the B adit or in its drill holes. The nearest approach to an ore shoot is a 76-foot stretch along B drift averaging 0.31 percent WO_3 (USBM assaying). Drifting, crosscutting, and diamond drilling failed to find any lateral extension of this body. No further exploration seemed warranted for such a relatively small body of low-grade material; nevertheless, Minerals Engineering Company carried two raises on this "ore shoot" to the surface. Mr. William Tobey, resident manager, in a

Note

telephone conversation, reported a preliminary estimate of 2,000 to 3,000 tons of 0.3 percent WO_3 rock minable from this shoot. He stated that mineralized rock continued to the surface 60 feet above the level in the north raise. In the south raise, which surfaced 85 feet above the level, the "ore" was followed up about 55 feet and may eventually be extended to the surface.

Apparently the mineralized zone is rather irregular, stands nearly vertical, and is locally split into two strands, each only 2 to 5 feet wide, by a dike of quartz monzonite. The "ore shoot" as now explored lies directly above the 118-foot stretch along B adit represented by Sample B-1832 (fig. 4). On the north the zone is cut off by a northwest-trending post-ore fault; on the south the zone grades into sheared(?) and altered(?) rock. The grade of the "ore" in place, according to Tobey, averages 0.3 percent WO_3, but because of dilution it has not been possible in mining operations to maintain a grade of more than 0.24 to 0.25 percent WO_3.

At the nearby Brown's Lake deposit, which uses the same mill, the break-even point was considered by Minerals Engineering personnel to be about 0.27 percent WO_3, for a 55- to 60-foot thickness of tactite mined by open-cut methods. With an increase last summer (1955) in mill capacity to just under 1,000 tons per day, the Operator estimates informally that the cutoff can be lowered to around 0.20 percent WO_3. Mining at Lost Creek would be more expensive and haulage is more costly.

The results of surface exploration of the B-C area on company account have been very disappointing. The early samples shown on company maps were taken from shallow cuts that did not expose bedrock clearly at all points. Deeper cuts failed to substantiate either the extent or grade indicated by the earlier work. The surface-cut samples shown on figure 4 are thought to represent fairly conditions at the C cuts. The 15.8-foot sample reported by the company to contain 0.44 percent WO_3 is of unknown significance. J. S. McNabb, formerly of the Bureau of Mines but not now available for consultation, submitted an unlocated sample of unspecified width from C-S-2 cut for Bureau assay as part of a comprehensive check sampling program. This sample, which may have been a split of the company sample, contained 0.66 percent WO_3.

Geologically, the 0.44 percent WO_3 sample appears to correlate with the C-943 interval of 10.7 feet located 140 feet north. Three samples across this interval ranged in value from 0.13 percent WO_3 to 0.17 percent WO_3 according to Bureau assays. This zone is not present 80 feet to the south in C-S-3 cut and is believed to be cut out by post-ore faulting. Similarly, the zone is cut off down dip by an overlying post-ore fault and does not descend to the altitude of B adit.

The structural relationships of the B adit and C cut mineralized zones as now understood may be summarized as follows: The B adit mineralized zone underlies and is cut off northward by a post-ore fault zone. The surface mineralized zone lies within structurally higher strands of the same fault zone and is truncated by them.

Exploration at the Upper Site (H adit).--The H adit (fig. 5) was portaled at an altitude of 7,750 feet, 914 feet above and 3,450 feet south of the B-adit portal. The portal was located in tungsten-bearing Amsden tactite about 140 feet east of the quartz monzonite contact.

Fewer structural complications were recognized here than in B adit; particularly noteworthy is the almost complete lack of post-mineral faulting. The tungsten content of the tactite is perhaps more disappointing than at B adit because no concentrations even approaching ore grade for a minable width were found. Company assays in the first east crosscut, which suggested some marginal grade rock, were not supported by later DMEA check sampling. Company assays of DMEA diamond drill core indicate a 10.2-foot intercept in Hole No. 4 containing 0.26 percent WO_3. The marginal grade rock in this hole, located midway between the first and second east crosscuts, does not extend to either working.

The southern part of H adit and diamond drill holes drilled westerly and southwesterly from this locality encountered much aplite and related rock types. One dike trends northwest and dips about 55° SW.; a second intersecting dike trends northerly and dips about 45° easterly.

The concept of intersecting dikes offers a plausible explanation for a number of puzzling features of the very poorly exposed surface geology. More importantly it implies that the downward projection of the marginal I cut ore shoot would lie above the intersection of the dikes and therefore ahead of the face of H adit. The structurally equivalent position of the surface ore shoot appears to lie in the next 200 feet of ground due south of the face.

Further south, it is probable that the potential ore zone has been cut out by quartz monzonite, which on the surface appears to have engulfed most of the Amsden formation.

The average grade of the I cut ore shoot is rather uncertain. However, even using the most generous figures, the outcrop of the shoot can barely be classed as marginal; unless it improves at depth, it would be submarginal in terms of underground operations.

Exploitation possibilities

Average grade of the ore milled from Lost Creek, based on returns from 15,000 tons, is 0.156 percent WO_3 recovered, having a value of $7.13 per ton of crude ore. Cutoff for ore grade at the company's large-scale open-pit operation at nearby Brown's Lake was reported to be 0.27 percent WO_3 and may now be as low as 0.20 percent WO_3. Assuming that this latter figure is correct, the obvious conclusion is that the Lost Creek operation probably is not returning a profit.

The Lost Creek operation has been referred to by the company in correspondence (letter dated 4/12/55 from Blair Burwell to A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I, Northwest District) as "exploratory mining." If it is exploration, the fact that there is some return from the rock excavated may be considered a bonus. If it is mining, it would seem doubtful that such an operation, not showing a profit, would long be continued.

The Lost Creek deposit is 3 miles nearer the company's flotation mill at Glen than the Brown's Lake deposit that warranted building the mill; however, road grades are steeper.

Summary of factual data

Units of work completed, unit costs thereof, and total costs to the contract are:

Item	Units	Unit cost	Total cost to contract
Road Construction	Job		$ 8,030.00
Drifts	1,082 feet	$35.00	37,870.00
Crosscuts	421 feet	35.00	14,735.00
Diamond drilling	1,263 feet	5.00	6,315.00
Total			$66,950.00

Total amount of contract	$121,280.00
Government's share at 75 percent	$ 90,960.00
Total amount expended	$ 66,950.00*
Government's participation	$ 50,212.50*
Total amount unexpended	$ 54,330.00*
Government's share unexpended	$ 40,747.50*
Royalty payments received	$ 175.94

*Subject to final audit

All work was on a unit cost basis. No equipment was purchased with Government participation so there were no problems of salvage.

Discussion of conclusions

Work under the contract was carried on in an efficient manner. Minerals Engineering Company supplied to the project a competent engineer, M. N. Shaw, who cooperated at all times with the Government engineers and geologists, not only on project work, but also on additional exploration carried on by the company.

The program was incomplete in the matter of diamond drilling. Amendment No. 3 extended the effective date of the contract, but the company did not choose to complete this work.

The company is financially competent but reluctant to pay royalty to the Government. The value of Lost Creek ore after milling is great enough to require 5 percent royalty, and although royalty received on the first 1,500 tons has been paid at this rate, royalty due on the additional 13,500 tons (to August 1955) has been calculated by the company at 1½ percent, based on the value of crude ore. The Government has not agreed to the Operator's method of computing royalty. Negotiations on royalty payments are at an impasse, and the matter has been referred to the Washington office.

Exploration of the Lost Creek property has disclosed that the bodies are discontinuous, and their grade is so low that they must be regarded as submarginal. No further exploration or development with Government participation is recommended at Lost Creek unless a more attractive target is disclosed by company operations.

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

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

RECEIVED
FEB 13 1956

February 10, 1956

Air Mail

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are copies of a letter dated February 6 received from Mr. Blair Burwell, president of the Minerals Engineering Company, and copies of my reply. I have also teletyped Brading to hold off on the royalty audit until we have the results of the conference which Mr. Burwell proposes.

Sincerely yours,

A. E. Weissenborn
A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW Dist.

Enclosures

cc: USBM (2)
USBM (AD)
Turner (2)

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

So. 157 Howard Street
Spokane 4, Washington

RECEIVED
FEB 13 1956

February 10, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Burwell:

With respect to your letter of February 6, our Washington office is fully informed of the royalty problem at Lost Creek and I am sure would be glad to discuss it with you. This would be highly desirable from our point of view as any decision will have to be made in Washington anyway.

I plan to be in Washington myself on Friday, February 17, and if this would coincide with your visit, perhaps we could have a joint conference.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW Dist.

cc: DMEA (2) w/incoming
USBM (2) "
USBM (AD) "
Turner (2)

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

RECEIVED
FEB 13 1956

February 6, 1956

Mr. A. E. Weissenborn
U. S. Department of the Interior
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Pursuant to your letter of January 31, this is to advise that I will be in Washington, D. C. next week and would like to meet with representatives there in order that we might clarify the entire situation with regard to the above-named loan.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

BB/rlc

cc: Wing G. Agnew
C. O. Mithendorf

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

RECEIVED
FEB 13 1956

FROM

BUREAU

CHG. APPROPRIATION

10—1723 U. S. GOVERNMENT PRINTING OFFICE

copy

S. 157 HOWARD STREET, SPOKANE 4, WASH
FEBRUARY ~~10~~ 9, 1956

MDN SP 12 I-GS-G

SPOKANE WASH 2-9-56 140P

MR. THOMAS H. BRADING

DMEA AUDITOR

US BUREAU OF MINES

224 NEW CUSTOMHOUSE DENVER

REDOCKET DMEA 2440, MINERALS ENGINEERING COMPANY. LETTER JUST RECEIVED FROM BURWELL STATES THAT HE WILL DISCUSS ROYALTY REPAYMENT IN WASHINGTON NEXT WEEK WITH MITTENDORF ET AL. SUGGEST YOU HOLD OFF ON ROYALTY AUDIT UNTIL WE LEARN RESULTS OF CONFERENCE.

A. E. WEISSENBORN, EXECUTIVE OFFICER

FIELD TEAM REGION 1

cc: OUTGOING TT'S
DMEA (2)
USBM (2)
CONFIRMATION
TURNER

Docket copy
Surname:
Talbert
Selfridge
Martin
Hillman
Mattendorf

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

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

FEB - 8 1956

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Ydp-2300

Dear Mr. Weissenborn:

Receipt is acknowledged of your letter dated February 1, 1956, concerning the referenced Operator's failure to pay royalty and advising of your belief that a royalty audit should be made at once.

The Contract Administration and Audit Division has informed this Committee that, in accordance with your telephone request of January 25, 1956, instructions have been issued for T. N. Reading, an auditor stationed in Denver, to audit this Operator's royalty records. It is understood that the Operator's records are maintained in Grand Junction, Colorado, and that Mr. Reading will arrange for the audit at the earliest date possible without interference with Region III audits now in process.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (WB)

APPROVED:

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

Thor H. Kiilsgaard (WB)
Member, Geological Survey

EDTalbert/wb
February 8, 1956

Copy to: Docket
Admr. Reading File
Operating Committee
Reg. III Field Team (2)
Mr. Holliday, USBM
Mr. Kiilsgaard, USGS
Mr. Martin
Mr. Chambers
Mr. Turner
Mr. Brading

R.S.S.

MINERALS ENGINEERING COMPANY
P. O. Box 1951 - Phone 4280
GRAND JUNCTION, COLORADO

February 6, 1956

Mr. A. E. Weissenborn
U. S. Department of the Interior
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Pursuant to your letter of January 31, this is to advise that I will be in Washington, D. C. next week and would like to meet with representatives there in order that we might clarify the entire situation with regard to the above-named loan.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

BB/rlc

cc: Wing G. Agnew
C. O. Mithendorf

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

RECEIVED
FEB 6 1956

February 1, 1956

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

This will supplement the Field Team letter of January 27 concerning Mr. Burwell's failure to pay royalty due the Government, and to return the Termination Agreement.

On thinking over the matter in the light of his letter of January 19, it seems likely that Mr. Burwell objects to Annex II of the Termination Agreement which changes the method of calculating royalty, although he does not specifically say so. It also is probable that to a certain extent Mr. Burwell is attempting to use the DMEA as a "whipping boy". The Field Team has long maintained that there was really no valid discovery made at Lost Creek and that it would not be possible to mine the low-grade tungsten-bearing rock in that locality. Mr. Burwell has persisted, however, in his efforts to operate the property and, as predicted by the Field Team, this has been a failure. Mr. Burwell then has attempted to justify the failure by pointing out that the royalties which the Government has put on the property have caused it to shut down. This is ridiculous of course for if the relatively small amount of money involved in the royalty payments is so significant then the operation is obviously not on a very sound basis. In any event, the Termination Agreement has neither been signed nor returned to us unsigned.

In a telephone conversation with Mr. Mittendorf and Mr. Talbert in which the desirability of sending an auditor from Denver to Grand Junction in order to make a royalty audit was discussed, the Executive Officer stated that the amount of royalty involved was about $800. As Mr. Talbert has pointed out in his letter of January 26 to Mr. Turner, this is incorrect. Figures are available on Lost Creek production through August 1955; these probably can be

tentatively accepted as a basis for discussion, although they should be verified later. Minerals Engineering figures (letter to Executive Officer November 16, 1955) that the royalty due the Government on this production is $3,416.02, on the incorrect assumption that the percentage royalty is based on the value of the crude ore. If the royalty is based on the value of the concentrates produced as it appears would be the case under Annex I of the contract, we estimate that the royalty due would amount to about $5,386.79, depending on the value placed on the concentrates. If the royalty is based on the value of the scheelite sold, as would appear to be the case if the Termination Agreement were signed and Annex II were in effect, the royalty would amount to $6,832.03 (Field Team letter to Burwell November 18, 1955).

We feel that a royalty audit should be made at once. Such an audit will give us some real facts to go on and may stir Mr. Burwell into taking some action.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

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

Wing G. Agnew

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

cc: USBM (2)
USBM (AD)
Turner (2)

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

January 31, 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Burwell:

This will acknowledge your letter of January 19. We are very much concerned over the nonpayment of any royalties from this property, except a small amount received in 1954, and consequently we have had no alternative but to refer ~~your~~ this matter to the Washington office of the DMEA.

As stated in our letters of November 4, 1955 and December 28, 1955 if the terms of the Termination Agreement sent to you April 5, 1955 are unsatisfactory the Termination Agreement should be returned to this office unsigned. You should at the same time accompany this with a statement of your objections to the agreement. As you have not done this we have no alternative but to consider you in default for payment of royalties due the Government. Consequently, you should return the agreement at once so that your position is clarified.

By Field Team, Region I, NW Dist.

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

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

cc: DMEA (4)
USBM (2)
USBM (AD)

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

1201 N. Division St.
Spokane 2, Washington
January 27, 1956

RECEIVED
FEB - 6 1956

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

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are copies of a letter dated January 19, 1956 from Mr. Blair Burwell, president of Minerals Engineering Company, together with copies of our reply.

It has been evident to us for some time that Mr. Burwell will continue to stall making payments for royalty unless pressure is brought to compel him to do so. Consequently, we have prepared copies of the pertinent letters, which are enclosed, and suggest that Washington take appropriate action to collect the delinquent royalties.

By Field Team, Region I, NW District

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

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

Enclosures

cc: USGS (2)
USBM (AD)

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

RECEIVED
FEB - 6 1956

January 19, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Reg. I, NW Dist.
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Just returned from a trip to the southwest and we are getting into the question of our Lost Creek DMEA loan and plan to close this up shortly.

At the present time we find that the present charges on this ore as interpreted by the DMEA have placed such a cost burden on the mining that we have closed all open pit and other mining for the present. We are carrying on a small amount of exploratory work in the lower tunnel during the winter in order to obtain some data as to our future policy in connection with this deposit.

One thing is sure that such an interpretation as we have had from your department if continued in the future will result in the suspension of all operations permanently, and I do not think any of us want to see such an unreasonable and arbitrary closure of this resource.

Sincerely yours,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

RECEIVED
JAN 23 1956
U.S.G.S.
SPOKANE, WASH.

BB/k

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

January 3, 1956

Mr. A. E. Weissenborn
U. S. Department of the Interior
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

RECEIVED
FEB - 6 1956

Dear Mr. Weissenborn:

Mr. Burwell is out of Grand Junction and will be back shortly after January 10, at which time he will answer your letter of December 28.

Yours very truly,

MINERALS ENGINEERING COMPANY

R. G. Sullivan

R. G. Sullivan
Vice President

RGS/rlc

RECEIVED
JAN 6 - 1956
U. S. G. S.
SPOKANE, WASH.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 E. Division Street
Spokane 2, Washington
November 18, 1955

RECEIVED
FEB - 6 1956

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-2300

Dear Mr. Burwell:

This will acknowledge receipt of your letter of November 16, 1955 to Mr. Weissenborn regarding royalty payments on Lost Creek mine production.

Apparently we have erred in assuming that the mill concentrates were sold to The Salt Lake Tungsten Company, and for that reason we suggested a schedule similar to that of a smelter whereby allowances would be made for freight to the refinery, refinery losses, refining costs, and penalties. On that basis the royalty on the Lost Creek production through August 1955 would have been $5,386.79, at the rate of 5 percent.

Annex II, paragraph (e) of your contract defines the manner in which royalty rates are determined per ton of production in the form in which sold, held or used. Any product sold at a price in excess of $11.50 per ton is subject to a 5 percent royalty.

Your letter clearly indicates that the mill concentrates were refined and that high-grade concentrates and/or synthetic scheelite was sold. Although you did not state the tonnage sold it is evident that the product and/or products, had a value in excess of several thousands of dollars per ton. Royalty at 5 percent on $136,640.61 is $6,832.03.

We are glad that the basis for computing royalties on Lost Creek mine production has finally been clarified.

by Field Team, Region I, NW District

cc: DMEA (2)
USGS (2)
USBM (AD)

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

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

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

November 16, 1955

RECEIVED
FEB - 6 1956

Mr. A. E. Weissenborn, Executive Officer
U. S. Department of the Interior
Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA 2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

We carefully checked your letter of October 28 and still cannot reconcile the royalty returns listed in the third and fourth paragraph of your letter with the provision in the DMEA Exploration Contract covering this work.

The provisions in our contract, Annex II, paragraph (e) are:

> "One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent of each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts."

Returning to the data contained in our letter of October 24, I am recalculating this data, using the wording and intent of the contract. This tabulation follows:

Tons mined		15,102.29
Mill Concentrates Produced:		
Low Grade	1483.18 Units	
High Grade	880.09 Units	2,363.27
Refinery Concentrates Produced		2,214.952
Refinery Concentrates sold		2,214.952
Price realized - $63.00 per unit		
less $1,502.48 penalties		$136,640.61
Value realized per ton of ore		$ 9.05
Royalty rate:		
$1\frac{1}{2}$ percent for $8.00		
$\frac{1}{2}$ percent for each additional $0.50		
$1\frac{1}{2}\% + 1\% = 2\frac{1}{2}$ percent		
Royalty due is $2\frac{1}{2}\%$ of $136,640.61		
Amount due		$ 3,416.02

Please advise us if this is not the correct procedure for royalties according to the present contract.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

BB/rlc

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

RECEIVED FEB - 6 1956

April 15, 1954

Mr. G. P. Wilson, Office Manager
Minerals Engineering Company
801 - 4th Avenue
Grand Junction, Colorado

Re: Docket DMEA-2292 (Tungsten)
American Alloy Metals, Inc., 2247
and
Docket DMEA-2440 (Tungsten)
Minerals Engineering Company, 2300

Dear Mr. Wilson:

This will acknowledge receipt of your letter of April 8, 1954, together with enclosures. These include a revised royalty statement covering production from the subject properties between October 15, 1953, and January 31, 1954, and a check in the amount of $1,472.68, which is the balance due the Government for royalty on this production as reflected in the revised royalty statement.

There still appears to be some misunderstanding on your part as to the information required in a royalty statement and the supporting documents which should accompany the statement. The revised statement is fine as far as it goes, but as noted in our letter of March 17, 1954, it will be necessary for you to furnish copies of settlement sheets or invoices from the purchaser of the concentrates (Salt Lake Tungsten Company) and also to furnish data regarding grade and tonnage of concentrates produced each month. This material is needed as it is basic information on which your royalty payments are calculated.

Your attention is directed to the latter part of the second paragraph and the third paragraph of our letter of March 17, 1954, to Mr. W. C. Walt, business manager of your company.

> ". . . Also, we require data concerning the grade and tonnage of concentrates produced. We realize that this figure will be the same as sales if the concentrates are not stockpiled. However, it is well to record it as a separate item. Settlement sheets or invoices from the purchaser of the concentrates (Salt Lake Tungsten Company) are required as supporting document.

"We are enclosing a statement form showing the basic data required as well as the manner in which royalty calculation should be made. If it suits your purpose you may follow this suggested form, if not, you may devise your own form, but all information shown on the suggested form will be required."

Although we believe these instructions quite clear, we are enclosing for your future guidance a copy of DMEA Order-1, Amended. Section 10(c) of the Order explains very clearly the method of calculating the royalty and defines in unmistakable terms what is subject to Government royalty and what deductions may be made before royalty is calculated. It will be obvious to you that we must have a copy of the buyer's settlement sheet or its equivalent in order to determine what deductions have been made and what royalties are due. Your royalty statement should be signed by the appropriate official of the company and should bear the following signed certification: "I certify that this royalty statement is correct."

Your letter states that it is necessary at times to store ranker grades until they can be shipped. This should not present any problem if the identity of the source of the concentrates is not lost before the concentrates are sold; in other words, if each concentrate lot is kept separate there should be no problem.

If, on the other hand, the concentrate lots are placed in a general stockpile and the individual lots lose their identity, it will be necessary to keep a stockpile inventory on a first-in first-out basis. Assume, for example, in February you stockpile 300 tons of concentrates containing 1,500 units of WO_3, of which 750 units of WO_3 are from the Ivanhoe Lease, 375 from the Lost Creek Lease, and 375 from non-DMEA sources. Then, in March, you stockpile 150 tons of concentrates containing 750 units of WO_3, all of which are from the Ivanhoe Lease. Now assume that 2,000 units of WO_3 are sold from the stockpile in April. On a first-in first-out basis, all of February's and 500 units of the March stockpile would have been disposed of. Each source would then be assigned its prorated share of the net return on the basis of the number of units from each source contained in the concentrates sold. It will require some bookkeeping to keep a record like this but if one comes from more than one source you will undoubtedly have to keep an equivalent record for your own use.

If your future production is all to be from the Ivanhoe Lease the problem will, of course, be much simpler, but we should still have a record of how much concentrate has been produced and how much has been sold.

It is hoped that this letter will clear up any misunderstanding you may still have regarding what is required in a royalty statement and that your future statements will include this essential information. Please send us immediately the information regarding tonnage and grade of mill concentrates for the shipments to January 31, 1954, together with copies of the corresponding settlement sheets from the Salt Lake Tungsten Company.

By DMEA Field Team, Region II

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

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

Enclosure

cc: USBM (2)
DMEA (2)
Hindman

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

So. 157 Howard Street
Spokane 4, Washington

C
O
P
Y

March 17, 1954

Mr. C. A. Walt, Business Manager
Minerals Engineering Company
801-4th Avenue
Grand Junction, Colorado

Re: Docket DMEA-2292 (tungsten)
American Alloy Metals, E247
and
Docket DMEA-2440 (tungsten)
Minerals Engineering Company, E300

Dear Mr. Walt:

This will acknowledge receipt of your letter of March 11, 1954 together with enclosures. These include a royalty statement and a check in the amount of $631.15 for royalty payments on ore produced from the subject properties between October 15, 1953, and January 31, 1954.

We regret to inform you that this royalty statement is incomplete and is apparently in error. We require that such statements include complete data on which royalty calculations are based as well as supporting documents. In addition to the data you have furnished, it will be necessary to provide us with basic data regarding the grade of mill heads from each source. This is needed to determine the number of units of WO_3 from each source for this is the basis for prorating concentrate production or sales back to the original source. Also, we require data concerning the grade and tonnage of concentrates produced. We realize that this figure will be the same as sales if the concentrates are not stockpiled. However, it is well to record it as a separate item. Settlement sheets or invoices from the purchaser of the concentrates (Salt Lake Tungsten Company) are required as supporting documents.

We are enclosing a statement form showing the basic data we require as well as the manner in which royalty calculations should be made. If it suits your purpose you may follow this suggested form; if not, you may devise your own form, but all information shown on the suggested form will be required.

You should also keep detailed records verifying the tonnage and grade of the mill heads originating from Ivanhoe, Lost Creek, or any other source. These need not be submitted with the monthly royalty statement but should be available for our inspection.

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It is noted that you have based all your royalty calculations on a royalty rate of 1½ percent which we presume is applied to the value of the crude ore. We wish to call your attention to Article 6 of Contract Idm-E300 and Article 9 of Amended Contract Idm-E247 which specify that royalty payments are to be based "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." In your case you are selling concentrates which have a net value greater than $11.50 per ton, thus the Government is entitled to the maximum royalty rate of 5 percent. If the ore were sold to the Salt Lake Tungsten Company before milling, then the royalty rate would be based on the value of the crude ore. These matters were discussed by Messrs. Ray Sullivan, Blair Burwell, Jr., and A. E. Weissenborn at a conference in Butte on December 1, 1953.

Your royalty statement places the value of concentrates originating from the Ivanhoe lease at $37,603.96. At 5 percent, the royalty due on this production is $1,880.20. Value of concentrates originating from the Lost Creek lease is placed at $4,472.81. At 5 percent, the royalty due on this production is $223.64 for a total royalty from both properties of $2,103.84 and not $631.15 as calculated and paid.

It would be appreciated if you would please revise your royalty statement along the lines suggested in this letter. We have credited the $631.15 to your account pending payment on the balance due.

By Field Team, Region II

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

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

Enclosure

cc: DMEA (2) w/encl.
USBM (2) w/encl.
Hindman w/encl.

C
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Y

MINERALS ENGINEERING COMPANY

DMEA ROYALTY STATEMENT - CONTRACTS Idm-E247 and Idm-E300
Period 10-15-53 through 11-30-53

Tonnage and Grade

Mill Heads	Tons	Percent WO_3	Units
Ivanhoe Lease (E247)	2,146.000	--	--
Lost Creek Lease (E300)	786.500	--	--
Non-DMEA ore (if any)	0	--	--
Total ore milled	2,932.500	--	--
Concentrate Production			
High grade con.	--	--	--
Low grade con.	--	--	--

Sales* (Settlement sheets attached)

Date	Type	Lot No.	Tons	Percent WO_3	Units WO_3	Net Return	Net Return per ton	Percent royalty rate (based on net value per ton of concentrate)
--	High grade	11	72.89	---	---	4024.460	55.21	5

*Sales of concentrates produced during month should equal concentrate production if concentrates are not stockpiled.

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Royalty Calculations

Proration for royalty calculation based on contained WO_3 units in mill heads

Percent from Ivanhoe Lease (Idm-E247)

$$\frac{\text{Units of } WO_3 \text{ from Ivanhoe Lease in mill heads}}{\text{Total } WO_3 \text{ units contained in mill heads}} =$$

Percent of units from Ivanhoe Lease or prorated share expressed as percent assigned to Ivanhoe Lease (carry to 3rd place, i.e., 50.195 percent).

Percent from Lost Creek Lease (Idm-E300)

$$\frac{\text{Units of } WO_3 \text{ from Lost Creek Lease in mill heads}}{\text{Total } WO_3 \text{ units contained in mill heads}} =$$

Percent of units from Lost Creek Lease or prorated share expressed as percent assigned to Lost Creek Lease.

Percent from Non-DMEA Sources

$$\frac{\text{Units of } WO_3 \text{ in mill heads from non-DMEA sources}}{\text{Total } WO_3 \text{ units contained in mill heads}} =$$

Percent of units from non-DMEA sources or prorated share expressed as percent assigned to non-DMEA sources.

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High Grade Concentrates

Ivanhoe Lease (Idm-E247)

(Total net return) x (Percent of prorated share x assigned to Ivanhoe Lease)

(Royalty rate) = Amount of royalty due on high grade concentrates originating from Ivanhoe Lease

Lost Creek Lease (Idm-E300)

(Total net return) x (Percent of prorated share x assigned to Lost Creek Lease)

(Percent royalty rate factor) = Amount of royalty due on high grade concentrates originating from Lost Creek Lease.

Low Grade Concentrates

Ivanhoe Lease (Idm-E247)

(Total net return) x (Percent of prorated share x assigned to Ivanhoe Lease)

(Percent Royalty rate factor) = Amount of royalty due on low-grade concentrates originating from Ivanhoe Lease.

Lost Creek Lease (Idm-E300)

(Total net return) x (Percent of prorated share x assigned to Lost Creek Lease)

(Percent royalty rate factor) = Amount of royalty due on low grade concentrates originating from Lost Creek Lease.

Royalty recap:

	Net value high-grade concs.	Royalty high-grade concs.	Net value low-grade concs.	Royalty low-grade concs.	Total net value	Total Royalty
This statement						
Ivanhoe Lease						
Lost Creek Lease						
Total to date						
Ivanhoe Lease						
Lost Creek Lease						

Docket copy

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

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

JAN 26 1958

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-[illegible]

and

Docket No. DMEA-3739 (Cobalt-Copper)
Idaho Metallurgical Industries, Inc.
Timberline Pride Claims, et al
Lemhi County, Idaho
Contract No. Idm-[illegible]

Dear Charlie:

The referenced contracts were the subject, in part, of a telephone conversation between Mr. Mittenhorf, Mr. Weingarten, and the undersigned on January 25, 1956. This letter is written, at Mr. Weingarten's request, in order to advise you in the matters discussed.

Under contract Idm-[illegible] questions have arisen as to the manner by which the Operator's claims for costs incurred may be acceptably documented as well as to the propriety of allowing costs for work performed by an independent contractor. It appears that the firm of Shuman and Full is acting in the capacity of both an independent contractor and an agent for the Operator in the prosecution of the project work.

Article 13 (b) (1), as included in Annex II of the contract, specifically waives the requirement of Article 4 (a) of the contract for estimating the costs by categories. It is the opinion of this Division, therefore, that the costs incurred under category (1) Independent Contracts are properly acceptable, provided that such costs (a) exceed neither the maximum unit costs nor the maximum total costs for the pertinent item of work, as listed under Stages I and II of the Estimated Costs of the Project in Exhibit "A", and (b) conform to the requirements of the last two sentences of Article 4 (b) of the contract.

R.C.G.

Article 13 (c) (2), as included in Annex II of the contract, provides that the Operator's claim by categories on Form NF-104 shall be supplemented by a statement showing the distribution of the categorical costs by each of the work items set forth in Exhibit "A". Accordingly, any costs claimed for work performed by Shemen and Full as an independent contractor should be shown on the Form NF-104 under category (1) and distributed on the supplemental statement to the applicable work items. Any work performed by other independent contractors should be reported in the same manner. Any other costs incurred, either directly by the Operator or through Shemen and Full as agents, should be reported on the Form NF-104 in the proper category, (2) to (7), and likewise distributed on the supplemental statement to the applicable work items.

All costs claimed for independent contract work should be documented by copies of the invoices for work performed by Shemen and Full or other independent contractors. The amounts claimed for costs incurred other than under independent contracts should be documented by invoices, payrolls, or other documentary evidence of such costs.

Under contract 14m-3320 royalty is not being paid by the Operator and Mr. Weisenborn indicated a desire for a royalty audit of the project. Since the Operator's records are maintained in Grand Junction, Colorado, he suggested that it would be more feasible to have the audit performed by one of this Division's Denver auditors. I understood him to say that no royalties had been paid to date, no monthly returns had been submitted, royalties due amounted to only about $800.00, and, therefore, no preparatory audit work in the Spokane office would be required. Since the Operator's production is continuing I demurred at making an audit at this time for such a relatively small amount and suggested that, for the time being, the audit be held in abeyance and another request be made on the Operator to pay the past due royalties.

Upon looking over the docket file, however, I find a copy of a letter dated November 18, 1955, addressed to the Operator by the Field Team, in which the amount of royalty due is indicated as being $4,832.03. Furthermore, our records indicate royalties amounting to $175.94 were received by the Government through April 14, 1954. This puts a different complexion on the matter.

Accordingly, it is suggested that you discuss this case with Mr. Weisenborn. If it is determined that an audit is required (as would seem to be indicated by the Field Team's letter of November 18, 1955), it is requested that you obtain from the regional files and forward to Mr. Breding in Denver the contract, all amendments thereto, all available settlement sheets, copies of all correspondence relative to the royalties due, and a transcript of the Operator's account as shown in the Finance Officer's ledger.

By copy of this letter Mr. Brading is being requested to perform this royalty audit if you so advise him. Please furnish this Division a copy of any letter which you may send to Mr. Brading in regard to this audit.

Copies of this letter also are being sent to Mr. Weissenborn and Mrs. Purdy.

Sincerely yours,

(Signed) E. D. Talbert

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

EDTalbert/wb
January 25, 1956

Copy to: Docket (2)
Admr. Reading File
Mrs. Purdy
Mr. Weissenborn
Mr. Brading
Mr. Martin
Mr. Chambers

400

RECEIVED

JAN 16 1956

WITH	ACTION	NOTED	DATE

MINERALS ENGINEERING COMPANY

P. O. BOX 1951
GRAND JUNCTION, COLORADO

January 3, 1956

Mr. A. E. Weissenborn
U. S. Department of the Interior
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Mr. Burwell is out of Grand Junction and will be back shortly after January 10, at which time he will answer your letter of December 28.

(Toaab return of termination agreement)

Yours very truly,

MINERALS ENGINEERING COMPANY

R. G. Sullivan

R. G. Sullivan
Vice President

RGS/rlc

RECEIVED
JAN 6 - 1956
U.S.G.S.
SPOKANE, WASH.

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

So. 157 Howard Street
Spokane 4, Washington

December 28, 1955

Mr. Elmir Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

Our Washington office has again asked us to request that you return all copies, unsigned, of the termination agreement forwarded to you on April 5, 1955. Will you please take care of this matter at your earliest convenience.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Reg. I, NW Dist.

cc: DMEA (2)
USBM (2)
USBM(AD)

400

DOCKET
Surname:
Holt
Martin
Selfridge
Hoffman
Mitchell

DEC 19 1955

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

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Reference is made to the subject docket, our letter to you of October 31, 1955, and your letter of November 4, 1955, to the operator, requesting that he return all copies, unsigned, of the termination agreement sent to him on April 5, 1955.

Our files do not indicate that any reply has been received from the operator.

Please again request the operator to return all copies of said agreement.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

cc: Docket
Code 400
Oper. Comm.
Adm. Read. File
T. Kiilsgaard, USGS
R. W. Holliday, USBM
FT, Reg. I-Spokane

SPHolt/ls
12/16/55

DOCKET
SURNAME
McMahon
400 Martin
J H Chandler
J E Fox
M Hendorf

NOV 15 1955

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

Re: Docket No. DMEA 2410 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Reference is made to your letter of October 28, 1955, to Mr. T. W. Holmes, Assistant General Manager, Minerals Engineering Company, advising that royalty due the Government on the value of concentrates produced is to be calculated at the rate of five percent.

In the event Minerals Engineering Company continues to procrastinate or refuses to pay royalty on the basis you have outlined, it is requested that you refer this case to Washington for collection, notifying the Operator of your action.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

ADMcMahon/foc
11-9-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. I - NWDist.
Messrs. Holliday, USBM
Kiilsgaard, USGS

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

November 4, 1955

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-R300

Dear Mr. Burwell:

Our Washington office has directed us to request you to return all copies, unsigned, of the Termination Agreement forwarded to you on April 5, 1955.

By Field Team, Region I, NW Dist.

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

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

cc: DMEA (2)
[illegible] (2)
[illegible] (AD)
Myers

RECEIVED
NOV 14 1955

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

November 1, 1955

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

We are continuing our correspondence with Minerals Engineering Company with respect to the payment of royalties.

The Operator has not yet signed the termination agreement that provided for the Government's royalty. As the Operator is mining from the Lost Creek deposit we feel that we must recommend issuing a Certification of Discovery or Development even though we think it probable that the grade is submarginal.

Justification for certification is contained in the report by the Operator's engineers dated December 8, 1952, the memorandum by W. Bradley Myers of December 9, 1954 and our letter of December 10, 1954.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

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

Wing G. Agnew

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

cc: USBM (2)
USBM (AD)
Myers

See if contract is on
early forms.

Our letter of Oct 31 was
an urge for a follow up
by FT for royalty thru their
9/9/55 letter proposing
method of royalty calculation.

Take up with S.E.J.

Get copy of our Oct. 31
letter

400

DOCKET
Surname:
McMahon
Martin
Selfridge
Johnson

OCT 31 1955

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

Re: Docket No. DMEA 2440-Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-5300

Dear Mr. Weissenborn:

Your letter of September 9, 1955, to Mr. Blair Burwell, president, Minerals Engineering Company, requested advice regarding the acceptability of your proposed method of computing royalty on Lost Creek Mine production. If you have not had a reply, we believe it would be advisable to inquire about the applicant's intentions in order to expedite final settlement of the contract.

Under the circumstances that have developed, the contract will undoubtedly be amended to provide for an agreeable method of royalty computation. Therefore, please request return of original and six copies of the proposed Termination Agreement forwarded to the Operator with your letter of April 5, 1955.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Approved:

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

W. P. Williams (GCS)
Member, Geological Survey

cc: Docket
Code 400
Oper. Comm.
Adm. Read. File
FT, Reg. I-Spokane
T. Kiilsgaard, USGS
R. Holliday, USBM
Code 800

ADMcMahon/ls
10/28/55

R.C.S.

Bill:

F.E.J. suggests writing F.T. concurring in their request that royalty be paid at the 5% rate; also advising that if Minerals Engineering refuses their request telling F.T. to inform Operator that case is being referred to Washington for collection. - Draft attached.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 N. Division St.
Spokane 2, Washington

RECEIVED
NOV - 4 1955

October 28, 1955

Mr. T. W. Holmes, Asst. Gen. Mgr.
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA 2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Holmes:

This will acknowledge your letter of October 24 to Messrs. W. G. Agnew and V. C. Fryklund in which you outline your conception of calculating royalties on Lost Creek mine production using 1-1/2 percent instead of 5 percent.

The method we submitted in our letter of September 9, 1955 to Mr. Blair Burwell specifically stated that the royalty must be 5 percent of the gross value of the tungsten content of the mill concentrates at $63 per unit less freight costs on the concentrates to the refinery, refinery costs including penalties, and refinery losses.

A Field Team letter of March 17, 1954 to Mr. C. A. Walt, business manager, Minerals Engineering Company, clarified royalty rates and stated in part: "It is noted that you have based all your royalty calculations on a royalty rate of 1½ percent which we presume is applied to the value of the crude ore. We wish to call your attention to Article 6 of Contract Idm-E300 and Article 9 of Amended Contract Idm-E247 which specify that royalty payments are to be based 'upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, <u>in whatever form disposed of</u>, including ore, <u>concentrates</u>, or metal.' In your case you are selling concentrates which have a net value greater than $11.50 per ton, thus the Government is entitled to the maximum royalty rate of 5 percent."

Your letter places the value of concentrates from Lost Creek through August 1955 at $107,735.84. Royalty due on this production at 5 percent is $5,386.79.

Your royalty statement should be supported by documents showing the weight and grade of crude ore mined and milled, weight and analyses of high and low grade concentrates, freight rates and costs for each concentrate, settlement sheets from Salt Lake Tungsten Company,

showing purchase prices, refinery losses, refinery costs including penalties, and any other pertinent data necessary to properly calculate royalties. A copy of your Monthly Operating Statements for the mine and mill will supply some of this information.

If the Lost Creek concentrates are sold separately or not commingled with Brown's Lake concentrates, copies of the GSA settlement sheets should also be included.

We will appreciate having you revise your royalty statement and supply adequate supporting documents along the lines suggested above so that this matter may be settled promptly.

By Field Team, Region I, NW District

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

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

cc: DMEA (2)✓
USGS (2)
USBM (AD)
Turner

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

RECEIVED
BUREAU OF MINES
OCT 27 1955

October 24, 1955

RECEIVED
NOV - 4 1955

Mr. W. G. Agnew
Mr. V. C. Fryklund
Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Docket #2440(Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract #Idm-E300

Dear Sirs:

Your letter of September 9 to Mr. Blair Burwell outlined a means of calculating royalties on our Lost Creek mine.

We have now gathered together the figures covering the production from Lost Creek from the time work commenced through August, 1955. We have endeavored to calculate royalties as set out below. You will note that we have used 1½ per cent instead of 5 per cent as the ore value is less than $8 per ton.

Tons mined	15,102.29 dry tons	
Mill concentrates - low grade (1483.18 units)	$ 93,440.19	
Mill concentrates - high grade (880.09 units)	55,446.12	
Total gross value	$147,886.31	
Freight to refinery - low grade	$ 2,339.38	
Refinery loss - low grade	10,743.22	
Cost of refining-including penalties	20,891.02	
Freight to refindery - high grade	766.45	
Refinery loss - high grade	0	
Cost of refining-including penalties	1,684.77	
Up-grading refining - high grade	4,724.73	
Total cost of Production	$ 41,150.47	
		$107,735.84

This gives a value of $7.13 per ton. Royalty at 1½ per cent would then be $1,616.04.

Production from Lost Creek at present is by open-pit means and every effort is being made to locate an ore body of commercial grade. Production has been rather erratic although we have done considerable development work.

Please advise us if the above calculations meet with your approval, and if they do, we will mail you a check immediately.

Very truly yours,

MINERALS ENGINEERING COMPANY

T. W. Holmes
Ass't. General Manager

T.W.H/k

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

RECEIVED
OCT 24 1955

1201 N. Division St.
Spokane 2, Washington
October 18, 1955

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

WSM

From: John D. Bardill, Bureau of Mines

Subject: Royalty payments, Docket No. DMEA-2440 (tungsten), Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-E300

The Brown's Lake operation of Minerals Engineering Company near Glen, Montana was visited September 26, 1955.

Mr. R. N. Roby, mine superintendent, stated that approximately 175 to 200 tons of low-grade tungsten ore averaging about 0.18 percent WO_3 is being mined daily and shipped to the mill and stockpiled until approximately 1200 tons has been accumulated before milling. Mr. Roby stated that about 9,000 tons had been mined and milled.

Mr. Earl Craig, mill superintendent, stated that Lost Creek mine ore is milled separately from Brown's Lake ore. Each truckload is weighed on a platform scale before being stockpiled. After being crushed, an hourly sample is taken from the conveyor belt from the fine ore bin to the rod mill. The sample is weighed, moisture content determined, and analysis made for tungsten; thus the weight of ore milled is taken twice. ?

A Field Team letter dated September 9, 1955, to Mr. Blair Burwell, president, Minerals Engineering Company, requested approval of a method of calculating royalty on Lost Creek mine production. Since Mr. Burwell has not acknowledged the letter or paid royalties during 1955, I suggest that the Field Team remind him that he is delinquent in his payments.

Copy retained 400

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
AD
Turner
JDB/he

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON, D.C.~~

1201 N. Division St.
Spokane 2, Washington
September 9, 1955

RECEIVED
SEP 12 1955

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

Your proposal of basing royalty payments on production from the Lost Creek mine on sales value of the tungsten content at $28 per unit, as outlined in your letter of April 12, 1955, was not acceptable to the Washington office.

We have devised an alternate method for calculating royalties which the Washington office has approved and has authorized us to submit for your consideration. Our plan is based on your method of placing a value on low grade tungsten concentrates, freight to the refinery, refining cost, and refinery losses as shown on your Monthly Operating Statement for Brown's Lake and Lost Creek operations. The following example is cited as a means of calculating royalties, using your August 1954 statement for Lost Creek.

	Production	Total to Date
(1)	Mill concentrates - low grade units	73.49
	* Gross value delivered to refinery	$4,630.16
(3)	Total gross value all products	4,630.16
	Cost of Production	
(9)	Refinery - Low Grade	
	Freight to refinery	$ 273.53
	Refinery loss	576.81
	Cost of refining (includes penalties)	580.62
		$1,430.96

*Calculated at $63.00 per unit WO_3

Royalty would be paid at the rate of 5 percent on $3,199.20 which is the difference between the gross value of the tungsten content of the low grade concentrate at $63 per unit less freight, refinery loss and refining cost.

Please advise us whether this method of computing royalty on Lost Creek mine production meets with your approval.

By Field Team, Region I, NW District

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

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

cc: DMEA (2)
USGS (2)
USBM (AD)
Turner

400

DOCKET
Surname:
Holt
Chapman
Talbert
Selfridge
Mathewson

AUG 1 9 1955

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

Re: Docket No. DMEA 2440-Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Reference is made to your letter of July 27, 1955, in regard to royalty payments on the referenced project.

The suggestion of Mr. Bardill in his memorandum of June 8, 1955, and your concurrence in your letter of July 25, 1955, have been carefully checked. Although we do not look with favor on special royalty terms, we believe in this case a settlement on net smelter returns is logical. If the Operator is agreeable to a 5 percent royalty on the units sold to General Services Administration on the basis of net smelter returns (as at $43.53 per unit, as per your letter of July 25, 1955), we will amend the contract accordingly.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Approved:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

cc: Docket
FT, Reg. I-Spokane
Code 400
Oper. Committee
T. Kiilsgaard, USGS
R. Holliday, USBM
Adm. Read. File
Mr. Chambers Code 800

TLChapman/ls
8/15/55

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

RECEIVED
JUL 2 1955

1201 N. Division St.
Spokane 2, Washington
July 25, 1955

VIA AIR MAIL

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

Re: Docket No. DMEA 2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

With regard to your letter of June 23, 1955, we are in agreement with you and do not look with favor on a recommendation for special royalty terms based on the premise that "the ore is subgrade and cannot stand a high royalty." It is apparent that we failed to make our proposal clear. What we propose is that the settlement be based on the company's Monthly Operating Statement, which can be considered an internal settlement sheet and which shows the units of tungsten recovered in the mill in low-grade concentrates. The value of the tungsten in these concentrates will be calculated at $63.00 per unit. A copy of the Operating Statement for the month of August 1954 was included with the Field Team letter of October 8, 1954 to the Operating Committee, re: Docket No. DMEA 2292 (tungsten), American Alloy Metals, Inc., Contracts Idm-E247.

You will note in Bardill's memorandum to the Field Team, dated June 8, 1955, that the gross value of the tungsten in the low-grade concentrates delivered to the refinery was calculated at $63.00 per unit. The value of the concentrates <u>less</u> freight to refinery, refinery loss, and refinery cost was $3,199.20 (net smelter returns) or $43.53 per unit. The 5 percent royalty may be calculated on the $3,199.20 or on the $43.53 per unit times the number of units. The results are identical.

This method of calculating "net smelter returns" is similar to the smelter schedules for lead concentrates where the base treatment charge, penalties, freight, etc. are deducted from the gross value of the concentrates.

It is our understanding that Lost Creek ore is stockpiled and milled separately from the Brown's Lake ore. If not, a satisfactory method for calculating the tungsten content of the ore will be devised.

We hope that we have clarified the situation.

If this procedure is satisfactory to you, we will attempt to negotiate with Mr. Burwell on this basis.

By Field Team, Region I, NW District

A. E. Weissenborn

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

Wing G. Agnew

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

cc: USGS (2)
USBM (AD)
Auditor Fisher

400

DOCKET
Surname:
Martin
Talbut
Selfridge
Johnson
Weissenborn

JUN 23 1955

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

Re: Docket No. DMEA 2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

This will acknowledge receipt of your letter of June 3, 1955, concurring with Mr. Bardill's recommendations of June 8 concerning royalty payments under the subject contract.

Inasmuch as the ore is not sold as ore, but is sold as a concentrate, we believe the royalty should be calculated, according to the contract, on the value of the concentrate sold. It is our understanding that the legal entity which sells the synthetic scheelite is not identical with the legal entity which constitutes the operator in the subject instance.

Obviously, if Lost Creek ore is mixed with Browns Lake ore for milling, some satisfactory method must be devised for calculating the tungsten content of the concentrates from each operation. Such a method can probably be worked out by the Field Team, which has handled similar instances in a manner satisfactory both to the operator and the Government.

We do not look with favor, however, on a recommendation for special royalty terms based on the premise that "the ore is subgrade and cannot stand a high royalty." It does not seem to us that the DMEA royalty schedule ought to be considered as a high royalty schedule.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

cc: Docket
FT, Region I-Spokane
Code 400
Oper. Comm.
Adm. Read. File
Thor Kiilsgaard, USGS
Robt. Holliday, USBM
Code 800 - Mr. Chambers

WSMartin/ls
6/22/55

R.C.S.

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

2440
~~2240~~

June 21, 1955

RECEIVED
JUL - 1 1955

Mr. Theodore Jacobs, President
The First National Bank of Missoula
Missoula, Montana

Dear Mr. Jacobs:

In reply to your letter dated June 14, 1955, I am sorry, but I do not feel that I am well enough acquainted with current royalties on tungsten ores in Montana to give you an authoritative answer to your questions.

Royalty is commonly based on a percentage of the net smelter return after deduction for treatment and shipping charges, which are paid for by the smelter. Royalties commonly run from 5 to 10 percent or even higher depending upon the grade of the ore and, I suspect, the optimism of the contracting parties. You might write the United States Vanadium Company at Bishop, California, or Getchell Mine, Inc., Red House, Nevada, all of whom buy tungsten ores and concentrates, in order to figure what price would be received for the ore, which may give you a basis of determining what percent royalty you will be getting. In considering royalties, you should not overlook the possibility that a small royalty which would permit a large tonnage, low-grade operation might in the long run return more money than a larger royalty from a small production.

I would further suggest that you contact Mr. Carl J. Trauerman, secretary, Montana Mining Association, Montana Standard Building, Butte, Montana. Mr. Trauerman should be familiar with current royalties in Montana.

Sincerely yours,

A. H. Weissenborn
Executive Officer, DMEA
Field Team, Region 1
Northwest District

cc: [illegible] (2)
[illegible] (2)

NO. 2106

THE FIRST NATIONAL BANK

OF MISSOULA
MONTANA'S OLDEST BANK
ESTABLISHED 1873

MISSOULA, MONTANA

THEODORE JACOBS
PRESIDENT

REFER TO		NOTED	
al Jack			
ANSWERED			

June 14, 1955

Mr. A.E. Weisenborn
Defense Minerals Exploration Admin.
S. Howard St.,
Spokane, Washington

Dear Mr. Weisenborn:

Today I was approached by representatives of Mineral Engineering Company in regard to a lease of some properties we own in Beaverhead County, Montana, which properties they believe contain a quantity of commercially recoverable Tungsten.

None of us here are at all familar with the royalty arrangement that is customary in connection with tungsten and are therefore not in a position to appraise the fairness of the proposition they outlined to us. Their suggestion was a royalty of 50¢ per ton containing up to ½ of 1% of tungsten oxide, $1.00 per ton on material ranging from one-half to three-quarters of 1% and $1.50 per ton on all material running over 3/4 of 1%.

The representative of the company suggested that you might be in a position to advise us of the reasonableness of this proposition or that you could put us in touch with someone who could give us this information

Yours very truly,

Theodore Jacobs

President

T
J
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H

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
June 8, 1955

RECEIVED
JUN 1 1955

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: John D. Bardill, Metallurgist, U. S. Bureau of Mines

Subject: Royalty payments, Docket No. DMEA 2440 (tungsten), Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-E300

This is in reference to a letter dated May 9, 1955, from Mr. W. S. Martin, Acting Chairman, Operating Committee, DMEA, regarding method of calculating royalty payments on Lost Creek mine production.

The company's Monthly Operating Statements show production from Brown's Lake (formerly American Alloy Metals) and Lost Creek deposits separately and, we think, may serve the same purpose as the settlement sheets. For example, the August 1954 statement includes the following items for Lost Creek.

	Production	Total to date
(1)	Mill concentrates - low grade units	73.49
	*Gross value delivered to refinery	$ 4630.16
(3)	Total gross value all products	4630.16
	Cost of Production	
(9)	Refinery - low grade	
	Freight to refinery	273.53
	Refinery loss	576.81
	Cost of refining (includes penalties)	580.62
	Total	$1430.96
	or $19.47 per unit	

*Calculated at $63.00 per unit WO_3

A copy of the complete statement was included with the Field Team letter of October 8, 1974 to the Operating Committee.

Mr. Blair Burwell has suggested that inasmuch as the Lost Creek operation is not commercial and the ore contains about 0.3 percent WO_3, which has a value of approximately $28 per unit delivered at purchasing mills, the royalty should be calculated on that value. The contract specifies that royalties should be calculated on the value of the final product which in this case is $63.00 per unit WO_3.

Since the ore is subgrade and cannot stand a high royalty it is suggested that the end product for purposes of reasonable royalty calculations be the mill concentrates rather than the more valuable synthetic scheelite. This, in effect, would amount to "net smelter returns," with allowances for freight to the refinery, refining costs and refinery losses amounting to about $19.47 per unit. The net after these is $43.53 per unit upon which the 5 percent royalty would be calculated. Royalty calculations would be made monthly based on the company records and would be subject to final Government audit.

We believe that Lost Creek ore is stockpiled and milled separately from the Brown's Lake ore. If the two ores are mixed and milled together some satisfactory method of calculating the tungsten content of the concentrates from each operation must be devised.

Low-grade mill concentrates from Lost Creek rock will probably contain from 5 percent to 7 percent WO_3.

United States Vanadium Company at Bishop, California purchases custom ore with WO_3 content ranging from 5 to 7.499 percent WO_3 at $39.00 per short ton unit WO_3. Getchell Mine, Inc., at Red House, Nevada, pays $47.00 per unit for 1 percent WO_3 or higher, less $8.00 per dry ton for treatment charges. Minerals Engineering Company at Ely, Nevada, pays $37.00 per unit for 3 to 5 percent WO_3 ore. These purchase prices reasonably approximate the "net" after allowances, considering that the purchasers have charged their profit to the purchase price.

It is recommended that the DMEA accept these Monthly Operating Statements in lieu of GSA settlement sheets.

John D. Bardill

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
AD
Auditor Fisher
JDB/he

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

June 3, 1955

Air Mail

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

In reply to Mr. Martin's letter of May 9, 1955, we are enclosing an analysis of the situation regarding the Lost Creek royalties prepared by Mr. J. D. Bardill, U. S. Bureau of Mines.

We are in agreement with Mr. Bardill's recommendation that the royalties be based on the company's operating statement in the manner in which he shows, and that we be authorized to present this proposal to Mr. Burwell.

By Field Team, Region I, NW District

A. E. Weissenborn / O.A.
A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Thomas E Howard
Thomas E. Howard
For: Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures
cc: USBM (2)
USBM(AD)
Auditor Turner
Myers

MINERALS ENGINEERING COMPANY

P. O. BOX 1951
GRAND JUNCTION, COLORADO

May 4, 1955

al
Jack
Bud

Mr. A. E. Weissenborn, Executive Officer
U. S. Department of the Interior
Defense Minerals Exploration Administration
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

DMEA

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

RECEIVED
JUN 13 1955

Dear Mr. Weissenborn:

Mr. Blair Burwell has requested that I forward to you the information which you requested in your letters of April 21 and April 28.

I am enclosing copies of United States Vanadium Company's purchased ore and concentrates schedules. Also, enclosed are copies of Getchell Mine, Inc. and Minerals Engineering Company purchased ore schedules.

Production from exploration headings in the Lost Creek Mine has been as follows:

Total for 1953	2469	Dry tons
Total for 1954	2025.41	Dry tons
Total for January 1955	270.94	Dry tons
Total for February 1955	81.29	Dry tons
Total for March 1955	None	
Total for April 1955	None	

Since production from the exploration work at Lost Creek has been spotty, I am unable, at this time, to hazard a guess as to additional production. I trust I have supplied the information requested.

Yours very truly,

MINERALS ENGINEERING COMPANY

T. W. Holmes
Ass't. General Manager

RECEIVED
MAY 9 1955
U. S. G. S.
SPOKANE, WASH.

TWH/rol

Encl.

C
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P
Y

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation
BISHOP, CALIFORNIA

RECEIVED
JUN 13 1955

TUNGSTEN ORE PURCHASING SCHEDULE

April 1, 1952

The United States Vanadium Company is purchasing at its Pine Creek Plant, ores of scheelite or scheelite and powellite which meet its specifications. The Company will accept such an ore after it has metallurgically tested a representative sample of the ore, and only if the test indicates the ore to be amenable to the milling process employed by the Company, with the Company (or its agents) being the sole judge of the acceptability of such ores. Acceptable ores will be purchased by the Company under the terms and conditions listed next below and which are subject to change without advance notice.

1. DEDUCTIONS AND TREATMENT CHARGES

The Company will make outright purchase of acceptable ores, delivered f.o.b. the Company's plant, on the basis of the net WO_3 content of the ore. No deductions as such are made for handling, sampling, treatment charges, metallurgical losses or impurities except as noted under Section 3. of this schedule.

2. PURCHASE RATES

The following purchase rates are effective as of this date. These rates are subject to change or adjustment by the Company, and further, the Company reserves the right to withdraw, at any time, any offer it makes to purchase.

WO_3 CONTENT	PRICE PER SHORT TON UNIT WO_3
0.00 % to and including 0.349 %	No Payment
0.35 % " " " 0.399 %	$ 27.00
0.40 % " " " 0.599 %	34.00
0.60 % " " " 0.999 %	35.00
1.00 % " " " 1.499 %	36.00
1.50 % " " " 3.749 %	37.00
3.75 % and higher	38.00

For delivered materials which contain less than 0.30% WO_3, there will be no payment. Such materials will become the property of the Company as liquidated damages for the Company's expense of weighing, sampling and assaying.

All delivered ores after weighing and sampling may be placed in process, commingled or otherwise disposed of by the buyer.

No payment will be made for metals other than tungsten contained in delivered ore.

3. SHIPMENTS

Delivery should be made in dump trucks as the plant is not on a railroad; however, ores will be accepted in vehicles other than dump trucks provided the shipper agrees to be responsible for unloading such vehicles. The Company will assign and clearly mark a given area in which each shipper may unload his ore. Shippers who unload ores in areas other than those assigned to them will be charged for transferring the misplaced ores to their proper location. The Company will accept delivery of acceptable custom ores at all times throughout each week beginning at 8:00 A.M. on Monday and ending at 8:00 A.M. on Sunday. The Company will not accept or be responsible for shipments arriving at its plant between 8:00 A.M. on Sunday and 8:00 A.M. on Monday. The delivery of tungsten ores must be made at the rate of at least 20 Units of WO_3 per week. Ores which have been delivered at a rate of less than 20 Units per week will be crushed and sampled for settlement two weeks after receipt of the first load, and a storage charge of $100 will be deducted from the settlement for the ore. The Company prefers to stockpile a shipper's ore until 60 or more Units of WO_3 have been delivered. Upon receipt of 60 or more Units, the Company, at its earliest convenience, will crush and sample the entire shipment for settlement. At the shipper's request, and at the Company's earliest convenience, shipments containing less than 60 Units of WO_3 will be crushed and sampled for settlement subject to the following conditions:

1. For lots containing less than 40 Units of WO_3, but more than 20 Units of WO_3, a deduction of $5.00 per unit for each unit under 40 will be made from the settlement value of the shipment.

2. For lots containing less than 60 Units of WO_3, but more than 40 Units of WO_3, a deduction of $2.50 per unit for each unit under 60 will be made from the settlement value of the shipment.

At the decision of the Company, and for its own convenience, the Company may crush and sample for settlement any shipment of ore, regardless of the WO_3 content, without penalty to either the Company or the shipper.

For lump ores, it is required that the largest particle size be not over 14 inches. For any shipment containing lumps in excess of 14 inches, a breaking charge of $1.00 per ton, based on the total tonnage of the shipment, will be made against the settlement value of the shipment.

The Company will not be responsible for trucks or other vehicles belonging to shippers or trucking firms while transporting ore to, or in the immediate vicinity of the Company's plant. It shall, at all times, be the shipper's responsibility to provide adequate vehicles and such other equipment as may be required to travel the roads serving the Company's plant. In the event towing service is required and the Company elects to provide such service, a charge will be made therefor based upon rental value of equipment utilized and time of employees while so engaged, but the Company assumes no obligations to provide such service.

4. SETTLEMENT

Unless otherwise agreed to in writing by the Company, settlement for all delivered ores will be made on a lot basis; lot being defined as the accumulated ore belonging to any one shipper and crushed in any one day. The Company will make a provisional cash settlement on all shipments without delay following the obtaining of all the necessary information including weights, moisture determinations and assays.

5. SAMPLING AND ASSAYING

The Company's sample, weights and moisture determinations obtained by standard practice shall be accepted as the basis for final settlement on all delivered materials. Four duplicate sample pulps will be prepared from each lot sample. One pulp will be assayed by the Company, one pulp submitted to the shipper and the two remaining pulps retained for possible umpire assays. The settlement sample pulp will be the only sample submitted to the shipper.

The provisional cash settlement for each lot will be made on the basis of the Company's assay and will be considered final unless the Company's assays are challenged and an umpire assay requested within thirty (30) days after the settlement date. Requests for umpire assays must be made in writing and must be accompanied by copies of the shipper's assays on the lot in question.

Seller or his representative may be present at the sampling, at his own expense, by making advance arrangements at the Company's office. The absence of Seller or his representative shall be deemed a waiver of this right.

The Company will make moisture determinations according to standard practices in ore sampling. All final samples will be divided into four pulps and distributed as follows: (1) The Seller, or his representative, will receive one pulp; (2) The Company will retain one pulp; (3) The other two pulps will be reserved for possible umpire analysis. The Company's pulp will be assayed by the Company. The Seller may, if he desires, and at his own expense, have his pulp assayed by an independent assayer. In case of disagreement on assays as to any constituent of the ores, an umpire shall be selected in rotation from a list of umpires approved by the Company, whose assays shall be final if within the limits of the assays of the two parties; if not, the assay which is nearer to that of the umpire shall prevail. The party whose assay is the farther from that of the umpire shall pay the cost of the umpire's assay for the constituent of the ores which is in dispute. In the event that the umpire's assay is equally distant from the assay of each party, costs will be split equally. In case of seller's failure to make or submit assays, the Company's assays shall govern. After sampling, the ores may be placed in process, commingled, or otherwise disposed of by the Company.

6. DEFINITIONS

A ton is 2,000 pounds.
A unit is 20 pounds of WO_3.
All assays will be reported in terms of per cent of WO_3 contained.

7. POTENTIAL SHIPPER'S PROCEDURE

Prospective shippers are requested to proceed as follows: Supply the Company with a 100-pound representative sample of the ore to be shipped, the name and mailing address of the individual or firm to whom payment would be made, and an estimate of the monthly tonnage that might be expected. It is further requested that a signed copy of this schedule be returned to the Company as verification of the shipper's understanding of the terms contained herein. After receipt of the sample, the Company will assay it and furnish the shipper with the result. If the assay is 0.40% or higher, the Company will proceed with metallurgical testing. It is to be understood that the Company is responsible only for the assaying procedure, and the assay result is not to be construed as being indicative of the grade of ore in the shipper's mine.

The foregoing is a statement of policy on the part of the Company and does not constitute a contract or an agreement on the part of the Company to accept tungsten ores or other tungsten bearing products. No statements or representations made by any agent or employee of the Company shall be binding upon the Company unless expressed in writing.

UNITED STATES VANADIUM COMPANY

By _____

I have read the foregoing statement of policy and I have received a copy thereof, and I agree that all shipments of ore made by me to the United States Vanadium Company are made subject to its provisions. Furthermore, I warrant that I have absolute title to such ores and I will protect and defend the purchaser against the claims of all others lawfully claiming to own the same or entitled to all or any portion of the proceeds of the sale.

All communications, assays and settlements are to be mailed to: _____

_____

_____

SIGNED: _____
Shipper

DATE: _____

C
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P
Y

GETCHELL MINE, INC.

RED HOUSE, NEVADA

RECEIVED
JUN 13 1955

CUSTOM ORE SCHEDULE

PAYMENT:

Pay for 80% of the Tungsten Tri-Oxide (WO_3) content at the following prices -

Grade of Ore	Price per STU WO_3
Less than 0,299 % WO_3	None
0.30 to 0.999 % WO_3	$46.00
1.00 and higher % WO_3	$47.00

CHARGES:

Treatment	Per dry ton
Less than 50 tons per month	$8.00
More than 50 tons per month	$6.00

Sampling and assaying $10.00 per lot of ore.

Minimum moisture deduction 1.00%

GETCHELL MINE, INC. reserves the right to change or cancel this schedule at any time and without notice.

CONDITIONS:

Getchell Mine, Inc. will purchase on a custom basis tungsten bearing ores of scheelite, or scheelite and powellite as the only tungsten minerals, and such ore must meet with the buyer's specifications. Purchases will be made only after a representative sample of the seller's ore has been metallurgically tested and approved for treatment in the buyer's plant. Ores which do not yield to the buyer's treatment can be refused at any time. Delivered ore which contains less than 0.299 % WO_3 will not receive payment and such ore will become the property of the buyer as liquidating damages for the buyer's expense of assaying, sampling and handling, and such ore may be treated, comingled, or otherwise disposed of by the buyer.

Ore will not be accepted which will not pass through the buyer's 16 inch grizzly. The shipper is responsible to pass the ore through the buyer's receiving grizzly. Deliveries of ore will be accepted only in dump trucks FOB Getchell Mine~~s~~, Inc. plant.

Payment will be made on the buyer's sample, weights, moisture determination and assays. A sample pulp will be furnished the shipper upon request.

Getchell Mine, Inc.
Red House, Nevada

Custom Ore Schedule
Page #2

Minimum ore deliveries of 5 tons will be accepted and settlement made. Settlement can be made upon completion of the buyer's assays.

Time of delivery must be arranged for in advance and no deliveries will be accepted before 7:00 a.m. and after 4:00 p.m. nor on Sundays.

May 1, 1952

MINERALS ENGINEERING COMPANY

PRICE SCHEDULE

Ely, Nev.

RECEIVED
JUN 13 1955

Grade of Ore % UO_3 From — To	Rate of Pay Per Unit
.40 — .50	$24.00
.51 — .60	25.00
.61 — .80	26.00
.81 — 1.00	28.00
1.01 — 1.50	30.00
1.51 — 2.00	32.00
2.01 — 2.50	33.00
2.51 — 3.00	35.00
3.01 — 5.00	37.00

C
O
P
Y

UNITED STATES VANADIUM COMPANY

UCC

A Division of Union Carbide and Carbon Corporation

Bishop . California

October 15, 1954

RECEIVED
JUN 1 3 1955

Mr. Blair Burwell
Mineral Engineering Company
101 North Spruce Street
P. O. Box 957
Grand Junction, Colorado

Dear Mr. Burwell:

Mr. Cortelyou requested me to send you our purchase schedule for off grade tungsten concentrates. This has been somewhat delayed due to my being on the road.

We offer the following prices for this type concentrate, f.o.b. our plant at Upper Scheelite, via Bishop, California:

WO_3 Content	Price per Short Ton Unit WO_3
5.00 % to and including 7.499%	$ 39.00
7.50 % " " " 9.999 %.	40.00
10.00 % " " " 14.999 %.	41.00
15.00 % " " " 17.499 %.	42.00
17.50 % " " " 19.999 %.	43.00
20.00 % " " " 29.999 %.	44.00
30.00 % and higher	45.00

This is somewhat of a flexible schedule and prices offered sometimes are changed in accordance with the amenability of the product to our plant processes.

Yours very truly,

UNITED STATES VANADIUM COMPANY

/s/ H. L. McKinley

H. L. McKinley
General Manager

HLM:aml

DOCKET
SURNAME

400

Martin
Chamberlin
L.G. Johnson

MAY - 9 1955

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

Re: Docket No. DMEA 240 - Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. 14m-2300

Dear Mr. Weissenborn:

This will acknowledge receipt of your letter of April 26, 1955, commenting on Mr. Burwell's objections to paying royalty for the subject project based on a price of tungsten of $63 per unit.

In any analysis of royalty payments, the first thing to do is to obtain copies of the settlement sheets. Where there is related ownership for the mine and reduction plant and a minority interest in the mine has no interest in the reduction plant, such settlement sheets are especially instructive. Generally speaking, if the minority interest is satisfied with the selling arrangements in force, it is probable that our royalty calculated in the usual way on such settlement sheets will be fair and reasonable.

Please, therefore, obtain such settlement sheets, or corresponding sales documents, in this instance and send us specific new recommendations supported by the settlement sheets.

Your letter also states that Mr. Burwell's proposal has the advantage of providing a simple means of arriving at the royalty due the Government. In making recommendations for exceptional provisions to replace the usual royalty provisions of our contracts, we suggest that you obtain as a matter of form supporting memoranda from the field auditors.

Sincerely yours,

W. S. Martin

APPROVED:

ACTING Chairman, Operating Committee (DHB)

John E. Crawford
Director, Bureau of Mines (DHB)

(S) R. D. Trace
Director, Geological Survey (DHB)

WSMARTIN/fec 5-6-55
cc to: Docket
Code 400
Adm. Read. File
cc to: Oper. Comm.
FT. REG. I - NWDist.
Messrs. Holliday, USBM
Hillsgaard, USGS

R.G.S.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Defense Minerals Administration
RECEIVED
MAY 2 - 1955

April 28, 1955

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

With further reference to your letter of April 12 and my letter of April 21, would you kindly furnish us with copies of schedules for low-grade ore and concentrates delivered at purchasing mills at Ely, Getchell, U. S. Vanadium or any other mill or refineries where low-grade ores or concentrates might be bought. We would like to forward this to our Washington office in support of your contention that the sale value of low tungsten ore or concentrate is $28.00 per unit of tungsten trioxide.

Sincerely yours,

A. E. Weissenborn, Executive Officer
DMEA Field Team, Region I
Northwest District

cc: DMEA (2)
USBM (2)
Myers

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

April 26, 1955

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are copies of a letter dated April 12, 1955, from Mr. Blair Burwell, President of Minerals Engineering Company, with respect to the Termination Agreement which has been sent to him in order to wind up the Lost Creek contract. Mr. Burwell objects to paying the royalty based on a price of tungsten of $63.00 a unit, stating that in low-grade ores the current price is only around $28.00 a unit. The difficulty is that Minerals Engineering does not sell the ore on this basis. The ore is concentrated in the company mill at Glen, Montana, and then is shipped to the Salt Lake Tungsten Company where it is treated by the Salt Lake Tungsten Company on some sort of a toll basis. Thus the company does not receive the full price of $63.00 a unit for the tungsten in the ore. It would be possible, of course, knowing the amount and grade of Lost Creek ore that was treated in the Glen mill, to estimate the amount of concentrates which resulted from Lost Creek ore and to base the royalty on the value these concentrates would have if sold to the refinery in Salt Lake City, using the normal price paid for concentrates of this grade bought on a custom basis. This unfortunately would involve a considerable amount of bookkeeping and computation.

Mr. Burwell's proposal has the advantage of providing a simple means of arriving at the royalties due the Government. Since we believe that only a relatively small production of ore will come from the Lost Creek deposit, we hope that some simply-applied method of calculating royalties can be arrived at, as we do not think that the royalty payments are going to amount to enough to justify any

involved calculations. We are not, however, prepared to accept Mr. Burwell's statement that $28.00 a unit is an appropriate price on which to base royalty payments, and we are requesting Mr. Burwell to supply us with schedules showing how he arrives at this price.

As you will note from the attached letter, we have written Mr. Burwell that his proposal was being referred to you for decision.

By Field Team, Region I, NW District

A. E. Weissenborn

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

Thomas E Howard

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

Enclosures

cc: USBM (2)
~~Quinlan~~
Myers

DEPARTMENT OF THE INTERIOR
Defense Materials Administration
Spokane
APR 25 1955

XXXXXXXXXXXXXXXXXXX
No. 157 Howard Street
Spokane 4, Washington

April 21, 1955

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-H300

Dear Mr. Burwell:

This will acknowledge your letter of April 12, 1955, in which you propose to base royalty payment on production from the Lost Creek deposit on a price of approximately $[illegible].00 a unit of contained tungsten.

As the Field Team is not authorized to enter into such an agreement with you, we are forwarding your proposal to the Washington office of the DMEA for their decision. I believe it would help us in arriving at this decision if you could inform us of the production that has already been made from the Lost Creek deposit and the additional production that you expect.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

cc: DMEA (2)
USBM (2)
Myers

MINERALS ENGINEERING COMPANY
P. O. BOX 1951
GRAND JUNCTION, COLORADO

April 12, 1955

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 29 1955

A. E. Weissenborn, Executive Officer
U. S. Geological Survey
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

I have gone over your letter of April 5, 1955, and proposal in regard to the Lost Creek mine. At the present time, we are working a very small crew at the LostCreek mine engaged in what we call exploratory mining. In this operation we are following ore mineralization with two men to determine the shape and size and continuity of the mineralization.

Obviously this operation is not commercial although it is producing a small amount of ore which currently is being stock piled at the Lost Creek mine and moved to the mill at long intervals. The problem of the basis of royalty on the Lost Creek is a troublesome one because, if we use the depletion basis valuation of $63 per unit, this results in an unreasonable royalty. Currently, ore containing .3 tungsten is valued at approximately $28 per unit of contained tungsten delivered at purchasing mills (Ely, Nevada, Getchell and U.S.V.). We would not be adverse to an agreement on the Lost Creek providing that the basis of valuation would be in accordance with the sales value of the tungsten content at $28 per unit.

In the case of the Brown's Lake property, it did not make much difference because we would pay the royalty out in a short period there anyway, and therefore, we agreed on a settlement of so much a month to take care of the matter as you will recall. If you can specify the basis of computation to be $28 per unit of contained tungsten or an adjusted price based on the same ratio of future prices, we would be certain that this would be fair and reasonable.

RECEIVED
APR 18 1955
U. S. G. S.
SPOKANE, WASH.

We would be glad to cooperate with you if this agreement could be modified according to this understanding.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell
President

BB/k

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

April 5, 1955

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 1951
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Burwell:

In order to make final settlement of the contract between the DMEA and Minerals Engineering Company for the exploration of the Lost Creek mine, we have had our Washington office prepare a Termination Agreement, the original and 6 copies of which are enclosed.

Please note that by the terms of this agreement the Government will retain a right to a percentage of royalty on any minerals which may be mined from the land described in the contract the same as if a Certification of Discovery or Development had been made.

Please review this agreement carefully and if the terms are satisfactory to you please sign all copies, retain the one marked "Operator's Copy," and return the rest to this office. We wish to call your attention to Article 5(b) of the contract stating the requirements of a final geological and engineering report, including maps.

Your cooperation in facilitating the closing of this contract will be appreciated.

By Field Team, Region I, NW District

cc: DMEA (2)
USBM (2)
USBM(AD)
Myers

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

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

Enclosures

400

DOCKET
Surname:
Chapman
Martin
Trow
Holliday

MAR 11 1955

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

Re: Docket No. DMEA 2440-Tungsten
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Enclosed are the original and five copies of a proposed agreement terminating the above-referenced contract.

If the terms and conditions of the proposed termination agreement are satisfactory to you and the operator, all six copies should be signed and the usual distribution made.

If any part of the proposed agreement does not have either your approval or that of the operator and cannot be amended within your delegated authority, the original and all copies of the proposed agreement are to be returned to this office, together with the proposed changes for consideration.

Please note that it is necessary for the cutoff date to be inserted in paragraph 1 of the termination agreement.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee (SHB)

Enclosures

APPROVED:

W. S. Martin
Member, Bureau of Mines (SHB)

Thor H. Kiilsgaard
Member, Geological Survey (SHB)

cc: Docket
FT, Reg. I-Spokane
Code 400
Oper. Comm.
Adm. Read. File
T. Kiilsgaard, USGS
R. Holliday, USBM

TLChapman/ls
3/9/55

Cal

Rubin

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

MAR - 8 1955

Memorandum

To: The Administrator, DMEA
Attention: W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2440 (Tungsten), Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-2300

As requested in a reference slip dated March 1 from Mr. Martin, and as discussed over the phone, we have prepared the attached Termination Agreement.

It is required that the cutoff date be inserted in paragraph 1.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor,
Defense Minerals

[redacted] 3/7/55

Copy to: DMEA Docket
Sol. Docket
W. S. Martin
J. L. Hofflund
H. C. Rubin
~~Chron. File~~

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 11 1955

January 10, 1955

Memorandum

To: W. S. Martin, DMEA, Room 3538

From: Robert W. Geehan

Subject: DMEA 2440 (Tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana

Reference is made to the memorandum from the Field Team, dated December 10, 1954, regarding certification of discovery at the subject deposit.

It is recommended that a certification of discovery be issued, as the Government is entitled to a royalty from current production. The question of profitable operation is not pertinent unless it can be clearly demonstrated that no conceivable operation can be conducted. In this case, it is known that a mining operation is active, that 2,000 to 3,000 tons containing about 0.3 percent WO_3 have been developed, and that, in all probability mining will continue.

Robert W. Geehan

Robert W. Geehan

Docket

IN REPLY REFER TO:

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

December 23, 1954

Re: DMEA-2440
Minerals Engineering Co.
(Lost Creek Mine)
Beaverhead Co., Mont.
$111,280 - Tungsten

W/Say

Memorandum

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

From: E. L. Newcomb, U. S. Geological Survey

Subject: Recommendation against certification as a discovery

Extensive exploration on this property has clearly indicated that much of the tungsten mineralization is submarginal in grade. One or two small ore shoots may average 0.3% WO_3, however, most of the tungsten-bearing tactite zone is only very sparsely mineralized.

The Brown's Lake deposit, which occurs as a massive, thick, near-surface deposit, is being mined by open pit methods. However, the break-even point is 0.27% WO_3. It seems unlikely that the Lost Creek property can be mined at a profit by underground methods inasmuch as the grade of most of the ore rock is considerably less than 0.27% WO_3.

Mr. Myers, Survey geologist, does not believe the operator's efforts to mine the property are warranted. He strongly suspects that any such efforts are largely a face-saving matter, and we are inclined to agree with Mr. Myers.

We concur with the Field Team and the field examiner in their conclusions and recommend against the issuance of a certificate of discovery for the Lost Creek prospect.

E. L. Newcomb

E. L. Newcomb

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

December 10, 1954

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed is a memorandum by W. B. Myers with five accompanying maps on Minerals Engineering's Lost Creek project. This is a complete summation of all that we know concerning the geology and the results of the exploration, and will, we believe, give you the information you require for closing out the contract.

As stated previously the potential value of the property was premised on the supposition that a large part of the tactite zone would uniformly assay 0.25 to 0.30 percent WO_3. Quite thorough exploration has shown that only small scattered shoots reach this grade. Consequently there is no basis for claiming a valid discovery warranting certification, for material of this grade can be mined successfully only if it occurs in large continuous, readily accessible bodies. As Myers points out, experience at Brown's Lake, which is being mined by the same company, demonstrates that even here where a 50- to 60-foot ore bed is favorably situated, so that it can be mined by open-pit methods with relatively little stripping, the break-even point is 0.27 percent WO_3, according to the company's own statement.

Nevertheless, the operator's persistent efforts to mine the ore creates a problem. His reasons for attempting to do so are obscure for we do not believe that he can do this profitably. We feel that if there is any production the Government is entitled to its royalty but we dislike to certify the project as a discovery for we feel that we may be playing into the operator's hands. For this reason we have suggested that as a condition for the Government to consent to a mutual termination agreement the operator agree to pay royalties the same as if a discovery had been made. If this cannot be done, then we would agree

Maps in envelope

to a Certification of Discovery of Development, although with extreme reluctance.

Whatever course is followed, the contract should be terminated, unless it is decided that more work should be done. We do not believe that any additional work at "B" adit would be useful, but one or two additional holes from the face of "H" adit might give valuable information as to the downward projection of the "I" cut oreshoot. The expected low grade of the projected oreshoot does not make this a particularly attractive target.

By Field Team, Region II

A. E. Weissenborn

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

Wing G. Agnew

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

Enclosure

cc: USBM (2)
Myers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

December 9, 1954

Memorandum

To: DMEA Field Team, Region II

From: W. Bradley Myers, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-2440 (tungsten), Minerals Engineering Co., Results of DMEA Exploration for Tungsten at Lost Creek Mine, Beaverhead County, Montana, Contract No. Idm-E300.

DMEA exploration at Lost Creek has been confined to the driving of two exploration adits and to diamond drilling therefrom. The geology of the adits and the tungsten and molybdenum assays of such mineralized rock as was encountered is portrayed on plates I, II, IV, and V. The results of DMEA check sampling of mineralized rock exposed in company surface operations, not a part of the DMEA project, are shown on these illustrations and on plate III.

Exploration at the Lower Site (B adit)

B adit was portaled at an altitude of 6,836 feet, about 200 feet above Lost Creek on the south wall of the canyon. The portal was located in tungsten-mineralized tactite about 30 feet east of a generally accordant contact of a large quartz monzonite pluton with the overlying contact-metamorphosed limy sediments of the Amsden formation (late Mississippian-Pennsylvanian in age). Although surface exposures were poor and very largely confined to several shallow bulldozer cuts, it was expected that the south-trending steeply east-dipping sediments would be relatively unbroken. It was hoped exploration would indicate that large areas of these contact-metamorphosed sediments might constitute low-grade tungsten ore.

Unfortunately, however, exploration has shown that most of the explored ground contains only slight amounts of tungsten (see pl. I) and further that the continuity of such low-grade mineralized areas as do exist is very uncertain.

Exploration has disclosed that the tactite zone is sheared by strong generally south-trending faults sub-parallel to but commonly steeper than the sedimentary bedding. The obvious movement on these faults is post-tactite and post-mineral, but some pre-tactite

and pre-intrusive faults have been mapped and indirect evidence suggests that many or most of the post-mineral faults were active earlier.

The effect of this faulting has been not only to break up the continuity of beds and of mineralized rock but to create zones of heavy ground which would hamper any low-cost methods of underground mining.

In addition, exploration has developed a more complex distribution of intrusive rocks than could have been justifiably inferred from the limited surface exposures. As indicated on plate I, this distribution is thought to be largely the result of faulting, both pre- and post-intrusive in age. The result is to further reduce the minability of the deposit.

A study of plate I will show that nothing that would normally be considered a commercially minable ore shoot has been exposed in the B adit or in its drill holes. The nearest approach to an ore shoot is a 76-foot stretch along B drift averaging 0.31 percent WO_3. (USBM assaying.) Drifting, crosscutting and diamond drilling failed to find any lateral extension of this body. No further exploration seemed warranted for such a relatively small body of low-grade material; nevertheless, Minerals Engineering Company has within the last $2\frac{1}{2}$ months started two raises on this "ore shoot" and has now carried them to the surface. (See pl.IV.) Mr. William Tobey, in a telephone conversation, reports a preliminary estimate of 2,000 to 3,000 tons of 0.3 percent WO_3 rock minable from this shoot. He stated that mineralized rock continued to the surface 60 feet above the level in the north raise. In the south raise, which surfaced 85 feet above the level, "ore" was followed up about 55 feet and may eventually be extended to the surface.

Apparently, the mineralized zone is rather irregular, stands nearly vertical, and is locally split into two strands, each only 2 to 5 feet wide, by a dike of quartz monzonite. The "oreshoot" as now explored lies directly above the 118-foot stretch along B adit represented by Sample B-1832 (see pl. I). On the north the zone is cut off by a northwest-trending post-ore fault; on the south the zone grades into sheared(?) and altered(?) rock. The grade of the "ore" in place, according to Tobey, averages 0.3 percent WO_3, but because of dilution it has not been possible in mining operations to maintain a grade of more than 0.24 to 0.25 percent WO_3

The Field Team strongly doubts that a relatively small body of rock containing only 0.3 percent WO_3 can be profitably mined by underground methods especially with the structural complications which are likely to be encountered.

At the nearby Browne's Lake deposit, which uses the same mill, the break-even point is considered by Minerals Engineering personnel to be about 0.27 percent WO_3, for a 55- to 60-foot thickness of tactite mined by open-cut methods.

The results of surface exploration of the B-C area on company account have been very disappointing. The early samples indicated on company maps were taken from shallow cuts which did not clearly expose bedrock at all points. Deeper cuts failed to substantiate either the extent or grade indicated by the earlier work. The surface cut samples shown on plate I are thought to fairly represent conditions at the C cuts. The 15.8-foot sample reported by the company to contain 0.44 percent WO_3 is of unknown significance. J. S. McNabb, formerly of the Bureau of Mines, but not now available for consultation, submitted an unlocated sample of unspecified width from C-S-2 cut for Bureau assay as part of a comprehensive check sampling program. This sample, which may have been a split of the company sample, contained 0.66 percent WO_3.

Geologically, the 0.44 percent WO_3 sample appears to correlate with the C-943 interval of 10.7 feet located 140 feet north. Three samples across this interval ranged in value from 0.13 percent WO_3 to 0.17 percent WO_3 according to Bureau assays. This zone is not present 80 feet to the south in C-S-3 cut and is confidently believed to be cut out by post-ore faulting. Similarly, the zone is cut off down dip by an overlying post-ore fault and does not descend to the altitude of B adit.

The structural relationships of the B adit and C cut mineralized zones as now understood may be summarized as follows: The B adit mineralized zone underlies and is cut off northward by a post-ore fault zone. The surface mineralized zone lies within structurally higher strands of the same fault zone and is truncated by them.

Exploration at the Upper Site (H adit)

The H adit was portaled at an altitude of 7,750 feet, 914 feet above and 3,450 feet south of the B adit portal. The portal was located in tungsten-bearing Amsden tactite about 140 feet east of the quartz monzonite contact.

Fewer structural complications were recognized here than in B adit; particularly noteworthy is the almost complete lack of post-mineral faulting. The tungsten content of the tactite is perhaps more disappointing than at B adit because no concentrations even approaching ore grade for a minable width were encountered (see pl. II). Company assays in the first east crosscut which suggested some

marginal grade rock were not supported by later DMEA check sampling. Company assays of DMEA diamond drill core, not yet checked by Bureau assays, indicate a 10.2-foot intercept in Hole No. 4 containing 0.26 percent WO_3. The marginal grade rock in this hole, located midway between the first and second east crosscuts, does not extend to either working.

The southern part of H adit and diamond drill holes drilled westerly and southwesterly from this locality encountered much aplite and related rock types. Much of this was recognized from the first by the Field Team as part of a large dike trending northwest and dipping about 55° to the southwest. Until recently, however, the significance of the distribution of aplite in several of the holes, particularly Holes No. 2, 8, and 11, has been obscure. It is now thought that these intercepts represent a second intersecting dike trending northerly and dipping about 45° easterly (see cross section, pl. II).

The concept of intersecting dikes offers a plausible explanation for a number of puzzling features of the very poorly exposed surface geology. More importantly it implies that the downward projection of the marginal I cut ore shoot would lie above the intersection of the dikes and therefore ahead of the face of H adit. The structurally equivalent position of the surface ore shoot appears to me to lie in the next 200 feet of ground due south of the face.

Further south, it is probable that the potential ore zone has been cut out by quartz monzonite, which on the surface appears to have engulfed most of the Amsden formation.

As has been detailed by Weissenborn in a letter to Selfridge of November 9, 1954, the average grade of the I cut ore shoot is rather uncertain. However, even using the most generous figures, the outcrop of the shoot can barely be classed as marginal; unless it improves at depth, it would be submarginal in terms of underground operations.

Miscellaneous company operations

The company has bulldozed nine cuts across the contact metamorphosed Amsden sediments in addition to those in the lower or B-C area and those in the upper or H-J area. Most of these did not disclose significant concentrations of tungsten. The two believed to be most promising are E and E_1. These have been rather extensively sampled by the company and later checked by the Field Team. The results of the Field Team check are noted on plate III. It is evident that these samples do not represent currently minable rock. (The heading on the sample box on plate III is somewhat misleading. Except for the single chip sample taken from the face by J. S. McNabb, the samples represent splits of company samples. All assays reported on plate III were by the Bureau of Mines.)

Conclusions

The large amount of exploration accomplished at Lost Creek indicates clearly that this is in general a submarginal prospect which contains several relatively small shoots of low-grade material, which, where minable by open cut methods, might be classed as barely marginal in grade.

It is equally clear that the continuing efforts of the operators to exploit this prospect seem to force the certification of a discovery. I consider this apparent necessity most unfortunate because intrinsically the property does not in my opinion merit such an accolade. Further, it is my suspicion that efforts to mine tungsten at Lost Creek are largely face-saving in nature. If mining operations are not being conducted for profit here, then in certifying this property we might involuntarily lend our support to one side of a controversy which should not concern us.

Attachment

Distribution:
DMEA (orig. & 3)
USBM (2)
Docket
Myers

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

RECEIVED

November 9, 1954

Air Mail

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

Re: Docket No. DMEA 2440 (tungsten)
Minerals Engineering Company
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Reference is made to your teletype of November 3, 1954, and previous correspondence on the same subject.

A memorandum by W. B. Myers, together with maps showing the results of the DMEA exploration at the Lost Creek property will be airmailed to you the first of next week. The result of the Lost Creek exploration has been very disappointing. Surface exposures available for observation before the start of work under the DMEA contract indicated a tungsten-bearing tactite zone of very considerable extent. Doubts as to the intensity and extent of the tungsten mineralization within the tactite zone precluded approval of a request for a DMEA production loan on the property. Nevertheless, the size of the possible tungsten-bearing tactite zone was impressive and it was recognized that there was a possibility of developing rock averaging between 0.20 and 0.30 percent WO_3. If it could be demonstrated that tungsten mineralization of this grade was sufficiently continuous the possibility of large-scale low-cost mining would be apparent. Exploration under Contract Idm-E300 was designed to test this possibility.

Underground exploration under the H-I and B Cuts, consisting of drifting, crosscutting, and underground diamond drilling, has conclusively shown, as can be noted from the maps attached to Myers' memorandum, that the hoped-for continuity and grade of tungsten mineralization in the tactite zone has not been borne out. The results in the H-I adit were almost completely negative. One small low-grade lense of tungsten mineralization was found in the B adit but subsequent diamond drilling definitely demonstrated that this lense had no continuity either across or along the tactite zone. It can be conclusively stated that no work done under the contract gives any basis for a Certification of Discovery or Development.

Work done on the surface by the operator at his own expense has given additional evidence that the tactite zone does not form a large body of low-grade ore similar to the nearby Brownes Lake deposit. In the summer of 1953 the Minerals Engineering Company mined a small amount of ore by open cut from a scheelite-bearing bed in the I Cut area. A total of 2,799 tons was trucked to the mill site and stockpiled. According to the records of daily operation this ore was milled as follows:

Month	Tons	Millheads % WO_3
November 1953	786	0.262
December 1953	740	0.205
September 1954	1,273	0.300
	2,799	0.264

Complete information on the recovery of the 2,799 tons milled is not presently available but according to the operators own Monthly Operating Statement for the month of August 1954 the 1,526 tons milled in November and December 1953 yielded 73.49 units of tungsten which would indicate that the grade of recovered tungsten in the mill heads was only 0.048 percent as contrasted to the 0.23 percent WO_3 reported average of the mill heads.

Even on the assumption that mill recovery during this period was only 50 percent (incomplete information suggests about 60 percent recovery during early operations) the actual average mill heads would not exceed 0.10 percent WO_3.

The reported mill heads of the mined I Cut ore are subject to question from another source. As Myers indicates, Tobey of Minerals Engineering, in a conference with members of the Field Team in Dillon on January 15, 1954, stated that 3,976 tons of ore averaging 0.14 to 0.16 percent WO_3 had been mined from I Cut.

A small amount of mined ore is reported in a dump near the I Cut site. All ore readily available to surface mining has been mined at the I Cut site. Additional mining would require stripping which, because of the low grade and the small tonnage, does not seem practicable.

Analysis of all the available information, therefore, shows that regardless of what Mr. Burwell has said or is reported to have said concerning his future plans, the work done under the DMEA contract did not result in a discovery nor has the work done by Minerals Engineering outside of the DMEA contract given much promise that the Lost Creek property can be successfully operated for tungsten.

By Field Team, Region II

A. E. Weissenborn

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

Noted
WGA

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

cc: USBM (2)
Myers

Docket

Minerals Administration
RECEIVED
NOV 5 1954

XDXXXXXX-050K

YWA082 WA SP 7 I-GS-G

SPOKANE WN 11-5-54 1010A

WSM

GEORGE C SELFRIDGE CHAIRMAN OPERATING COMM DMEA DEPT OF INTERIOR

WA

REURTEL 11-3-54, MINERALS ENGINEERING CO., DOCKET DMEA 2440. EXPECT TO HAVE MEMORANDUM REPORT SHOWING RESULTS OF PROJECT WORK AND ORE RESERVE SITUATION IN MAIL BY END OF NEXT WEEK.

A E WEISSENBORN SP

11-3-54 2440

MH 1010A

No reply necessary

NOV 5 3 37PM '54
BUREAU OF MINES
MAIL ROOM
WASHINGTON D.C.

DOCKET
Surname:
Selfridge
Rutledge
Martin
Selfridge
Mitchell
Hedges
Kilsgaard

Interior Department

Defense Minerals Exploration Administration

NOV 8 - 1954

14X4401(01) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

T E L E T Y P E

To: A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
Spokane 4, Washington

Reourlet September 20, 1954, Docket DMEA 8440, Minerals Engineering Company, in regard to data needed to make final determination regarding certification and further information needed for reply to Congressional inquiries. Please advise by wire what action is being taken by your office.

George C. Selfridge

Chairman, Operating Committee (24)

cc: Docket
Code 400
Oper. Committee
Adm. Reading File
FT, Reg. 2 - confirmation
R. W. Geehan, USBM
Thor Kiilsgaard, USGS

FARutledge/ls
11-2-54

R.C.S.

400 DOCKET SURNAME

Rutledge
Martin
Selfridge
Yeman

SEP 28 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten deposit
Beaverhead County, Montana
Contract No. Idm-8300

Dear Mr. Weissenborn:

Reference is made to our letter of August 4, 1954, in which we asked for further information needed for reply to Congressional inquiries regarding the subject contract, and the data needed to make a final determination regarding certification under the contract.

It would be appreciated if you would give this matter your attention and also advise us what is the present status of this contract.

Sincerely yours,

George C. Selfridge (by ESF)
Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

FARUTLEDGE:foc
9-24-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. II
R. W. Geehan, USBM
Thor H. Kiilsgaard, USGS

COPY

Amea 2440

Extract from September 16, 1954, issue of THE MINING RECORD", page 3.

Butte, Mont.--Minerals Engineering Co. is producing about 550 tons of tungsten ore a day from its property in Beaverhead County and milling about 440 tons daily, it is reported here. Mine concentrates are shipped to the Salt Lake Tungsten Refinery, Salt Lake City, in which Minerals Engineering has a financial interest.

Its 300-ton mill at Glen, Beaverhead County, Montana, is now beneficiating low grade tungsten ores, consisting of powellite and other tungsten minerals from the properties of the Minerals Engineering Co. and American Alloy Metals, Inc., west of the Mill.

Docket

MINERALS ENGINEERING COMPANY

P. O. BOX 957

GRAND JUNCTION, COLORADO

September 13, 1954

DATE	FROM	ROUTED	DATE

Mr. A. E. Weissenborn
Executive Officer
Defense Minerals Exploration Administration
Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Royalty payments
Docket No. DMEA-2292 (tungsten)
American Alloy Metals, Inc.
Brown's Lake deposit
Beaverhead County, Montana
Contract Idm-E247 (terminated)

Copy already on file 2440 - 2292 docket as for cross reference this ltr. in the records

Mng Co. docket as Co. is combining its docs to file.

Dear Al:

I wish to acknowledge your letter of September 9, in regard to DMEA payments on American Alloy Metals, Inc. property.

I presume that by this time you have received our letter of September 7th with check attached, from Mr. C. A. Walt, our Treasurer, which reports total net proceeds to the end of July from the American Alloy property and royalty on the same.

Referring to your letter of September 9th, in the second paragraph you state that you would require substantiating evidence of the buyer's settlement sheet showing the grade and tonnage of each lot of concentrate or ore sold. As discussed with you in Salt Lake recently, the buyer of our tungsten is the G.S.A. in Salt Lake City and the lots that they receive and settle for are concentrates delivered after refining through the Salt Lake refinery setup. Accordingly, we are sending you copies of the settlement sheets of the G.S.A. and are also sending you the detailed cost on accounting sheet of our monthly operating statement. It is requested that this attached sheet be held as confidential by your office.

As you are familiar, the Montana operation necessarily lags approximately sixty days behind in the settlements by the buyer of tungsten, and as we use the formula of total tons mined and proceeds received, this results in a varying value per ton ranging from a low value at the start to a high value at the finish.

According to our figures we have paid you $7,725.72 on a total obligation of between $55,000.00 and $65,000.00. In accordance with a

RECEIVED
air mail
SEP 15 1954
U. S. D. S.
SPOKANE, WASH.

Docket

MINERALS ENGINEERING COMPANY

P. O. BOX 957

GRAND JUNCTION, COLORADO

September 13, 1954

Mr. A. E. Weissenborn
Executive Officer
Defense Minerals Exploration Administration
Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Royalty payments
Docket No. DMEA-2292 (tungsten)
American Alloy Metals, Inc.
Brown's Lake deposit
Beaverhead County, Montana
Contract Idm-E247 (terminated)

Copy already on file 2292 docket as for cross reference this ltr. in the Materials 2440 - the Co. docket as Co. is combining its res to sell.

Dear Al:

I wish to acknowledge your letter of September 9, in regard to DMEA payments on American Alloy Metals, Inc. property.

I presume that by this time you have received our letter of September 7th with check attached, from Mr. C. A. Walt, our Treasurer, which reports total net proceeds to the end of July from the American Alloy property and royalty on the same.

Referring to your letter of September 9th, in the second paragraph you state that you would require substantiating evidence of the buyer's settlement sheet showing the grade and tonnage of each lot of concentrate or ore sold. As discussed with you in Salt Lake recently, the buyer of our tungsten is the G.S.A. in Salt Lake City and the lots that they receive and settle for are concentrates delivered after refining through the Salt Lake refinery setup. Accordingly, we are sending you copies of the settlement sheets of the G.S.A. and are also sending you the detailed cost on accounting sheet of our monthly operating statement. It is requested that this attached sheet be held as confidential by your office.

As you are familiar, the Montana operation necessarily lags approximately sixty days behind in the settlements by the buyer of tungsten, and as we use the formula of total tons mined and proceeds received, this results in a varying value per ton ranging from a low value at the start to a high value at the finish.

According to our figures we have paid you $7,725.72 on a total obligation of between $55,000.00 and $65,000.00. In accordance with a

RECEIVED
air mail
SEP 15 1954
U.S. D.M.E.A.
SPOKANE, WASH.

letter from the American Alloy Metals, Inc. of September 2, it is their assumption that the total indebtedness of American Alloys to the Government is $59,943.26 to date less payment already made of $7,725.72.

We have accrued and charged into the operation the amount of $5,000.00 per month to cover the DMEA royalties as an estimated amount during June and July. As the June shipments were marketed and settlements received in the last of August, our Treasurer is sending you $5,000.00 to cover the June shipments and the amount for July will be paid in the early part of October.

Following this procedure it is the suggestion of our Treasurer that we divide the net amount remaining due the Government (whatever this amount is certified to be) into twelve equal payments so that the indebtedness could be taken care of by October 1, 1955. The Government is only interested in having their loan returned at a reasonable rate, and we are only interested in accomplishing this in due proportion to the return from the sales of concentrates, but due to the somewhat involved marketing channels and time involved in the "float" it might be that a payment of the entire loan in this manner might be less troublesome than a continued accounting breakdown. Of course, at any time we would be quite agreeable to the audit of our figures by the Government, and in case the royalties would exceed the twelve equal payments we would be very glad to adjust to this figure.

It will be necessary to reproduce some of the ore settlement sheets and these will be mailed to you in a few days.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell
President

BB/rol

Encl.

cc: American Alloy Metals, Inc.
One Montgomery Street
San Francisco, California

Mr. Frank Eichelberger
401 Symons Building
Spokane, Washington

MINERALS ENGINEERING COMPANY

TUNGSTEN MILL AND MINES
GLEN, MONTANA
REFINERY
SALT LAKE CITY

ENGINEERING AND PRODUCTION OF MINERALS AND METALS
URANIUM DRILLING AND ELECTRONICS

TELEPHONE 430 801 4TH AVENUE P. O. Box 957
Grand Junction, Colorado

DEPARTMENT OF THE INTERIOR
Bureau Mines & Administration
RECEIVED
SEP 20 1954

September 7, 1954

copy already in 2292 - please file this w/ 2440 - Minerals Engineering

Mr. A. E. Weissenborn
Executive Officer, D. M. E. A.
Field Team, Region II
So. 157 Howard Street
Spokane 4, Washington

Dear Mr. Weissenborn:

Mr. Burwell has outlined to me the method which you and he agreed upon at your Salt Lake meeting a short time ago, for making D. M. E. A. payments on the American Alloys property at Glen, Montana.

Net proceeds from this operation at the end of July were $515,048.03. This is after refining charges have been deducted. Tons milled at the end of this same period were 64,598.68 tons, giving a net value per ton of $7.97.

On the basis of $7.97 per ton, we understand our payment would be on the basis of 1-1/2% of the net proceeds to date, which gives an accumulative payment due of $7,725.72 under the agreement. Since we have already paid $7,588.72, this leaves a balance due of $137.00, for which our check is enclosed.

It is further understood and agreed by us, that our books are available for, and subject to, audit by you at any reasonable time, and if you have any additional comments to offer regarding this letter, we shall appreciate hearing from you.

Very truly yours,

MINERALS ENGINEERING COMPANY

C. A. Welt, Treasurer

CAW:miw

cc: Mr. Willis A. Swan

RECEIVED
SEP 11 1954
U. S. G. S.
SPOKANE, WASH.

We're Building a Company - - -
ME Co.
- - - and We're in a Hurry

400
Docket
Surname
Rutledge
Selfridge
Johnson
Mitchenoy

SEP 9 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Docket No. DMEA 2292 - Tungsten
American Alloy Metals, Inc.
Browns Lake Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E247

Dear Mr. Weissenborn:

Reference is made to the subject dockets and the following article on page 3 of "The Mining Record" for Thursday, August 26, 1954:

MINERAL ENG. CO. SPEEDS UP OUTPUT AT TUNGSTEN MINE

Butte, Mont.--Minerals Engineering Co., Beaverhead county, according to R. N. Roby, mine superintendent, is producing about 550 tons per day of tungsten ore on a 5-day week basis from its property and milling about 440 tons daily on a 7-day week basis. Concentrates are shipped to the Salt Lake Tungsten Refinery at Salt Lake City, in which the Minerals Engineering Co. has a financial interest.

It is inferred that the above-referenced production is coming from the Browns Lake deposit and not the Lost Creek deposit. It will be appreciated, therefore, if you will clarify the foregoing information.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (SLS)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (SLS)

Thor H. Kiilsgaard
Member, Geological Survey (SLS)

FARutledge:foc
9-3-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. II
R. W. Geehan, USBM
Thor H. Kilsgaard, USGS

R.C.S.

DMEA 2740

Minerals Engineering Company

Application dated March 12, 1952 MF 103
Two one borehole
Lower - CDE
Upper - HIJ
MF-100 (March 11, 1952) stated that operator planned to begin mining in April 1952

Contract dated April 17, 1952

Lease between dated Aug. 30, 1951
Carl Swidin
Henry Mennis and Blair Burwell
R. M. Fleming

except claim a right of Peter Speck

10 years - expires Aug. 30, 1961
lease renewable for additional 10 years

Erection of concentrating mill on or near the prospective lower lot and demand, then first priority shall be given to one for this deposit.

R. M. Fleming transferred interest to Burwell

One stockpiled after [illegible] of contract

DOCKET
Surname
Rutledge
Putin
Hollyud
Selfridge

INTERIOR DEPT.
JUL 28 1954
SOLICITOR

AUG 4 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

This will acknowledge receipt of your letter of June 29 commenting on many of the questions raised in the letter of May 25, 1954, from Henry Meine and Carl Guidici to Senators Murray and Mansfield and Representative Metcalf, concerning the subject project.

We would like to have your specific comments on the following:

1. The statement in the Meine and Guidici letter of May 25, 1954, that:

   "Now the important point that we wish to bring out is that we have obtained information to the effect that Mr. Burwell will not do any further work on the Sugar Loaf Claims until after March 1, 1955, at which time he will be free of all obligations to the U. S. Government on the $45,000.00 D.M.E.A. loan."

2. The apparent conflict in the recommendations in your letter that on the one hand no discovery be certified but that, on the other hand, as a condition of an agreement terminating the contract, the Operator be required to agree to pay royalty on "any ore produced from the Lost Creek property and treated in the Glen mill within the next 10 years." It would seem that certification is preferable, if appropriate, since it is the method set forth in the contract for requiring payment of royalty.

3. The Operator has already paid $175.94 in royalty to the Government, and according to your letter to that company of March 17, 1954, it should have paid a total of $223.64. Your letter of June 29 adds that Mr. Tobey, the local manager for the Operator, stated that it might be worthwhile to mill the remaining ore now stockpiled at the "I" cut. Such milling would presumably result in salable concentrates and hence in further royalty liability if completed prior to termination of the contract without certification, or subsequently within 11 years after date of the contract with certification.

For your further information, we enclose copies of a related letter of July 8, 1954, to the Administrator from Representative Metcalf's office, and of the enclosures dated July 1, 1954, mentioned therein.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JHH)

Philip W. Guild
Member, Geological Survey (PWG)

cc: DOCKET
FIELD TEAM, REG. II
CODE 400
ADM. READ. FILE
OPER. COMMITTEE
R. W. GRYTAN, USBM
E. L. NEWCOMB, USGS
WSMartin/HSRubin/ls
7/28/54

RAG

DOCKET COPY
Surname: Martin

JUL 14 1954

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My Dear Mr. Metcalf:

Reference is made to your letter of July 8, 1954, concerning operations on the Super Roof claims of the Lost Creek mine near Glen, Montana, our docket No. MMA 2440 - Tungsten, Minerals Engineering Company. With that letter you enclosed a letter to you dated July 1, Lillon, Montana, from Messrs. Earl Guidici and Jerry Heine, to which they attached a copy of their letter of the same date to Senator Murray.

We note that you request further information necessary to reply to Messrs. Guidici and Heine. A reply, with which we are in agreement, was sent by Senator Murray on July 9, 1954. It was our understanding that a copy of that reply would be given to you. Apparently, however, your name was inadvertently omitted from the distribution, and we are, therefore, enclosing a copy of the copy sent to us. As we have mentioned in our previous correspondence, we shall keep you advised if we receive further information about this matter.

In accordance with your request, we are returning the enclosures you sent us.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

cc: Docket
Adm. Read. File
Field Team, Reg. 2
R. W. Geehan, USBM
T. P. THAYER, USGS
Code 400

WSMartin/ls
7-14-54

R.C.G.

H. ALEXANDER SMITH, N. J., CHAIRMAN
ROBERT A. TAFT, OHIO
GEORGE D. AIKEN, VT.
IRVING M. IVES, N. Y.
WILLIAM A. PURTELL, CONN.
FRANK A. BARRETT, WYO.
BARRY GOLDWATER, ARIZ.
JAMES E. MURRAY, MONT.
LISTER HILL, ALA.
MATTHEW M. NEELY, W. VA.
PAUL H. DOUGLAS, ILL.
HERBERT H. LEHMAN, N. Y.
JOHN F. KENNEDY, MASS.

PHILIP R. RODGERS, STAFF DIRECTOR

United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

Docket
DMEA
2440

July 9, 1954

Messrs. Henry Meine and Carl Judici
Dillon, Montana

Gentlemen:

I have your letter of July 1st in which you request me to obtain for you a copy of Burwell's reports to DMEA.

I regret to inform you that DMEA, like other Government agencies, does not release such reports, as they are considered confidential between the lessee and the agency. As there is a contract in force between you and Burwell, no doubt there is in it a provision calling for him to furnish you with such data, such being the common practice.

With best regards, I am

Sincerely yours,

Jim Murray

cc--Senator Mansfield
C. O. Mittendorf, DMEA

copies sent to F.T. on 7-14-54 attached to carbon copies of outgoing ltr to Hon. Lee Metcalf

LEE METCALF
1ST DISTRICT OF MONTANA

COMMITTEE:
EDUCATION AND LABOR

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

MERRILL ENGLUND
EXECUTIVE SECRETARY

SECRETARY:
MRS. DONALDEEN WHITE

FIELD OFFICE:
GALEN BLOCK
LAST CHANCE GULCH
HELENA, MONTANA

BEVERLY L. KNOWLES
FIELD SECRETARY

8 July 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1954

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

Dear Mr. Mittendorf:

Reference is made to previous correspondence concerning operation on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana (your docket DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-#E300).

In the absence of Congressman Metcalf, this office has received the enclosed request from Mr. Meine and Mr. Guidici for copies of the report which they say the lessee of their land was required to make under terms of the loan agreement. This is amplified in the enclosed copy of their letter to Senator Murray.

I will appreciate the information necessary to reply. Please return the enclosures for our files.

Very truly yours,

Merrill Englund

Phoned Englund's secretary 7/12/54 said we would reply to this when we saw Broadgate's answer to the same letter from Meine - G — WBM

Meine 2440

(3)

Docket

COPY

Dillon, Montana
July 1, 1954

Hon. Lee Metcalf
Member of Congress
Washington, D. C.

Dear Mr. Metcalf:

We enclose you a copy of letter which we are sending to Senator Murray to-day.

Will you please try to get us copies of this report, after you first telephone Senator Murray's office about it.

Yours very truly,

Signed: Carl Guidici)
)
Henry Meine)

copy in too file

(7)

C
O
P
Y

Dillon, Montana, July 1, 1954

Hon. James E. Murray
United States Senator,
Senate Office Building
Washington, D. C.

Dear Senator Murray:

May we ask you to inspect our letter of May 25th, 1954.

Under the terms of the loan from the RFCA to Minerals Engineering Corporation for the working of our tungsten property referred to in our letter of May 25th, the lessee of our land was required by the loan agreement to make a report of ores extracted, where the ore came from, and its assays. It would help us a whole lot in figuring out the value of our land, and what claims we should first apply for patent on if we could get a copy of that report; it would also help us show the Land Office people the mineral content of our land, and that it was of such value as to justify issuing patent to us. We thank you very much for your prompt attention, and letters that you have sent us about this matter, and really, as we are owners in the land, it would help other Montana people to find out about the Montana mineral deposits in Beaverhead County.

Sincerely,

HENRY MEINE

CARL JUDICI

copy in too file

7353

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

June 29, 1954

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

This is in reply to your letter of June 21, 1954, in which you request comments on allegations made in letters from Henry Meine and Carl Guidici to Senators Murray and Mansfield and Representative Metcalf dated May 25 and in a letter to Mr. Mittendorf dated June 12, 1954.

The property in question concerns Sugar Loaf Quartz mining claims No. 1 to 29, inclusive, Utopia (unorganized) mining district, Beaverhead County, Montana. These claims were leased by Messrs. Guidici, Meine, and Fleming to Blair Burwell; subsequently, Burwell bought out the interest of Fleming in the claims and the lease and assigned the lease and interest to the Minerals Engineering Company. Copy of the lease agreement and various instruments transferring the lease to Minerals Engineering were submitted with the application and should be available in your files. Thus, on the DMEA contract Minerals Engineering appears both as an owner and a lessee of the claims, which, according to the above, apparently is correct. I presume that this is the reason why no Owner's Consent to Lien is attached to the contract, although I can find nothing specific in our file concerning this and presume that this was arranged in Washington between the DMEA and Mr. Burwell. It is not clear to me what proportion of the claims is represented by the interest obtained by Blair Burwell from Fleming, but I have been informed by Mr. Tobey, the local manager for Minerals Engineering, that the company "owns or controls" 50 percent interest in the Sugar Loaf claims. The rest presumably is the part leased from Messrs. Meine and Guidici. The lease agreement provides, among other things, that the lessee should pay until December 1, 1952, a minimum royalty of $2,000 a month and after January 1953 a minimum royalty of $3,500 per month. The lease also stipulates

that if a concentrating mill is built by the lessee or his assigns, first priority shall be given to ore from the Sugar Loaf claims.

Messrs. Meine and Guidici contend that there is a large tonnage of tungsten ore on the Sugar Loaf claims and as evidence cite a statement by Burwell made December 12, 1951, at a Congressional hearing in Butte, that there are 720,000 tons of 0.35 percent WO_3 tungsten ore on the Lost Creek-Sugar Loaf property. Mr. Burwell did make a statement to this effect at that time. I think it fair to say that this was probably his honest opinion at the time; although events have since shown that this statement is highly over optimistic. You will recall that at about this time the DMEA (at that time DMA) Field Team examined the Sugar Loaf claims at Lost Creek for the purpose of appraising an application which Mr. Burwell proposed to submit for a DMA production loan. The Field Team was unable to substantiate the grades claimed by Mr. Burwell, and checking of duplicate samples, including some of Mr. Burwell's, by the Bureau of Mines laboratory at Albany, suggested very strongly that Mr. Burwell had been misled by inaccurate assays and that his claims as to the probable grade of the tactite zone at the Lost Creek property were erroneous. At the same time the Field Team investigation suggested that there was a strong possibility of finding a very large tonnage of low-grade tactite averaging perhaps between 0.2 and 0.3 percent WO_3. Although the grade was admittedly low, Mr. Burwell believed (and the Field Team concurred) that ore of this grade perhaps could be exploited provided the tonnage was great enough and conditions were favorable. On this basis an exploration program was negotiated with Minerals Engineering to explore the deposit. Meanwhile, Mr. Burwell negotiated an operating agreement with American Alloy Metals, which controlled a property at Browns Lake, a few miles from the Lost Creek property. Minerals Engineering constructed a mill near Glen, Montana, to treat ore from both Browns Lake and the Lost Creek properties. For some time now, this mill has been operating entirely on Browns Lake ore.

Work under the DMEA exploration contract began on April 18, 1952, and was pursued with great energy by the Minerals Engineering Company. As a matter of fact, it is quite apparent that a good deal more was spent in the work than was provided for in the contract which was on a unit-cost basis, and which permitted, consequently, Minerals Engineering to claim only certain stipulated amounts. DMEA exploration was done through two adits, the B level adit and the H level adit, and from crosscuts and drill holes from these adits. This work was designed to explore the most favorable parts of the tactite outcrop, according to surface showings. Work continued until December 8, 1952, at which time it was suspended because of winter conditions.

Work in the adits has been disappointing. The H level adit disclosed structural complications which had not been anticipated and aside from a few scattered assays, nothing even approaching ore

grade was found. The B level adit was somewhat more encouraging. It disclosed a length of the adit averaging around 0.25 percent WO_3. Diamond drilling in the summer of 1953 in H level adit failed to disclose any rock approaching ore grade and diamond drilling in B level adit showed that the tungsten mineralization exposed in the adit had no appreciable width and could not be considered as ore. In view of these discouraging results, work was suspended until such time as mill tests could be made on some of the surface ore on the Lost Creek claims. A mill at that time was in the process of being constructed near Glen, which, as stated previously, was to treat Lost Creek and Browns Lake ore. The mill went into operation in the late fall or early winter of 1953. The early results of the milling were not good as concentrate grades were low and the recovery was poor. These difficulties were finally traced to the hardness of the water which was causing trouble with the soap flotation circuit and by the spring of 1954 the mill was in operation treating around 350 to 375 tons of ore a day. This ore, however, is at present all coming from the Browns Lake deposit.

On the Lost Creek property, the only showing of any importance is in the "HI" cut. This has been developed by bulldozing entirely at the operator's expense and most of the work was done before the start of the DMEA contract. In this area, a 14-foot tactite bed is mineralized and an attempt was made to mine it by open cut. Tobey states that about 4,500 tons were mined from the open cut, some of which is stockpiled near the pit but most of which was trucked to the mill. I saw the cut on June 2, 1954, and would judge that 4,500 tons would be about the correct order of magnitude. Even though recovery of this ore was not good, mill head assays do permit a good appraisal of its average tungsten content. Records accompanying royalty statements show that 786 tons averaging 0.262 percent WO_3 were milled in the period from October 15 through November 30 and 740 tons averaging 0.205 percent WO_3 were milled in December of 1953, all from Lost Creek ore. On the other hand, from October 15 through November 30, 2,146 tons averaging 0.311 percent WO_3 were milled from the Ivanhoe lease at Browns Lake and 3,722 tons averaging 0.414 percent WO_3 were mined in December 1953; 5,261 tons averaging 0.402 percent WO_3 were mined in January 1954 from the Ivanhoe lease. The mill has continued operating since then on ore from the Ivanhoe lease, the grade to date being reported around 0.45 percent WO_3. We have no further record of any Lost Creek ore having been milled. The reason, of course, is obvious. The grade of the Lost Creek material is much lower than that from Browns Lake and the transportation and mining costs are much higher. It should also be realized that the material milled from Lost Creek represents the best grade material that could be mined from the property. I presume that any Lost Creek ore now stockpiled at the mill will eventually be concentrated if not too

low grade and Tobey states that it might be worthwhile to mill the remaining ore now stockpiled at "I" cut, inasmuch as this no longer would bear a mining charge. Some additional tonnage might be recovered from "I" cut but because the grade is low and the amount of stripping required to get at the ore is increasing rapidly, it is doubtful that the company will do further work here. Thus, although the Browns Lake ore can be mined and treated at a profit, it is quite likely that the Lost Creek tonnage costs more to mine and mill than the value of the tungsten that can be extracted from the ore and it is even more unlikely that any additional ore can be mined profitably from the property. Tobey, the local manager, informed me that Meine and Guidici had been advised that no further payment of the $3,500 minimum royalty would be made. The result of this, I presume, is that Guidici and Meine may have grounds for breaking the lease with Minerals Engineering, but the problem is complicated because Minerals Engineering is part owner as well as lessee. It would appear that this part of the problem is one which must be solved by the interested parties and in which the Government is not concerned.

Early in May, Myers and McNabb of the Field Team, after a careful field examination and inspection of the maps and records, have concluded that the project should be terminated by mutual agreement without a Certification of Discovery or Development. I visited the property with McNabb on June 2 and after reviewing the records again and going over some of the workings in the field, I also have reached the same conclusion, for it is apparent that no ore of any importance has been found and that the exploration has now gone far enough to determine that further expenditures are unjustified.

Messrs. Guidici and Meine are probably correct in their statement that the Minerals Engineering is in default on their royalty payments. They also are correct in stating that priority has not been given to ores from the Lost Creek property but that the mill has been operating on other ores. Messrs. Guidici and Meine, on the other hand, are not correct in believing that a large tonnage of tungsten ore exists on the Lost Creek property nor are they correct in concluding that Mr. Burwell has "received special and unordinary treatment in regards to obtaining Government money to develop the Sugar Loaf claims." The refinery at Salt Lake City and the mill at Glen were both built entirely without Government assistance; in fact, the Field Team refused to support a proposal for a production loan on the property although they did support an exploration contract. This contract was in the amount of $111,280 which was subsequently raised to $121,280. The sum of $66,950.01 has been spent on the exploration contract, of which $50,212.51 has been the contribution of the DMEA. As stated before, Minerals Engineering has certainly spent more than this, but it is not our concern. Thus, a little more than half of the allotted contract funds have been spent and it is now recommended that the contract be terminated by mutual consent without further

expenditure of funds. This is the normal treatment accorded to the holder of any unsuccessful contract and is in the best interest of the Government. I feel strongly that there is no basis for a Certification of Discovery or Development and that to make one would [not] only burden us for the next 11 years with the chore of examining the property at intervals. I also feel that because the results have been so obviously unfavorable and all reasonable objectives have been tested with unfavorable results that a Certification of Discovery or Development would be somewhat ridiculous. Some of the tactite that has already been mined may be treated at the mill but to me it is highly unlikely that there will be any further mining from the property. As a protection to the Government, it is quite possible that the Minerals Engineering Company would agree as a condition of terminating the contract that any ore produced from the Lost Creek property and treated in the Glen mill within the next 10 years would pay a royalty the same as if a discovery had been made.

I trust that this will give you sufficient information with which to answer a reply to Senators Murray and Mansfield and Representative Metcalf.

Sincerely,

A. E. Weissenborn, T.H.K.

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

cc: USBM(2)
Myers

H. ALEXANDER SMITH, N. J., CHAIRMAN
ROBERT A. TAFT, OHIO
GEORGE D. AIKEN, VT.
IRVING M. IVES, N. Y.
DWIGHT GRISWOLD, NEBR.
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JOHN F. KENNEDY, MASS.
PHILIP R. RODGERS, STAFF DIRECTOR

United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

Docket

June 22, 1954

DMEA
2440

Messrs. Henry Meine and Carl Giudici
Dillon, Montana

Gentlemen:

I have a copy of your letter to DMEA dated June 12, which seems to also answer my letter of June 9, 1954.

The Defense Mineral Exploration Administration informs me that the Burwell contract with that agency is currently in good standing. Unless there is some evidence that a fraud has been perpetrated upon the Government by Burwell, who signed the DMEA contract as the principal, I do not think it is proper that I should intervene. The fact that the terms of the lease contract may not have been observed as between parties thereto appears to be a matter of adjustment between them. However, DMEA has agreed to look into the matter.

With best regards, I am

Sincerely yours,

Jim Murray

cc--C. O. Mittendorf

400

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

Docket
Surname
Martin
Geehan
Guild
Rutin
Talbert
Hedges
Selfridge
H E Johnson

JUN 21 1954

Hon. Mike Mansfield
United States Senate
Washington 25, D. C.

My dear Senator Mansfield:

This will acknowledge receipt of your letter of June 15, 1954, enclosing a copy of a letter to us of June 12, 1954, from Henry Reinie and Carl Guidici of Dillon, Montana, concerning operations on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana (our docket No. DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-300).

We thank you for the foregoing correspondence, and we enclose a copy of a letter of acknowledgment which we are sending to your constituents today and from which you will note that we are making inquiries of our Field Team in the matter. As soon as we receive the necessary information we shall reply further, and you will be informed accordingly.

The enclosure sent to us with your above letter is returned herewith as requested.

With best personal regards.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosure

Copy to: Hon. James E. Murray
United States Senate
Attn: Mr. Bill Woodgate

Hon. Lee Metcalf
House of Representatives

WSMartin:foc 6-17-54
cc to: Docket
Code 400
Adm. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS
FT. REG. 2
Operating Comm.

R.C.G.

400.00

SURNAME
DOCKET
Martin
Geehan
Guild
Burton
Talbot
Hedges
Selfridge
Jeffrey

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

JUN 21 1954

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My dear Mr. Metcalf:

Further reference is made to your letter of May 20, 1954, regarding a letter to you of May 25, 1954, from Henry Meinie and Carl Guidici of Dillon, Montana, concerning operations on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana (our docket No. DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-8300).

In our reply of June 3, 1954, we undertook to inform you as to the status of the foregoing inquiry. We therefore enclose a copy of our self-explanatory reply of today to a letter of June 12, 1954, to us from Messrs. Meins and Guidici, whose letter indicates that a copy has already been sent directly to you.

We shall keep you advised regarding the additional information we receive on the same subject.

Sincerely yours,

C. O. Mittendorf
Administrator

Enclosure

WSMartin:foc 6-17-54
cc to: Docket
Code 400
Admr. Reading File
FT. Reg. 2
R. W. Geehan, USBM
T. P. Thayer, USGS

Copy to: Hon. James E. Murray
United States Senate
Attn: Mr. Bill Broadgate

Hon. Mike Mansfield
United States Senate

R.C.S.

400

Docket
Surname
Martin
Gechan
Guild
Rubin
Talbert
Hedgen
Selfridge
Johnson

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

JUN 21 1954

Mr. Carl Bandici
Mr. Henry Heine
Route 1
Dillon, Montana

Re: Docket No. DMA 240 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Ida-300

Gentlemen:

This will acknowledge receipt of your letter of June 12, 1954, which enclosed a copy of "Mining Lease and Agreement" of August 30, 1951, between yourselves and E. L. Leaing as lessors, and Clair Burwell as lessee, with reference to the captioned mining property.

We note your reasons for your dissatisfaction with the performance of Minerals Engineering Company, the purchaser of Mr. Burwell's interest under the above mentioned lease. As soon as we receive replies to the various inquiries which we are now making in connection with the foregoing and have considered them you will be advised further.

Inasmuch as we have in our files other copies of the same lease, we are returning your copy, with our thanks.

Sincerely yours,

C. O. Mittendorf

Administrator

WSMartin:foc
6-17-54
cc to: Docket
Code 400
Admr. Reading File
FT. Reg. 2

Enclosure

Hon. James E. Murray, Attn. Mr. Bill Broadgate
Hon. Mike Mansfield
Hon. Lee Metcalf

R.C.S.

400

Docket
Surname
Martin
Geehan
Guild
Ruhin
Talbert
Selfridge
Hedges
Weissenborn

JUN 21 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 240 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. 14-2300

Dear Mr. Weissenborn:

Reference is made to copies previously sent to you of our letters of June 3, 1954, to Senator Mike Mansfield, and Rep. Lee Metcalf, regarding substantially identical letters of May 25, 1954, sent by Messrs. Henry Maine and Carl Guidici to them and also to Senator Murray concerning the subject property.

Under date of June 9, 1954, we received a copy of Senator Murray's letter to Messrs. Maine and Guidici in essentially the same form as we discussed in our above letters.

We now enclose copies of letter of June 12, 1954, from Messrs. Maine and Guidici to us and of our reply of to-day. Also enclosed are copies of Senator Mansfield's letter to us of June 15, 1954, and of our reply of to-day.

Please let us have your detailed comments on the allegations made in both cited letters from Messrs. Maine and Guidici.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (HB)

Enclosures

APPROVED:

J. H. Hedges (HB)
Member, Bureau of Mines

Philip W. Guild (HB)
Member, Geological Survey

WSMartin/foc 6-17-54
cc to: Docket
Code 400
Admr. Reading File
Operating Comm.
R. W. Geehan, USBM
T. P. Thayer, USGS

RGS

Broadgate phoned
4:24 6/17/54

to say he is writing a letter something like this for Senator Murray's sig.:

"I have a copy of your letter of the 12th which seems to answer mine of the 9th.

DMEA informs me that the Burrell contract is currently in good standing. Unless there is some evidence of fraud I do not think it would be proper for me to intervene in this matter.

However DMEA has kindly offered to investigate the case thoroughly"

cc. Mansfield, Metcalf, Hittenbach

WSM

ALEXANDER WILEY, WIS., CHAIRMAN
H. ALEXANDER SMITH, N. J.
BOURKE B. HICKENLOOPER, IOWA
WILLIAM LANGER, N. DAK.
HOMER FERGUSON, MICH.
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MIKE MANSFIELD, MONT.

FRANCIS O. WILCOX, CHIEF OF STAFF
JULIUS N. CAHN, COUNSEL

United States Senate

COMMITTEE ON FOREIGN RELATIONS

Defense Minerals Adm.
RECEIVED
JUN 16 1954

June 15, 1954

Mr. C. E. Mittendorf, Administrator
Defense MineralsExploration Administration
Department of the Interior
Washington, D. C.

Dear Mr. Mittendorf:

In regard to your letter of June 3 relative to the operations on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana, docket No. DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-E300), will say I am enclosing copy of letter I have received from Messrs. Carl Giudici and Henry Meine.

It is my hope that the information contained therein will answer some of the questions you have raised and any additional information you can give me at this time will be very much appreciated. Please return the enclosure with your reply.

Thanking you and with best personal wishes, I am

Sincerely yours,

Mike Mansfield

H. ALEXANDER SMITH, N. J., CHAIR
ROBERT A. TAFT, OHIO
GEORGE D. AIKEN, VT.
IRVING M. IVES, N. Y.
DWIGHT GRISWOLD, NEBR.
WILLIAM A. PURTELL, CONN.
BARRY GOLDWATER, ARIZ.

JAMES E. MURRAY, MONT.
LISTER HILL, ALA.
MATTHEW M. NEELY, W. VA.
PAUL H. DOUGLAS, ILL.
HERBERT H. LEHMAN, N. Y.
JOHN F. KENNEDY, MASS.

PHILIP R. RODGERS, STAFF DIRECTOR

United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

June 9, 1954

Mmca-2440

W/M

Messrs. Henry Meine and Carl Giudici
Dillon, Montana

Gentlemen:

I have carefully noted your letter of May 25th regarding the Burwell contract with DMEA on the Sugar Loaf claims.

Before taking the matter up with DMEA in detail, I feel that I should have more information as to your relations with Mr. Burwell and his successor in interest, the Minerals Engineering Corporation. Is or was Burwell a partner and owner of interests in these claims or a lessor or both, and, in general, what were the terms of your agreement with him?

It is not unusual for work to be suspended during the winter months and no doubt a time extension from DMEA was obtained for the purpose. I am informed that the DMEA contract is in good standing and that royalties have been paid.

Awaiting your further advice, I am

Sincerely yours,

Jim Murray

cc-C. O. Mittendorf

C O P Y

Dillon, Montana

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

Dear Mr. Mittendorf:

We have read your letter of June 3rd, 1954, to Senator Mike Mansfield concerning your Docket No. D.M.E.A. 2440.

We herewith enclose you a copy of our lease and agreement to Blair Burwell, which was assigned to the Minerals Engineering Corporation of Grand Junction, Colorado.

This is not a matter merely of dissension among lessors at all, except that one co-owner transferred his interest after the lease was signed to Mr. Burwell, and it went to the Minerals Engineering Corporation. The Minerals Engineering Company is not keeping its lease agreement. There have been no payments of minimum royalty since October, 1953, as set out in the lease that ores from this land should have priority to the capacity of the mill.

The ores from this land are not given priority; they have been stockpiled and there has been no milling of such ores for some months, and the mill has been operating on other ores steadily.

We have never put our interest in the land under any lien or security of the Government loan.

We enclose you copy of the lease.

Sincerely yours

Carl Giudici

Henry Heine

Encl: lease
cc: Senator Mike Mansfield
Senator James Murray
Rep. Lee Metcalf

June 11

DOCKET
Surname:
Martin
Hoffland
Hodges
Farnsworth
Selfridge
Yellman
Whitehouse

JUN - 4 1954

Interior Department
Defense Minerals Exploration Administration
14X4401(01) Revolving Fund, Defense Production Act, Interior
(Allocated Working Fund to the Office of the Secretary)

T E L E T Y P E

To: A. E. Weissenborn, DMEA Executive Officer, Spokane, Washington

Re copies sent you of our June 3 letters to Senator Mansfield and Representative Metcalf concerning Docket DMEA 2440-Tungsten, Minerals Engineering Company, Contract Idm-8300. We are now airmailing you copies of letters from constituents.

Also re copy received here John S. McNabb's letter May 10 to you recommending that termination agreement be sent to same operator. Please defer termination until we advise you further.

George C. Selfridge

G. C. Selfridge
Chairman, Operating Committee

CC: DOCKET
FT, REG. II
OPER. COMM.
ADMIN. READ. FILE
CODE 400
AUDITS DIVISION, BUR. MINES
R. W. GEEHAN, USBM
T. P. THAYER, USGS

WSMartin/ls
6/4/54

R.C.S.

DOCKET
Surname:
Martin
Martin
Hoffman

JUN 8 1954

Hon. Mike Mansfield
United States Senate
Washington 25, D. C.

My dear Senator Mansfield:

This will acknowledge receipt of your letter of May 27, 1954, enclosing a letter sent to you by Henry Meinie and Carl Guidici of Dillon, Montana, concerning operations on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana (our docket No. DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-E300).

A letter differing from that sent you only in the salutation and indicated distribution of copies was sent to Senator Murray. A member of his staff discussed the matter with our Iron and Ferro-Alloys Division, by telephone, and a copy of Senator Murray's reply is being sent directly to you. We understand that the main feature of that reply will be a request for information as to the relationship of Messrs. Meanie and Guidici as lessors to and co-lessors with Mr. Burwell in respect to the Sugar Loaf claims. Senator Murray's office will pass on to us whatever additional information is received in reply. If we find that this matter concerns something other than internal dissension among the lessors, you will be promptly informed.

Sincerely yours,

C. O. Mitteadorf

Administrator

Copy to: Hon. James E. Murray
United States Senate
Attn.: Mr. Bill Broadgate

Copy to: DOCKET ✓
ADM. READ. FILE
CODE 400
FIELD TEAM, REG. II
R. W. GEEHAN, USBM
T. P. THAYER, USGS

WSMartin/HCRubin/ls
6/2/54

R.C.B.

DOCKET
Surname:
Martin
Martin
Holland

400

JUN - 3 1954

Hon. Lee Metcalf
House of Representatives
Washington 25, D. C.

My dear Mr. Metcalf:

This will acknowledge receipt of your letter of May 28, 1954, enclosing a letter sent to you by Henry Meinie and Carl Guidici of Dillon, Montana, concerning operations on the Sugar Loaf claims at the Lost Creek mine near Glen, Montana (our docket No. DMEA 2440 - Tungsten, Minerals Engineering Company, contract No. Idm-5300).

A letter differing from that sent you only in the salutation and indicated distribution of copies was sent to Senator Murray. A member of his staff discussed the matter with our Iron and Ferro-Alloys Division, by telephone, and a copy of Senator Murray's reply is being sent directly to you. We understand that the main feature of that reply will be a request for information as to the relationship of Messrs. Meanie and Guidici as lessors to and co-lessors with Mr. Burwell in respect to the Sugar Loaf claims. Senator Murray's office will pass on to us whatever additional information is received in reply. If we find that this matter concerns something other than internal dissension among the lessors, you will be promptly informed.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Copy to: Hon. James E. Murray
United States Senate
Attn.: Mr. Bill Broadgate

WSMartin/HCRubin/ls
6/2/54

Copy to: DOCKET
FIELD TEAM, REG. II
CODE 400
ADM. READ. FILE
R. W. GEEHAN, USBM
T. P. THAYER, USGS

R.C.h.

Docket

June 1, 1954

Mr. Bill Broadgate advised by telephone that he proposes to send the following letter over Senator Murray's signature to complaining constituents about DMEA 2440.

Gentlemen:

I have carefully noted your letter of May 25 regarding the Burwell contract with DMEA on the Sugar Loaf claims.

Before taking the matter up with DMEA in detail, I feel that I should have more information as to your relations with Mr. Burwell and his successor in interest, the Minerals Engineering Corporation. Is or was Mr. Burwell a partner and owner of interest in these claims, or lessor or both, and, in general, what were the terms of your agreement with him?

It is not unusual for work to be suspended during the winter months, and no doubt an extension from DMEA was obtained for the purpose.

I am informed that the DMEA contract is in good standing and that royalties have been paid.

Awaiting your further advice.

LEE METCALF
1ST DISTRICT OF MONTANA

COMMITTEE:
EDUCATION AND LABOR

DMEA-2440

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

MERRILL ENGLUND
EXECUTIVE SECRETARY

SECRETARY:
MRS. DONALDEEN WHITE

FIELD OFFICE:
GALEN BLOCK
LAST CHANCE GULCH
HELENA, MONTANA

BEVERLY L. KNOWLES
FIELD SECRETARY

28 May 1954

Mr. C.O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington.

Dear Mr. Mittendorf:

In the enclosed letter, Mr. Henry Meine and Mr. Carl Giudici of Dillon, Montana, ask an investigation of a D.M.E.A. loan to either Mr. Blair Burwell or the Minerals Engineering Corporation of Grand Junction, Colorado.

I will appreciate information necessary to reply. Please return the enclosure for my files.

Very truly yours,

Lee Metcalf

Enc.: (1)

To be returned later.

ALEXANDER WILEY, WIS., CHAIRMAN
H. ALEXANDER SMITH, N. J.
BOURKE B. HICKENLOOPER, IOWA
WILLIAM LANGER, N. DAK.
HOMER FERGUSON, MICH.
WILLIAM F. KNOWLAND, CALIF.
GEORGE D. AIKEN, VT.
HOMER E. CAPEHART, IND.
WALTER F. GEORGE, GA.
THEODORE FRANCIS GREEN, R. I.
J. W. FULBRIGHT, ARK.
JOHN J. SPARKMAN, ALA.
GUY M. GILLETTE, IOWA
HUBERT H. HUMPHREY, MINN.
MIKE MANSFIELD, MONT.

FRANCIS O. WILCOX, CHIEF OF STAFF
JULIUS N. CAHN, COUNSEL

United States Senate

COMMITTEE ON FOREIGN RELATIONS

May 27, 1954

Mailed 10 pm May 28 per envelope

Hon. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington, D. C.

Dear Mr. Mittendorf:

I am enclosing herewith letter I have received from Henry Meinie and Carl Guidici of Dillon, Montana, relative to the mining claim known as the Sugar Loaf Claims #1 to #29 on Lost Creek outside of Glen, Montana.

I would appreciate your sending me a report on this matter and please return the enclosure for my files.

Thanking you and with best personal wishes, I am

Sincerely yours,

Mike Mansfield

I would like to see the letter return,

C
O
P
Y

(NOTE: A letter identical to the one typed below, except that the salutation was directed to Honorable Representative Lee Metcalf and the distribution of copies showed copies going to Senator James E. Murray and Senator Mike Mansfield, was also received in DMEA by reference from Representative Metcalf. In last paragraph of letter to Metcalf the words "to you and your wife" were not included.)

Dillon, Montana
May 25, 1954

Honorable Senator Mike Mansfield
Senate Office Building
Washington, D. C.

Dear Mike:

We are the major owners of twenty nine claims known as the Sugar Loaf Claims #1 to #29 on Lost Creek outside of Glen, Montana. We subsequently leased these claims to a gentleman by the name of Blair Burwell, who in turn assigned said claims to his Colorado Corporation, known as Minerals Engineering Corporation of Grand Junction, Colorado.

Mr. Burwell subsequently went to Washington and arranged for a D.M.E.A. loan on the twenty nine Sugar Loaf Claims, which he received. Upon investigating we have found that Mr. Burwell,or Minerals Engineering Corporation, has received some $45,000.00 from the Governmant to develop the property.

Since last January they have ceased operations and since last September have failed to pay us our agreed monthly payments as per our signed contract, which is immaterial on the present question. We have done considerable work in the Area of the Sugar Loaf Claims, we know that there is sufficient quantity of Ore that can be mined at a profit from our voluminous list of Assays and Samplings. Also if you wish you may refer to "Hearing before the Committee on Interior and Insurlar Affairs, United States Senate, 82nd Congress, Second Session on Defense Minerals Policy, December 12, 1951, at Butte, Montana, pages 28-35 as to grade of marketable Ore and page 133 as to estimated Tonnage on Lost Creek Sugar Loaf Properties is at 0.35% WO_3 is shown as 720,000 tons.

Mind you these figures were given by Mr. Burwell who agreed that the Smelter Operations of the Tungsten Refining should be built in Butte, Montana, but when he found that he could not dictate policys to Montana people he went to Salt Lake City and constructed his refinery.

Now the important point that we wish to bring out is that we have obtained information to the effect that Mr. Burwell will not do any further work on the Sugar Loaf Claims until After March 1, 1955, at which time he will then be free of all obligations to the U. S. Government on the $45,000.00 D.M.E.A. loan.

It appears to us that he has received special and unordinary treatment in regards to obtaining Government money to develop the Sugar Loaf Claims. He has failed to give information as to what he has really and truly developed in the Area. We feel that unless specific and direct action is taken by the U. S. Government to secure the monies which they have advanced that a great jeopardy will be placed upon all future D.M.E.A. loans for this Area, which will greatly harm the small Montana prospector and miner, to say nothing of hitting his pocketbook harder taxwise. We hope that you will be able to investigate this matter completely and if you wish to receive further information we will do everything possible to cooperate with you.

We hope to hear from you on this matter in the near future and take this opportunity to thank you for your many past favors to us small Montana citizens.

With best regards (to you and your wife,) we remain.

Sincerely yours,

Signed: Henry Meine

Henry Meinie

Signed: Carl Guidici

Carl Guidici

c.c. Senator James E. Murray
c.c. Rep. Lee Metcalf

CROSS REFERENCE

DMEA 2440 - Minerals Engr. Co.

See: DMEA 2292 file.

See Letter of April 19, 1954, from Field Team to Minerals Engineering Co. saying that check for $1,472.68 royalty is fine, but Oper. must supply settlement sheets, certify to correctness, etc. Explains how to account for ore from Ivanhoe and Lost Creek properties.

(e) Date completed:

Docket DMEA 2440

Rutledge
Martin
Hoffman
Chamberlin

MAR 18 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2292 - Tungsten
American Alloy Metals, Inc.
Ivanhoe claim
Beaverhead County, Montana
Contract No. Idm-E247

Dear Mr. Weissenborn:

This will acknowledge your letter of March 1, 1954, which raises certain questions about payment of royalties on production from the referenced property under the subject and prior contracts that were combined by an agreement dated October 1, 1952.

We agree with your interpretation of the method of calculation of royalty for the low-grade concentrate which will be sold at Glen, Montana, to the Salt Lake Tungsten Company in accordance with a regular published schedule. Because there is an actual transfer of ore from one company to the other, the royalties should be applied at the point where the Salt Lake Tungsten Company takes possession.

The question of the high-grade concentrate, however, is a different matter. Here there will be no transfer until sale is made by the Operator to GSA. Therefore, the treatment charge and freight charges prior to the point of delivery to GSA are, like the original milling charge, not properly deductable before calculation of the Government's royalty.

The above statements will also apply to the ore produced from the Lost Creek tungsten deposit, Docket No. DMEA 2440, Minerals Engineering Company, Contract No. Idm-E300, if the same procedure is followed in disposing of the concentrates.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

Philip W. Guild

Member, Geological Survey

cc: Field Team, Reg. 2
Docket DMEA 2292
Docket DMEA 2440
Oper. Comm.
Adm. Read. File
Code 400
R. W. Geehan, USBM
T. P. Thayer, USGS

FARutledge/ls 3/12/54

3-18-54

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

March 18, 1954

2240

WSM

Mr. [illegible], Alt. Business Manager
Minerals Engineering Company
[illegible] Avenue
Grand Junction, Colorado

Re: Docket DMEA-2232 (tungsten)
American Alloy Metals, Inc.
and
Docket DMEA-2440 (tungsten)
Minerals Engineering Company, [illegible]

Dear Mr. Ault:

This will acknowledge receipt of your letter of March 11, 1954 together with enclosures. These include a royalty statement and a check in the amount of $651.15 for royalty payments on ore produced from the subject properties between October 15, 1953, and January 31, 1954.

We regret to inform you that this royalty statement is incomplete and in apparently in error. We require that such statements include complete data on which royalty calculations are based as well as supporting documents. In addition to the data you have furnished, it will be necessary to provide us with basic data regarding the grade of mill heads from each source. This is needed to determine the number of units of WO_3 from each source for this is the basis for prorating concentrate production or sales back to the original source. Also, we require data concerning the grade and tonnage of concentrates produced. We realize that this figure will be the same as mine if the concentrates are not stockpiled. However, it is well to record it as a separate item. Settlement sheets or invoices from the purchaser of the concentrates (Salt Lake Tungsten Company) are required as supporting documents.

We are enclosing a statement form showing the basic data we require as well as the manner in which royalty calculations should be made. If it suits your purpose you may follow this suggested form, if not, you may devise your own form, but all information shown on the suggested form will be required.

You should also keep detailed records verifying the tonnage and grade of the mill heads originating from Yellow, Cost Creek, or any other source. These need not be submitted with the monthly royalty statement but should be available for our inspection.

It is noted that you have based all your royalty calculations on a royalty rate of 1½ percent which we presume is applied to the value of the crude ore. We wish to call your attention to Article 6 of Contract Ism-5300 and Article 9 of Amended Contract Ism-5307 which specify that royalty payments are to be based "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." In your case you are selling concentrates which have a net value greater than $11.90 per ton, then the Government is entitled to the maximum royalty rate of 5 percent. If the ore were sold to the Salt Lake Tungsten Company before milling, then the royalty rate would be based on the value of the crude ore. These matters were discussed by Messrs. Ray Sullivan, Blair Burwell, Jr., and A. E. Weissenborn at a conference in Butte on December 1, 1953.

Your royalty statement places the value of concentrates originating from the Ivanhoe lease at $37,603.96. At 5 percent, the royalty due on this production is $1,880.20. Value of concentrates originating from the Lost Creek lease is placed at $4,472.81. At 5 percent, the royalty due on this production is $223.64 for a total royalty from both properties of $2,103.84 and not $631.15 as calculated and paid.

It would be appreciated if you would please revise your royalty statement along the lines suggested in this letter. We have credited the $631.15 to your account pending payment on the balance due.

By Field Team, Region IX

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

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

Enclosure

cc: BLM (2) w/encl.
USGS (2) w/encl.
Hindman w/encl.

MINERAL ENGINEERING COMPANY

DMEA ROYALTY STATEMENT - CONTRACTS 14m-2247 and 14m-2300
Period 10-15-53 through 11-30-53

Tonnage and Grade

Mill Heads	Tons	Percent WO_3	Units
Ivanhoe Lease (2247)	2,146.000	--	--
Lost Creek Lease (2300)	786.300	--	--
Non-DMEA ore (if any)	0	--	--
Total ore milled	2,932.300	--	--
Concentrate Production			
High grade con.	--	--	--
Low grade con.	--	--	--

Sales* (Settlement sheets attached)

Date	Type	Lot No.	Tons	Percent WO_3	Units WO_3	Net Return	Net Return Per Ton	Percent royalty rate (based on net value per ton of concentrate)
--	High grade	11	72.89	--	--	4084.460	55.21	5

* Sales of concentrates produced during month should equal concentrate production if concentrates are not stockpiled.

Royalty Calculations

Proration for royalty calculation based on contained WO_3 units in mill heads

Percent from Ivanhoe Lease (Nm-2247)

$$\frac{\text{Units of } WO_3 \text{ from Ivanhoe Lease in mill heads}}{\text{Total } WO_3 \text{ units contained in mill heads}}$$ = Percent of units from Ivanhoe Lease or prorated share expressed as percent assigned to Ivanhoe Lease (carry to 3rd place, i.e., 30.195 percent).

Percent from Last Creek Lease (Nm-2300)

$$\frac{\text{Units of } WO_3 \text{ from Last Creek Lease in mill heads}}{\text{Total } WO_3 \text{ units contained in mill heads}}$$ = Percent of units from Last Creek Lease or prorated share expressed as percent assigned to Last Creek Lease.

Percent from Non-DMEA Sources

$$\frac{\text{Units of } WO_3 \text{ in mill heads from non-DMEA sources}}{\text{Total } WO_3 \text{ units contained in mill heads}}$$ = Percent of units from Non-DMEA sources or prorated share expressed as percent assigned to non-DMEA sources.

High Grade Concentrates

Ivanhoe Lease (Idm-5247)

(Total net return) x (Percent of prorated share x assigned to Ivanhoe Lease)

(Royalty rate) = Amount of royalty due on high grade concentrates originating from Ivanhoe Lease

Lost Creek Lease (Idm-8300)

(Total net return) x (Percent of prorated share x assigned to Lost Creek Lease)

(Percent royalty rate factor) = Amount of royalty due on high grade concentrates originating from Lost Creek Lease.

Low Grade Concentrates

Ivanhoe Lease (Idm-5247)

(Total net return) x (Percent of prorated share x assigned to Ivanhoe Lease)

(Percent Royalty rate factor) = Amount of royalty due on low-grade concentrates originating from Ivanhoe Lease.

Lost Creek Lease (Idm-8300)

(Total net return) x (Percent of prorated share x assigned to Lost Creek Lease)

(Percent royalty rate factor) = Amount of royalty due on low grade concentrates originating from Lost Creek Lease.

Royalty recap:

	Net value high-grade ounces	Royalty high-grade ounces	Net value low-grade ounces	Royalty low-grade ounces	Total net Value	Total Royalty
This statement						
Ivanhoe Lease						
Lost Creek Lease						
Total to date						
Ivanhoe Lease						
Lost Creek Lease						

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

Defense Minerals Administration
RECEIVED
MAR 18 1954

March 15, 1954

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

Re: Docket No. DMEA-2440 (tungsten)
Minerals Engineering Company
Lost Creek tungsten deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Enclosed are the original and two signed copies of Amendment No. 3 to the above-referenced contract.

Distribution of this amendment is being made in the usual manner.

Sincerely yours,

A. E. Weissenborn

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

Enclosure

cc: Finance Officer w/encl.
USBM (2)
Myers

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
SO. 157 Howard Street
Spokane 4, Washington

February 24, 1954

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

Re: Semiannual Report of Certified Projects, Region II

Dear Mr. Selfridge:

This is in reference to your letter of February 15 regarding the Semiannual Report on Certified Projects, Region II, in which you inquire why no royalty payments are reported from Dockets DMA 846 - Tungsten, McFaus Tungsten Corporation, DMA 700-Tungsten, Alps Mining and Milling Company, and DMEA 2292-Tungsten, American Alloy Metals and associated properties, although these properties are reported as being "In Production."

According to our information, McFaus is concentrating ore from the Snowbird group, but due to winter conditions in stock piling the concentrate and will not ship until spring. Concerning Alps Mining and Milling, we have just received the first royalty check on a shipment of gold ore. As far as we know no tungsten concentrates have been shipped yet. With respect to American Alloy Metals, this property went into production in December but did not make actual shipments until sometime in January. We have just received a letter from the Minerals Engineering stating that they are now ready to make the first royalty payment and asking some details as to how this is to be done.

Sincerely yours,

/s/ A. E. Weisenborn
Executive Officer, DMEA
Field Team, Region II

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

February 23, 1954

Mr. Ray Sullivan
Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek tungsten deposit
Beaverhead County, Montana
Contract No. Idm-5300

DMEA

Dear Mr. Sullivan:

I am enclosing herewith the original and 6 copies of Amendment No. 3 to the Lost Creek contract. Under the terms of this contract, the time has been extended from 18 to 28 months and work may be recessed to not later than May 17.

If you are in agreement with the terms of this amendment, please sign all copies, retain the one marked Operator's Copy and return the rest to us.

Sincerely yours,

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

Enclosures

cc: USBM (2)
DMEA (2)
Myers

400

Martin
Selfridge
Yeghiam
Wittenoy

FEB 17 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek tungsten deposit
Beaverhead County, Montana
Contract No. Idm-K300

Dear Mr. Weissenborn:

Enclosed are the original and five copies of a proposed amendment, Amendment No. 3, to the referenced contract, signed by the Administrator for the Government.

If the terms and conditions of this proposed amendment are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made.

If any part of the amendment does not meet with your approval, please return all copies with your comments.

As you will note, the extension of the contract is for 28 months instead of the 32 months recommended. Evidently the project will require field examination and review soon after work is resumed, and a further extension can be arranged after such review, if desirable.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosure

WSMartin/ls
2/15/54

APPROVED:

Philip W. Guild
Member, Geological Survey

J. H. Hedges
Member, Bureau of Mines

cc: DOCKET
FT, REG. II
OPER. COMM.
CODE 400
ADM. READ. FILE
T? P. THAYER, USGS
R. W. GEEHAN, USBM

R.C.S.
2-17-54

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Department of the Interior
Defense Minerals Administration
RECEIVED
FEB 8 1954

February 4, 1954

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

Reference is made to the Executive Officer's letter of January 14, 1954, in which you were informed of a pending field report to be made on the referenced property by DMEA field examiners. This report has been prepared by John S. McNabb, U. S. Bureau of Mines, and is submitted herewith.

McNabb reports that the operator intends to do additional exploration work during the coming spring, although the exact nature of much of this work will depend upon geologic appraisal of existing data and upon more detailed study of the area to be explored. It is intended to make such a study in the spring when the snow has melted from the outcrops.

McNabb recommends that the subject contract be recessed for a period of 8½ months, or from September 1, 1953, until May 15, 1954. He also recommends that the contract be extended from 18 months to 32 months. This would extend the expiration date to December 17, 1954.

The Field Team concurs with McNabb's proposal and recommends an amendment, to be signed by the Administrator, recessing the contract for the present time and extending the expiration date to December 17, 1954. This extension of the contract will allow sufficient time to either complete project work or to test the deposit sufficiently to satisfy the Government and the operator. When project work is resumed in the spring it may be necessary to again amend the contract to allow for such work as may be decided upon, but this amendment will have to await the compilation of additional data.

By Field Team, Region II

A. E. Weissenborn

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

Wing G. Agnew, acting

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

cc: USBM (2)
Myers
Hindman

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

Defense Minerals Administration
FEB 8 1954

1201 N. Division St.
Spokane 2, Washington
January 20, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, Bureau of Mines

Subject: Report of converence with Minerals Engineering Co. officials, concerning Contract Idm-E300, Docket No. DMEA 2440 (tungsten), Lost Creek Mine, Beaverhead County, Montana

A meeting was held at the offices of the Minerals Engineering Company in Dillon, Montana, on January 15, 1954, at which time the future status of DMEA Contract Idm-E300 was discussed. At the meeting the DMEA was represented by Mr. W. Bradley Myers, geologist, U. S. Geological Survey, and Mr. John S. McNabb, mining engineer, U. S. Bureau of Mines. Mr. William Tobey, general superintendent of Montana operations, represented the Minerals Engineering Co.

Mr. Tobey indicated that his company wished to do some additional exploration at the Lost Creek mine under their DMEA contract if suitable time extensions and contract amendments could be arranged. The exploration project has been in a state of suspension since September 1, 1953. To date $66,950.00 of the contract total of $121,280.00 has been expended. The contract originally provided for an 18-month project scheduled to terminate on October 17, 1953. To date the contract has not been amended to extend the termination date.

Minerals Engineering Co. submitted the following tentative amended project proposals:

1. Grant a 8½-month contract recess from September 1, 1953 to May 15, 1954.

2. Change the contract period from 18 months to 32 months, to allow seven additional months of active exploration after the recess period. This would extend the termination date to December 17, 1954.

3. Drill at least one and perhaps two diamond drill holes to the south from the face of "H" level to delineate the boundaries and composition of the aplitic (?) dike. This would not require a contract amendment if items 1 and 2 were approved.

4. Possibly drift 200 feet to the south from the face of the stripping area in I cut to explore the delineation and grade of the ore body now being mined by open pitting. To date 3,976 tons averaging 0.14 to 0.16% WO_3 have been mined.

   Whether or not this proposal is warranted as far as both parties are concerned could be better determined after additional ore was mined this winter and the absence of snow permitted a current geologic appraisal.

5. Explore by bulldozer and bench trenching the E_1-F cut area along the strike of the mineralized tactite area for a distance of approximately 500 feet. Also, perform a similar bulldozer and bench trenching project in the C cut area.

   Additional sampling and geologic appraisal are needed to determine whether this proposal is warranted. The presence of the snow pack rules out the possibility of such a detailed study at the present time. It is conceivable that the E_1-F cut area warrants additional exploration. However, the DMEA field engineers believe that the surface exposures at C cut and the results obtained in B level, directly beneath it, were sufficiently disappointing as to virtually rule out the possibility of discovering minable quantities of ore in the C cut area.

It is recommended that the DMEA grant the Operator an 8½-month recess and amend the contract period to terminate in 32 months from the date of the contract, as noted in items 1 and 2. If, at the end of the recess period, the company still wishes to perform the work proposed in items 3, 4 and 5, an examination by the DMEA field engineers that will include geologic mapping and sampling will determine what phases of the project proposal are warranted.

John S. McNabb

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

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

xxxxxxxxxxxxxxxxxx
No. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1954

January 19, 1954

Mr. Ray Sullivan
Minerals Engineering Company
Box 957
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract No. Idm-5300

Dear Ray:

On January 15, Bill Tobey, John McNabb and Brad Myers conferred in Dillon on the question of resuming DMEA work at the Lost Creek mine.

It was agreed that a small amount of additional diamond drilling should be undertaken from the face of H adit on any eventual resumption of work. Further proposals involving surface work were discussed in some detail. As the unseasonably mild weather had by that time been replaced by sub-zero weather and continuing snow, it was felt that hopes had gone glimmering for surface work before spring. It was concluded that the best course of present action would be to recess the contract until good weather next season. Field examination of new exposures would then be made before plans for any surface work were finalized. The recess will also have the effect of extending the expiration date of the contract. This recess could go into effect immediately after the last DMEA contract work, as shown by your monthly reports and vouchers.

If this meets with your approval, will you please write me a letter requesting such a recess and giving the date that you wish the recess to go into effect, as well as the date at which you plan to resume work on the contract. We will then recommend approval of the recess to our Washington office as it is not within our authority to grant a recess, particularly when the time allowed in the contract is exceeded.

Granting of this recess will not constitute approval of any plans for any further work which differs from that specified in the contract. Approval for such new work will be based on consideration of the specific plans in the light of new field examinations, which will be made as soon as practicable next spring.

Sincerely yours,

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

cc: USBM (2)
DMEA (2)
Myers

Copied from The Mining Record - - - Thursday, January 14, 1954

COLORADO FIRM IS DOING GREAT WORK IN TUNGSTEN AREA

Wallace, Idaho--- Mineral Engineering Company's new 300-ton mill at Glen, Mont., has been in full operation since mid-November treating ore on a three-shift basis from two new tungsten mines on Sugarload mountain in Beaverhead county, the state's most southwesterly county.

Brought into production with the starting of the $300,000 plant were the Grand Junction, Colo., firm's Lost Creek mine and American Alloy Metal's Brown's Lake mine, on the opposite side of the mountain. Both are now operated by Minerals Engineering, the Brown's Lake property under a lease arrangement concluded last summer, Ray G. Sullivan, vice-president of the company, is in charge of the entire mining and milling project. Both mining operations are by quarry methods.

Much production is being taken from a new ore body disclosed in bulldozing a road to the known deposit. The new deposit has proven to be 800 feet long with an average width of more than 60 feet and average values approximately $25.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

January 14, 1954

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

Re: Docket No. DMEA 2440 (tungsten)
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Selfridge:

This is in reply to your letter of January 8, in which you inquire about the current status of the Lost Creek contract. This matter, as you point out, has been pending for some time.

This spring a drilling program was agreed upon with the company, and this program was carried out and fairly well completed during the last part of August or the first part of September. Since then, the company has been devoting all of its efforts to completing the construction of their mill at Glen, Montana and to bringing the Brown's Lake deposit into operation. They have also done some experimental mining from the Lost Creek deposits. The decision as to whether more work would be done at Lost Creek depended in part on the results of the experimental mining at Lost Creek which it was expected would furnish a pretty good answer as to the grade of the ore that could be mined from the deposit. I visited the property early in December shortly after the mill first went into operation. At that time, the Brown's Lake deposit looked very encouraging, but I was quite pessimistic about the results at Lost Creek. I talked with Ray Sullivan of Minerals Engineering (as you may have heard, Blair Burwell has had a heart attack and is currently out of active participation in any of the work in Minerals Engineering) and suggested to Sullivan that if no more encouraging results were forthcoming, perhaps the best thing to do would be to terminate the contract by mutual agreement, and I further suggested that if he was in agreement with this he write me a letter to that effect.

Early this week we had a phone call from the Minerals Engineering people and, as a result, an engineer and a geologist from this office will confer tomorrow with the Minerals Engineering people on the property to discuss with them what course should be

followed. Apparently, the Minerals Engineering people have in mind some additional drilling.

Although I am not very optimistic about the possibilities of the Lost Creek property, yet there is now a mill available to treat the ore, and if some additional drilling can find some ore which will make some repayment to the Government's share of the contract possible, I feel that we should consider it. In fact, if a small additional amount of drilling will definitely determine whether ore is present or not, I feel we would have ample justification to undertake it so as to be sure that nothing of any possible value is being passed up. If, on the other hand, no useful purpose will be served by additional drilling, then I would favor termination of the contract. I cannot inform you at the moment as to just what type of additional work the company proposes, but I will inform you of this as soon as our field men return and report.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM (2)
Myers

400

Rutledge
Martin
Selfridge
Mattenbery

JAN - 8 1954

Mr. A. H. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

Reference is made to the subject docket and to our letter of September 11, 1953. It would be appreciated if you would expedite our receiving the requested data.

We also would appreciate being advised of the present status of the referenced project at your earliest convenience. The December report of the Bureau of Mines, Region II, states: " . . . doubtful that further work will be done under the contract." Because the date for completion of this project was October 17, 1953, your attention is called to Memorandum No. 18, (1) Suspension of operations - (2) Termination of contracts.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JHB)

Approved:

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

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

Copy to: Docket
FT, Reg. 2
Code 400
Oper. Comm.
Adm. Read. File
R. W. Geehan, USBM
T. P. Thayer, USGS

FARutledge/ls
1/7/53

R.C.G.
1-8-54

Memo 2440

Copied from the MINING WORK, January 1954, page 97

$300,000 TUNGSTEN MILL IN OPERATION

A view of the new 300-ton gravity, and flotation mill near Glenn, Montana, is shown above. Owned by the Minerals Engineering Company of Grand Junction, Colorado, the mill is treating ore from Minerals Engineering's Lost Creek mine on Sugarloaf Mountain in Beaverhead County, Montana. It is also milling ore from a mine on the other side of the mountain operated by Minerals Engineering for American Alloy Metals, Inc. Exploration and development of the properties began in 1951, and construction of the mill started in July 1953. Mining is by open-pit methods. Mill concentrate averaging 10 percent WO_3 is shipped to The Salt Lake Tungsten Company refinery at Salt Lake City where it is retreated to produce a high-grade concentrate. Salt Lake Tungsten is jointly owned by Minerals Engineering and Sylvania Electric Products Company of Towanda, Pennsylvania. R. G. Sullivan, vice president of Minerals Engineering, is in charge of the combined Glenn, Montana operations. American Alloy is owned by E. A. Julian of San Francisco and Frank Eichelberger of Spokane, Washington.

Copied from Engineering and Mining Journal - January 1954 - page 121

MINERALS ENGINEERING CO., Grand Junction, Colo., firm, has completed its new 300-ton tungsten mill at Glen in Beaverhead County, Mont., and the plant is already in operation on a three-shift basis handling ore from both the company's Lost Creek Mine and the Brown's Lake Mine, leased from American Alloy Metals. The properties are on opposite sides of Sugarloaf Mountain in Beaverhead County and both are being mined by open-pit methods.

The $300,000 mill was built in record time, having been started early in September.

Mill concentrates are being shipped to the Salt Lake City refining plant of Salt Lake Tungsten Co., which is jointly owned by Minerals Engineering and Sylvania Electric Products Inc.

Llinen 2440

Copied from the MINING WORLD January, 1954

The SALT LAKE TUNGSTEN COMPANY of Salt Lake City, Utah has shipped its initial 50,000 pounds of tungsten oxide (synthetic scheelite) to the government. The company will reach full production this spring, according to M. N. Shaw, manager of the new refinery. Production is now at about one third capacity. Shipments of concentrates from the Glenn, Montana mill of Minerals Engineering Company to the refinery have commenced. The new mill has a 300-ton-perday capacity. Minerals Engineering which, with Sylvania Electric Products, Inc., owns the Salt Lake Tungsten Company, recently took over on a lease basis a tungsten mine at Brown Lake, Montana. Meanwhile, a stockpile of tungsten concentrates produced by the 100-ton-per-day mill of the H. M. and S. Milling Company at Salt Lake City is being reduced.

~~The UNITED STATES ATOMIC ENERGY COMMISSION plans to expand docks~~

400

FILE COPY
SURNAME:

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

Chairman
Martin
Selfridge
Secretary

Air Mail

SEP 1 1 1953

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Weissenborn:

In reviewing the MF-104 report on the subject docket for the month of July 1953, we note that the allotted funds are 54 percent expended. It would be appreciated if you could furnish us with a summary of the results of the operation to date.

We do not have sufficient data in Washington on which to base any conclusion regarding such results. The assay maps received here show only the results of surface sampling; we have not received any assay returns of samples from the diamond drill holes or the adits. It would be appreciated if you could send us these assays with the aforementioned summary.

From the data at hand it appears, however, that the ore occurs in irregular bodies of low grade, and we would appreciate your ideas as to the advisability of continuing the project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

Copy to: Docket
Field Team, Reg. 2
Adm. Read. File
Code 400
Operating Comm.
Mary Miller, USGS
R. W. Geehan, USBM

9/11/53

TLChapman/ls
9/10/53

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MINERALS ENGINEERING COMPANY
P. O. Box 957
Grand Junction, Colorado

July 25, 1953

Mr. W. Bradley Myers
U. S. Department of the Interior
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine (Brown's Lake)
Contract Idm-E300

Dear Brad:

I wish to acknowledge your letter outlining the drilling plan proposed at Browns Lake.

We would like to assume this drilling as soon as possible, but understand there is some question as to whether the Contract Idm-E300 should be assigned to Minerals Engineering Company or not. As soon as possible, and as soon as this can be determined, we will arrange to proceed as outlined.

We have now roughed out an access road which is scheduled to reach the Ivanhoe outcrop about August 1st, which will greatly expedite the exploration work outlined.

Sincerely yours,

/s/ Blair Burwell

Blair Burwell

BB/rol

cc: Mr. Frank Eichelberger
Mr. E. A. Julian
Mr. W. B. Tobey
Mr. Neil Roby

Copied from The Mining Record June 11, 1953, Page 7

File: DMEA-2440 - Mineral Engr. Co.

TUNGSTEN PLANTS WILL BE BUILT FOR REDUCTION OF ORE

Grand Junction, Colo.--- Minerals Engineering Co. of Grand Junction, has announced plans for a tungsten refinery at Salt Lake City to be built at a cost of some $700,000. The new refinery would handle ores from Montana and Nevada, and serve as a Utah stockpile.

Linked to the plan is the Eimco Corp. of Salt Lake City, which has sold a 12-acre tract on the Jordan River to Minerals Engineering Co. for the plant. Eimco plans to reduce some 30,000 tons of tungsten concentrates already on hand, which were acquired after World War II.

The firm also plans erection of a $225,000 tungsten ore concentrator at Glen, Mont., in connection with its related metals project.

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

April 21, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 27 1953

WSM

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Co., Inc.
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Selfridge:

Enclosed are four copies of a map of the "H" workings at the Lost Creek deposit on which have been plotted the projected geology and the project plan of exploration for the next season. This has been prepared after discussion with Mr. Bill Toby, the engineer in charge of the project for Minerals Engineering Co., Inc.

Sincerely yours

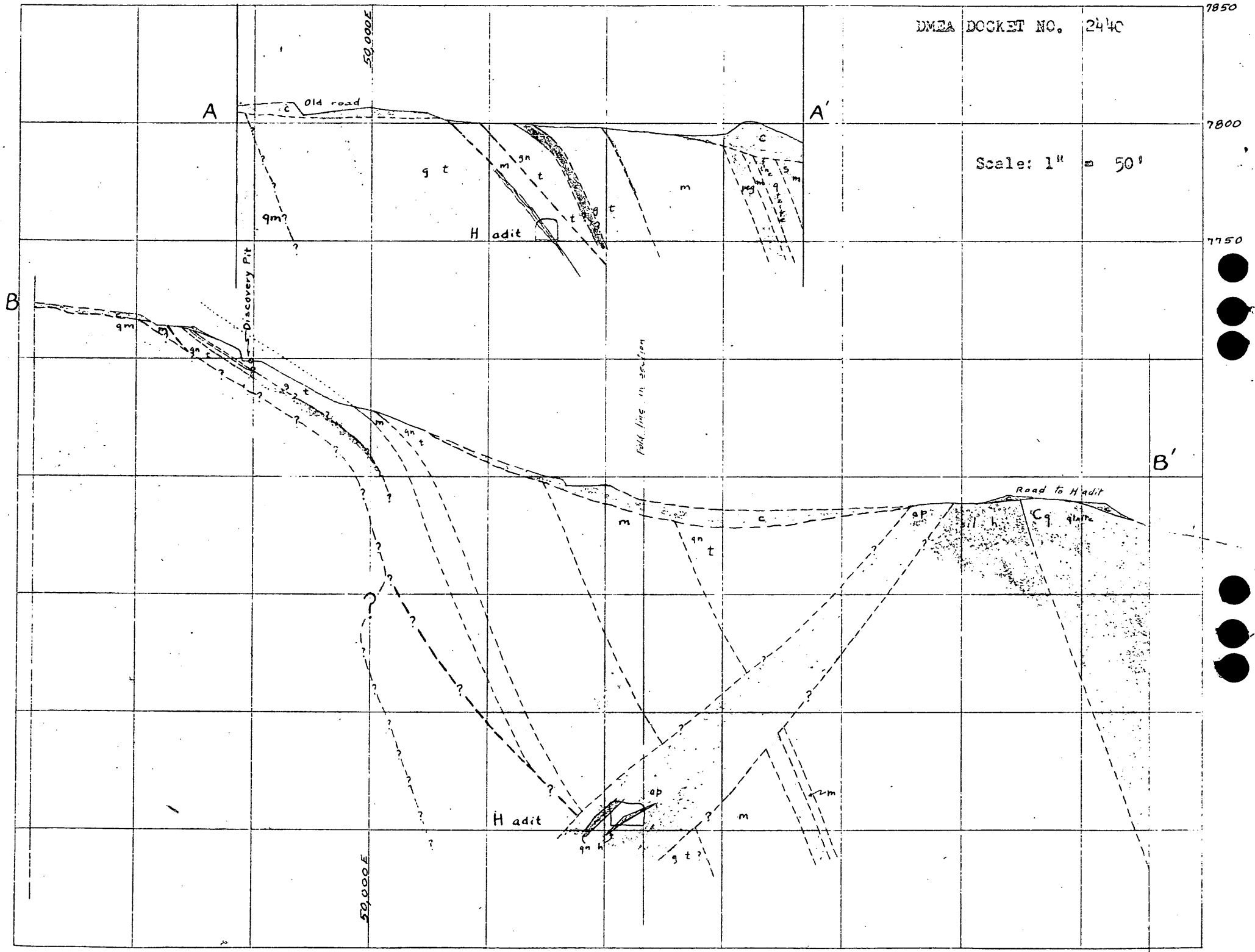
A. E. Weissenborn

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

Enclosure
cc: USBM (2)
Myers

3 copies goals map attached still
VS

ltr & map
Copy retained 400



GEOLOGIC SECTIONS THROUGH H ADIT, LOST CREEK

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~XXXXXXXXXXXXXXXXXX~~
So. 157 Howard Street
Spokane 4, Washington

April 21, 1953

Mr. Blair Burwell, President
Minerals Engineering Co., Inc.
Box 957
Grand Junction, Colorado

Re: Docket No. DMEA-2440 (Tungsten)
Lost Creek Mine
Beaverhead County, Montana
Contract Idm-E300

Dear Blair:

Bill Toby has just been over here and we have had a very good discussion concerning the proposed work to be done this summer on the Lost Creek project. I am enclosing herewith a plan in section of the "E" level in which the proposed work, consisting of drifting and diamond drilling, has been laid out on the projected geology. Some minor variations may be necessary depending on what is found as drifting progresses, but we believe that the plan can be followed very closely. We are all agreed that the holes marked "hold" should be deferred until the last of the drilling and possibly could be eliminated depending some on what is found in the other holes.

The prints are made on "intermediate" paper and onalid prints can be made from them. A more finished plan and section are being drafted now and will be sent to you later.

We have also discussed work in the "B" cut, and we are in general agreement with Bill Toby as to what should be done there also. The plans and sections of this also are being prepared, but we are not sending you a preliminary sketch as we understand that you wish to concentrate your first efforts on "E" cut.

I expect to be in Grand Junction on Survey business from May 19 to 21. A rather busy schedule has been planned for us, but if you expect to be in Grand Junction at that time, I hope that I

would be able to get away and have an opportunity to discuss Lost Creek with you some time during this interval.

Sincerely yours

A. E. Weissenborn
Executive Officer, DMRA
Field Team, Region II

Enclosure
cc: Bill Toby, Glen, Montana
DMRA (2)
USBM (2)
Myers

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

February 3, 1953

WSG

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 13 1953

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

Re: Docket No. DMEA-2440 (Tungsten)
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Selfridge:

With reference to your letter of January 30, Mr. Burwell did send us copies of assay maps of the Lost Creek property. These maps showed some, but not all of the assays of the samples taken. We wrote the company asking for the additional information some of which, but not all, has been sent. Meanwhile, we are sending you two copies of the company map with as much of the information as we have. Results of the Bureau check samples are not yet available.

We are also sending you copies of a report by Mr. M. N. Shaw, General Superintendent of the Minerals Engineering Company, describing flotation tests made on ore from the Lost Creek property.

Sincerely yours

A. E. Weissenborn

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

Copy retained 400

Copy made for 400

Enclosures

cc: USBM (2)
Myers

maps sent under separate cover

MINERALS ENGINEERING COMPANY
P. O. BOX 957
GRAND JUNCTION, COLORADO

402

January 30, 1953

al
Brad
Thor

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Dear Mr. Weissenborn:

We have completed the report of concentration of the Lost Creek ores by flotation, and are enclosing a copy for your files.

I want to thank you and your staff for the splendid co-operation they gave me during the 1952 field season, especially yourself and Brad Meyer.

Yours very truly,

MINERALS ENGINEERING COMPANY

M. N. Shaw

M. N. Shaw
General Superintendent
Montana Operations

MNS/rol

Encl.

FLOTATION TESTS - LOST CREEK MINE, MONTANA

PURPOSE OF TESTS:

To determine the procedure and reagent combination for concentration by flotation of the Lost Creek, Montana ore.

CONCLUSION:

92 percent of the tungsten in the Lost Creek ore may be recovered in a 5% to 13% concentrate by flotation.

SOURCE OF ORE USED IN FLOTATION TESTS:

A large-scale bulk sample was taken from each of the seven principal ore bodies developed during 1952. Each sample was crushed to pass 1/4 mesh and split to a weight proportional to the tonnage to be mined from each ore body upon starting of mining operations. These weighed samples were mixed together to make the composite used in flotation testing. Details of samples taken, tonnages represented, weight of bulk samples and weights taken from composite are tabulated below:

Block	Estimated Tonnage Represented	Location	Weight of Bulk Sample Lbs.	Weight of Comp.
1 & 2	54,400	B Tunnel	550	67
3	25,400	C-S-1 Cut	750	67
4	14,000	C-S-2 Cut	750	66
5	28,000	E Cut	750	400
6 & 7	53,900	H-1 Cut	750	100
8 & 9	141,750	H Tunnel	700	100
10	53,400	I-J Cut	550	100
	370,850	@ 0.239		

ORE PREPARATION FOR FLOTATION TESTS:

The ore was crushed thru 10 mesh. This gave approximately the same ratio between particle size of ball mill feed and ball mill diameter as will be used in plant practice. A 3,000 gram sample was then split out and pulverized thru 150 mesh for assaying.

This composite sample has been designated as "November Composite".

ASSAYING:

The method used for assaying is a duplicate of a procedure used in plant

practice of commercial tungsten refining, so that all percentages of tungsten given in the assay results is the percentage of tungsten which would actually be recovered as a marketable product from the particular ore being tested. As an example, the percentage of tungsten given for the composite is the percentage of tungsten which would actually be marketed if the ore represented by this composite were treated in a commercial tungsten refinery; or in the case of the flotation tests, the weight of tungsten which would be marketed for a given weight of ore. This method, known as the Minerals Engineering Company method, differs from conventional assaying methods inasmuch as the Minerals Engineering Company method gives the amount of tungsten which will be recovered by a commercial refining method, while the conventional methods give the amount of tungsten contained in the sample without regards to the amount which may be recovered by commercial methods.

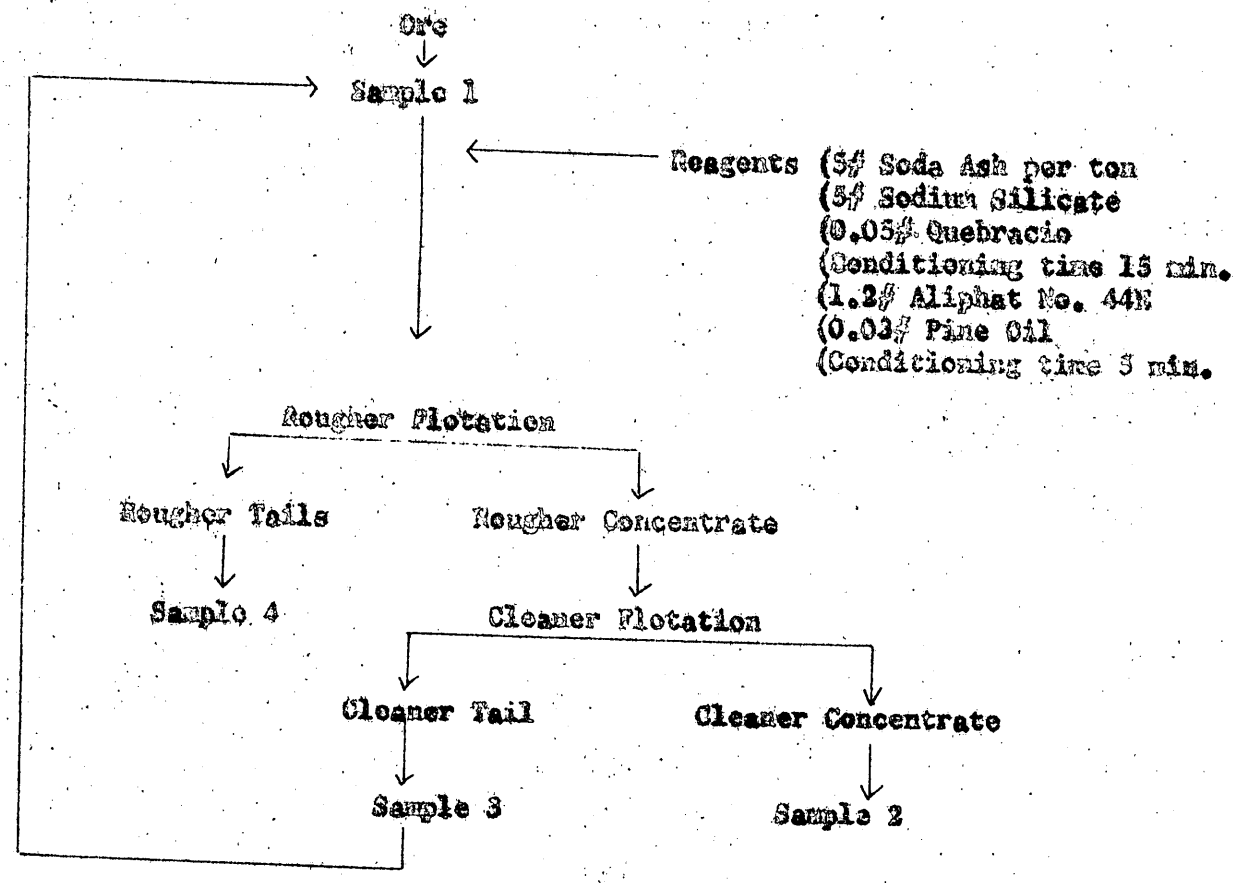
Five 200-gram samples were assayed by the Minerals Engineering Company method with the following results:

Average	% WO_3	% Mo
1	0.235	0.11
2	0.241	0.13
3	0.237	0.14
4	0.242	0.11
5	0.240	0.11
Average	0.239	0.124

SUMMARY OF RESULTS:

Four single-stage flotation tests were completed to determine the procedure and reagent combination for this ore (LC 123521, LC 124522, LC 126523, LC 127524).

Following these tests a cyclic test with the following circuit was set up (LC 1211526):



After the circuit was established third-stage samples of

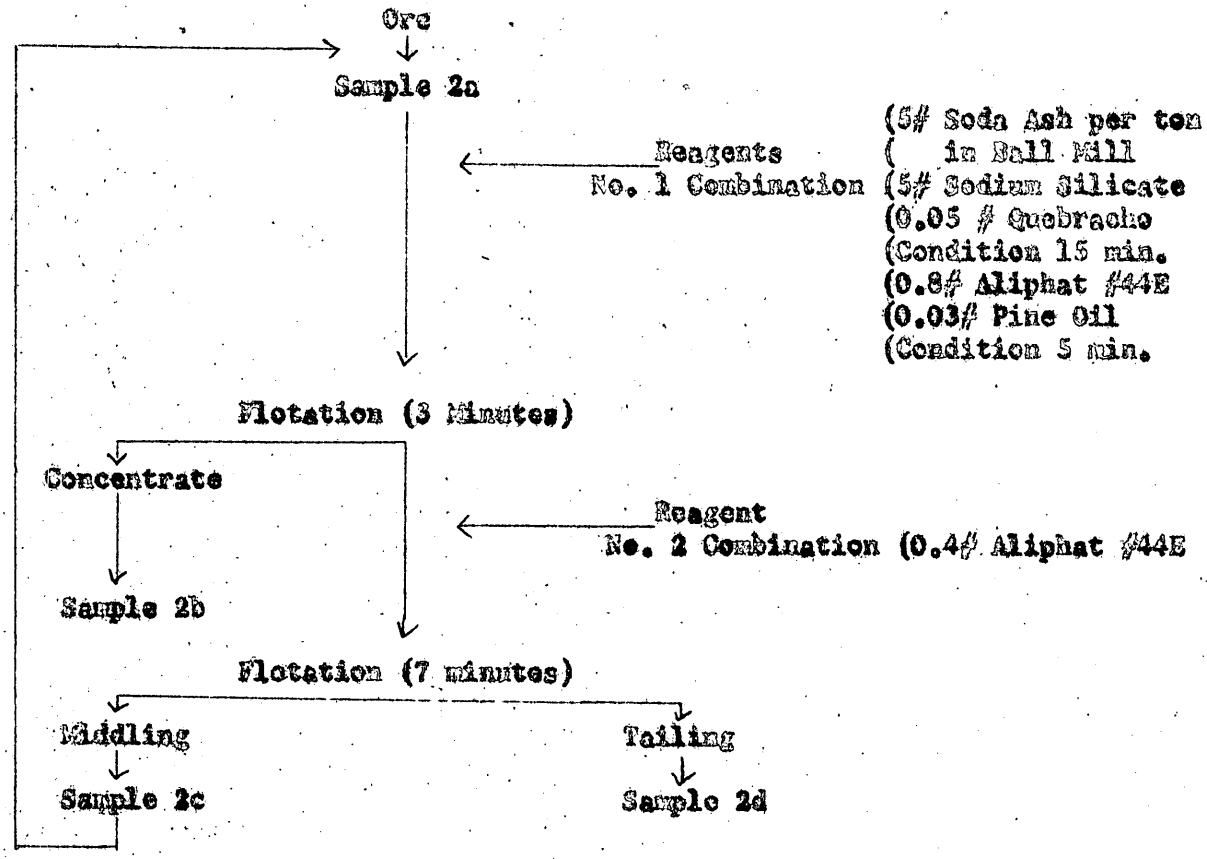
1 Heads
2 Cleaner concentrate
3 Cleaner Tails
4 Rougher Tails

were taken with the following results:

Sample No.	Description	Wt. Gms.	% WO3	% Mo	Gms. WO3	Gms. Mo	% Recovery WO3	% Recovery Mo
1	Heads	2153	0.266	.11	5.73	2.45 2.37	100.0	100.0
2	Cleaner Conc.	42	12.42	2.80	5.22	1.18	91.3	48.2
3	Cleaner Tail	138	0.04	0.23	0.06	0.28	1.1	11.4
4	Rougher	1973	0.023	0.05	0.45	0.99	7.6	40.4

Assay Heads 0.24% WO3
Calculated Heads 0.266% WO3 (Cleaner Conc. + Cleaner Tail + Rougher Tail)

Following the initial cycle test a second test was made using the following flow sheet (LC 1212527):



Results of this test are as follows (Considering final products only):

Sample	Desc.	Wt. Gms.	% WO3	% Mo	Gms. WO3	Gms. Mo	% Recovery WO3	% Recovery Mo
2a	Heads	5856	0.24	.10	14.06 14.01	5.80 5.84	100.0	100.0
2b	Conc.	235	4.70	1.65	12.93 11.05	2.96 3.88	91.9	51.1
2d	Tail	5531 5.7 C.C.	0.018	0.05	1.14 1.00	2.84 2.77	8.1	48.9
	Assay Head		0.24 WO3	0.12 Mo				
	Calculated Head		0.24 WO3	0.10 Mo				

Metallurgical detail of Cyclic Results is given in the supporting data sheet.

DETAIL CYCLIC TEST

Sample	Description	Wt. Grms.	Assay WO3	Assay Mo	Wt. in Grms. WO3	Wt. in Grms. Mo	% Recovery WO3	% Recovery Mo
2a	Heads	5856	0.24	0.10	14.06	5.80 5.85	100.0	100.0
2b	1st Stage Conc.	43	7.66	2.89	3.29	1.24	23.4	21.4
2d	1st Stage Tail	1750	0.025	0.05	0.44	0.88	3.1	15.2
2b	2d Stage Conc.	90	3.82	1.05	3.44	0.95	24.5	16.4
2d	2d Stage Tail	1700	0.015	0.05	0.26	0.85	1.8	14.7
2b	3rd Stage Conc	98	4.28	0.67	4.19	0.66	29.8	11.4
2c	3rd Stage Mid	325	0.66	0.09	2.16	0.29	15.4	5.0
2d	3rd Stage Tail	1850	0.015	0.05	0.28	0.93	2.0	15.9
		5856						

FLOTATION TESTS WORK SHEETS

Flotation Test LC 123521

HEAD ORE

November Composite

GRIND:

0.25% on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5.0 Lbs/T Soda Ash
0.2 Lbs./T Quebracho
1.1 Lbs./T Sodium Silicate
0.8 Lbs./T Elastol LL

PROCEDURE:

2,000 grams of head ore ground with 1,000 grams of water in a laboratory ball mill for one hour. The pulp was transferred to a Minerals separation-gype sub A flotation machine with warmed water and conditioned 15 minutes with five pounds soda ash, and 0.2 pounds quebracho per ton of ore after ten minutes conditioning 0.8 pounds/ton of Elastol LL was added. After conditioning, a rougher concentrate was removed over a period of ten minutes.

The rougher concentrate was transferred to a Denver Type Sub A machine and conditioned five minutes with 0.3 pounds/ton of Sodium Silicate. Cleaner concentrate No. 1 was removed over a period of five minutes.

Cleaner concentrate No. 1 was conditioned five minutes with 0.8 pounds/T of sodium silicate and a final cleaner concentrate was removed over a period of ten minutes. Ph of final cleaner tailing was 10.0.

RESULTS:

Product	Weight	% WO3	Grams WO3	% Recovery WO3
Heads	2000	0.24	4.800	100.00
Rougher Conc.	1140	0.32	3.65	87.79
No. 1 Cleaner Conc.	440	0.79	3.48	81.20
No. 1 Cleaner Tail	700	0.04	0.28	6.59
Final Cleaner Conc.	84	2.15	1.81	42.51
Final Cleaner Tail	356	0.46	1.64	38.60
Final Tail	860	0.06	0.52	12.21

TAIL SCREEN ANALYSIS

Mesh	% Weight	Cum. % Weight
+100	0.25	0.25
+150	4.05	4.30
+200	13.65	17.95
-200	82.05	100.00
Total	100.00	

OBSERVATIONS:

Apparently the tungsten-bearing mineral is easily depressed by quebracho. There was a non-selective abundant soap froth, and concentration of tungsten was more or less mechanical.

FLOTATION TEST LC 124522

HEAD ORE

November Composite

GRIND

0.25% on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5 Lbs./T Soda Ash
0.2 Lbs./T Quebracho
1.1 Lbs./T Sodium Silicate
0.8 Lbs./T Aliphat No. 44E

PROCEDURE:

2000 grams of head ore, ground with 1000 grams of water, in a laboratory ball mill for one hour. The pulp was transferred to a Minerals separation Type Sub A Machine with warmed water and conditioned 15 minutes with 5 pounds/ton soda ash and 0.2 pounds/ton quebracho, after 10 minutes conditioning 0.8 pounds/ton of aliphat No. 44 E was added. After conditioning a rougher concentrate was removed over a period of 10 minutes.

The rougher concentrate was transferred to a Denver Type Sub A machine and conditioned five minutes with 0.3 pounds/ton of sodium silicate. Cleaner concentrate No. 1 was removed over a period of five minutes.

Cleaner concentrate No. 1 was conditioned five minutes with 0.8 pounds sodium silicate and No. 2 cleaner concentrate removed over a period of ten minutes. pH of No. cleaner tail was 10.0.

RESULTS:

Product	Weight	% WO_3	Grams WO_3	% Recovery WO_3
Heads	2000	0.24	4.80	100.0
No. 1 Cleaner Tail	720	0.05	0.36	9.06
No. 2 Cleaner Tail	565	0.06	0.34	8.55
No. 2 Cleaner Conc.	200	1.56	3.12	78.63
Tail	515	0.03	0.15	3.76

OBSERVATIONS:

Somewhat the same froth conditions were observed in this test as was observed in the preceeding test, although the tail was lower and the tailing weight was also less. The grind appeared to be too fine and apparently quebracho was again depressing the tungsten-bearing mineral.

As the preceding tests did not produce the desired results, a series of exploratory tests were run varying the grind, amounts of fatty acid, sodium silicate, quebracho, and soda ash, and in different combinations. Products of these tests were observed under the Ultra Violet Lamp and were not assayed. It appeared as if a somewhat coarser grind, using the same amount of soda ash, a greater amount of fatty acid and sodium silicate, and a lesser amount of quebracho gave improved results. To check these observations, parallel tests were run using elastol LL in one and aliphat No. 44E in the other.

FLOTATION TEST LC 126523

HEAD ORE

November composite

GRIND

1.0% on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5 Lbs./T Soda Ash
5 Lbs./T Sodium Silicate

Reagents (Continued)

0.05 Lbs./T Quebracho
1.2 Lbs./T Aliphat No. 44E
0.03 Lbs./T Pine Oil

PROCEDURE:

2000 grams head ore ground in a laboratory ball mill with 1000 grams of water for 40 minutes. The pulp was transferred to a Minerals Separation Type Sub A Machine with warmed water, and conditioned for 15 minutes with 3 pounds per ton Soda Ash, 0.05 pounds per ton Quebracho and 5 pounds per ton of sodium silicate. After 10 minutes conditioning 1.2 pounds per ton Aliphat No. 44E and 0.03 pounds per ton Pine Oil were added. After conditioning a rougher concentrate was removed over a period of ten minutes. The rougher concentrate was conditioned five minutes in a Denver Type Sub A Machine with 0.1 pounds per ton of Aliphat No. 44E and 0.2 pounds per ton of Pine Oil. The cleaner concentrate was removed over a period of ten minutes.

RESULTS:

Product	Weight	% WO3	Grams WO3	% Recovery WO3
Heads	2000	0.24	4.80	100.0
Heads (Calc)	2000	0.23	5.29	100.0
Rougher Conc. (Calc)	171	2.94	5.03	95.4
Cleaner Conc.	47	10.59	4.98	94.2
Cleaner Tail	124	0.04	0.05	1.0
Tail	1829	0.014	0.26	4.8

pH of Head Pulp 9.8

TAIL SCREEN ANALYSIS

Product	% Weight	Cum. % Weight
+ 100 mesh	1.0	1.0
+ 150 mesh	12.5	13.5
+ 200 mesh	18.0	31.5
- 200 mesh	68.5	100.0

FLOTATION TEST LC 137524

HEAD ORE

November Composite

GRIND

1.0 % on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5 Lbs./T Soda Ash
5 Lbs./T Sodium Silicate
0.05 Lbs./T Quebracho
1.0 Lb./T Elastol LL

PROCEDURE:

2000 grams of head ore ground in a laboratory ball mill for 40 minutes, with 1000 grams of water. The pulp was transferred to a Minerals Separation Type Sub A Machine with warmed water and conditioned 15 minutes with 5 pounds per ton Soda Ash, 5 pounds per ton Sodium Silicate and 0.05 pounds per ton Quebracho. After ten minutes 1.0 lbs. per ton Elastol LL was added. After conditioning, a rougher concentrate was removed over a period of ten minutes. This concentrate was cleaned once in a Denver Type Sub A Machine. The cleaner froth was voluminous, because of this no reagents were added to the cleaning cycle.

RESULTS:

Product	Weight	% WO3	Grams WO3	% Recovery WO3
Heads (Calc)	2000	0.26	5.22	100.0
Rougher Conc (Calc)	315	1.53	4.82	92.2
Cleaner Conc.	110	3.26	3.59	68.7
Cleaner Tail	205	0.60	1.23	23.5
Tail	1675	0.024	0.40	7.8

pH head pulp 9.6

OBSERVATIONS:

In these two parallel tests it was apparent Elastol LL did not have the promoting characteristics nor the selectivity of Aliphat No. 44E, and warmed water was of no benefit in the reaction of the fatty acids with the Tungsten-bearing minerals. It was difficult, in fact most impossible, to maintain a constant temperature within the flotation pulp. While temperature does effect emulsifying of the unsaponified fatty acids, when saponified emulsification could take place at top water temperatures.

As a satisfactory grade and recovery was made using aliphat No. 44E, the following three-stage cycle test was run using this fatty acid.

FLOTATION TEST LC 1211526

HEAD

November Composite

GRIND

1.0% on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5 Lbs./T Soda Ash
5 Lbs./T Sodium Silicate
0.05 Lbs./T Quebracho
1.4 Lbs./T Aliphat No. 44E
0.02 Lbs./T Pine Oil

PROCEDURE

1st Stage: 2000 grams of head ore was ground 40 minutes with 1000 grams of water. The pulp was transferred to a Minerals separation Type Sub A Machine and conditioned 15 minutes with 5 Lbs./T Soda Ash, 5 Lbs./T Sodium Silicate, and 0.05 Lbs./T Quebracho. After ten minutes 1.2 Lbs./T Aliphat No. 44E and 0.02 Lbs./T Pine Oil were added. After conditioning, a rougher concentrate was removed over a period of five minutes, 0.2 Lbs./T Aliphat No. 44E was added and the froth removed for five more minutes. The rougher concentrates was cleaned once in a Denver Type Sub A Machine. Cleanre Tails were added to the freshly ground

pulp of the following stage.

2nd Stage: Procedure same as 1st Stage except cleaner tail of preceding stage was added to the head of this stage.

3rd Stage: Procedure same as 2nd Stage.

RESULTS:

Product	Weight Grams	Assays % WO3	Assays % Mo	Grams-Content WO3	Grams-Content Mo	% Recovery WO3	% Recovery Mo
1st Conc	18.0	12.00	3.40				
1st Tail	1850	0.12					
2nd Conc	19.0	12.00					
2nd Tail	1960	0.12					
3rd Heads Calculated	2153	0.266	0.11	5.73	2.45	100.0	100.0
3rd Conc	42	12.42	2.80	5.22	1.18	91.3	48.2
3rd Cl Tail	138	0.04	0.20	0.06	.28	1.1	11.4
3rd Tail	1973	0.023	0.05	0.45	.99	7.6	40.4

OBSERVATIONS:

This test is interesting in the manner in which the tungsten-bearing mineral reported. In the first two stages less than 50% of the tungsten was in the concentrate while on the third stage over 90% of the tungsten was reported in the concentrate. The circulating load, that is the cleaner tail, apparently established itself in the first stage at about 7% of the original feed, but the contained tungsten dropped from about 10% of total in first stage to 5.5% in the second stage and to one percent in the third stage.

Apparently there are certain tungsten-bearing minerals present in the ore which react relatively slow with the sodium carbonate and fatty acid, and the reacting conditions are not favorable until the third stage. In order to explore this, the following test was run, adding the soda ash to the trind to allow more reacting time. Also, a final concentrate was removed from the cell, and the rougher concentrate added to the head of the following stage.

FLOTATION TEST LC 1212527

HEAD ORE

November Composite

GRIND

1.0% on 100 mesh

FLOTATION PULP DILUTION

22% Solids

REAGENTS

5 Lbs./T Soda Ash
5 Lbs./T Sodium Silicate
0.05 Lbs./T. Quebracho
1.2 Lbs./T Aliphat No. 44E
0.03 Lbs./T Pine Oil

PROCEDURE:

1st Stage: 2000 grams of head ore was ground 40 minutes with 1000 grams of water and 5 lbs. per ton of ore of Soda Ash. The pulp was transferred to a Minerals Separation Type Sub A laboratory flotation machine, with tap water and conditioned 15 minutes with 5 lbs. of sodium silicate and 0.05 lbs of Quebracho per ton of ore. After ten minutes of conditioning 0.8 lbs per ton of ore of Aliphat No. 44E was added. A finished concentrate was removed for three minutes. At the end of three minutes 0.4 lbs of Aliphat No. 44 E and 0.03 lbs of Pine Oil per ton of ore was added and a rougher concentrate removed for seven minutes. The rougher concentrate was added to the head pulp of the following stage.

2nd Stage: Procedure same as Stage 1 except the rougher concentrate of the preceding stage was added to the head of this stage.

3rd Stage: Procedure same as Stage 2.

RESULTS:

STAGES

Product	Weight Grams	Assays % WO3	Assays % Mo	Grams-Content WO3	Grams-Content Mo	% Recovery WO3	% Recovery Mo
Heads	5856	0.24	0.10	14.06	5.80	100.0	100.0
1st Stage Conc	43	7.66	2.89	3.29	1.24	23.4	21.4
1st Tail	1750	0.025	0.05	0.44	0.88	3.1	15.2
2nd Stage Conc	90	3.82	1.05	3.44	0.95	24.5	16.4
2nd Tail	1700	0.015	0.05	0.26	0.85	1.8	14.7
3rd Stage Conc	98	4.28	0.67	4.19	0.66	29.8	11.4
3rd Cl Tail	325	0.66	0.09	2.16	0.29	15.4	5.0
3rd Tail	1850	0.015	0.05	0.28	0.93	2.0	15.9

CONSOLIDATED

Product	Weight Grams	Assays % WO3	Assays % Mo	Grams-Content WO3	Grams-Content Mo	% Recovery WO3	% Recovery Mo
Heads							
Sample 2a	5856	0.24	0.10	14.06	5.80	100.0	100.0
Sample 2b Concentrate	231	4.70	1.65	10.94	2.85	77.8	49.2
Sample 2c Middling	325	0.66	0.66	2.15	0.29	15.3	5.1
Sample 2d Tailing	5300	0.018	0.05	0.97	2.66	6.9	45.7

CONSOLIDATED - MIDDLING DISTRIBUTED

Product	Weight Grams	Assays % WO3	Assays % Mo	Grams-Content WO3	Grams-Content Mo	% Recovery WO3	% Recovery Mo
Heads	5856	0.24	0.10	14.06	5.80	100.0	100.0
Conc	235	4.70	1.65	12.92	2.96	91.9	51.1
Tail	5531	0.018	0.05	1.14	2.84	8.1	48.9

OBSERVATIONS:

Although the concentrate grade was somewhat low in this test, by pulling a lesser amount of weight in the first concentrate a seven percent grade or better could be obtained. This is shown in stage one.

The effect of a longer conditioning time of the Soda Ash is shown clearly.

In this test, as in the preceding test, the third stage showed the best results. In the second stage an excessive amount of rougher concentrate was pulled, but the metal content was being reduced throughout the test, indicating a lower tailing and a higher grade concentrate could be expected in additional stages.

FILE COPY
SURNAME:

Selfridge

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

JAN 3 0 1953

BW

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

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek Tungsten Deposit
Beaverhead County, Montana
Contract No. Idm-8300

Dear Mr. Weissenborn:

When Mr. Burwell was in Washington several weeks ago, he informed us that he had left complete assay maps of the subject property with you.

Because we have had inquiries from DMPA concerning the grade of the deposit, will you please advise us if Mr. Burwell also left copies of the maps with you for the Washington office? If so, when may we expect our copies?

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

GHS

S.H. 1-30-53

Approved:

J. H. Hedges (GHS)
Member, Bureau of Mines

A. R. Kinkel, Jr. (GHS)
Member, Geological Survey

GCSelfridge/pa 1-29-53
Copy to: Mails & Files
Admin. Reading File
G. C. Selfridge
R. W. Geehan, Rm. 3521
D. M. Lemmon, Rm. 5616, GSA
Operating Committee
Code 400

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

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cc:

DOCKET No. OMEA 2440. TUNGSTEN
MINERALS ENGINEERING Co.
CONTRACT 10M-E 300. $121,280.00 APR. 17, 1952
18 MONTHS
AUTHORIZED 2,200 FT. DRIFTS. 750 FT. XCUTS
WORK STOPPED FOR WINTER ON DEC. 8, 1952

COMPLETED

ROADS - TRAILS	-	$8,030.00
1,082 FT. DRIFTS AT $35.00 FT		37,870.00
421 FT. XCUTS AT $35.00 FT.		14,735.00
TOTAL SPENT.		$60,635.00

50% OF ALLOTED FUNDS SPENT
49% OF DRIFTING COMPLETED
56% OF XCUTTING COMPLETED

CONTRACT EXPIRES SEPT. 17, 1953.

FILE COPY 400
SURNAME:

Chapman
Selfridge
R. J. Smith

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

DEC 5 1952

Mr. A. N. Weissenborn
Executive Officer, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMRA 2440 - Tungsten
Lost Creek Mine Contract Idm-E300
Beaverhead County, Montana

Dear Mr. Weissenborn:

In the monthly reports submitted on this project, we note where numerous samples have been taken during the progress of the operation.

To date, we have not received any returns on the results of these samples. Will you please call this to the attention of the Operator.

Sincerely yours,

George C. Selfridge (GHB)
ACTING Chairman, Operating Committee

A.N. 12-5-52

Approved:

W. H. Hedges (WHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (ARK)
Member, Geological Survey

TLChapman'lm
12/3/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
Operating Committee
G. C. Selfridge
T. L. Chapman

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

November 24, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 25 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA 2440 (Tungsten)
Minerals Engineering Company
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. 2 to the subject contract. Copies of this amendment have been retained by the Operator, the Field Team, and by carbon copy of this letter the Finance Officer's copy is being distributed.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer
DMEA Field Team, Region II

Enclosure

cc: USBM (2)
Finance Officer w/encl.
Myers

cae
12/1

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

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 12 1952

November 5, 1952

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Re: Docket DMEA-2440 (Tungsten)
Lost Creek mine
Beaverhead County, Montana
Contract Idm-E300

Dear Mr. Burwell:

Enclosed are 6 copies of Amendment No. 2 to your Contract Idm-E300. If the terms of this amendment meet with your approval, please sign all copies, retain that copy marked for the Operator and return the others to this office.

Sincerely,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: DMEA (2)
USBM (2)
Myers

Case
11-12

400

FILE COPY
SURNAME:

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

OCT 30 1952

Mr. A. E. Weissenborn
Executive Officer, DMEA Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek tungsten project
Beaverhead County, Montana
Contract No. Idm-R-300

Dear Mr. Weissenborn:

Reference is made to your letter of October 15, 1952, enclosing Amendment No. 2 to the subject contract.

We are returning herewith, duly signed, the amendment as rewritten by this office and trust that it meets with your approval.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Enclosure

AEKane:ls 10/24/52

Approved:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

CC: Docket
Admn. Read. File
Field Team, Reg. 2
Operating Committee
A. E. Kane - Legal
G. C. Selfridge
Reading File - Legal
D. M. Lemmon, USGS
R. W. Geehan, USBM

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Spokane, Washington
October 15, 1952

Department of the Interior
Defense Minerals Exploration Administration
OCT 20 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Docket No. DMEA-2440 - Tungsten
Minerals Engineering Co.
Lost Creek Tungsten Project
Beaverhead County, Montana
Contract No. Idm-E300

Dear Mr. Johnson:

When the subject project was visited early in September by Messrs. Selfridge, Myers, Volin, et al, it was recognized that geologic conditions were immensely more complicated than had been envisioned when the exploration was planned. The possibility of increasing the amount of the contract so that a more thorough exploration of the entire tactite zone could be done by crosscutting and diamond drilling was discussed. A proposal which was worked out jointly by the Operator, Bureau of Mines engineers, and Survey geologists is presented here as Amendment 2 to the contract. It will require an additional $10,000 and will provide for more drilling. The amount of crosscutting provided for in the original contract is not increased. A justification by Myers of the Survey gives the geological basis for this proposed work.

Mr. Myers points out that in view of the geologic complications the additional lateral exploration would truely be exploration and cannot be considered detailed enough to block out ore.

The Field Team is in agreement with the conclusions of the Engineer, Geologist, and Operator, and strongly recommend that this amendment be approved.

By Field Team, Region II

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

Copy retained 400

cc 10-20

Thomas E Howard
acting for M. E. Volin, Member
(U. S. Bureau of Mines)

cc: USBM (2)
Myers

AMENDMENT NO. 2

It is agreed this 1st day of October 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and

Minerals Engineering Company, Grand Junction, Colorado

(Docket No. DMEA 2440 - tungsten)

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 300 of April 17 1952 between the parties hereto be modified and amended as described in Exhibit "F" attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be October 1 1952.

Revised

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

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

Executed in sextuplicate the day and year first above written.

MINERALS ENGINEERING COMPANY
(Operator)

By _____
President

THE UNITED STATES OF AMERICA

By _____

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

OCT 2 1952

MINERALS ENGINEERING COMPANY
Docket No. DMEA 2440 (tungsten)
Contract Idm-E300

Amendment No. 2

Exhibit "F"

In Exhibit "A" of Contract Idm-E300, under "Description of Work" add the following:

A maximum of 2,000 feet of underground diamond drilling shall be performed. The total footage to be drilled shall be distributed over approximately forty diamond drill holes located in "B" and "H" levels. All drill holes shall be cored. Holes shall be carried in the AX diameter, unless drilling conditions necessitate a reduction to the EX diameter.

The above work is for the primary purpose of supplementing information obtained by crosscutting, in order to more adequately guide the overall exploration program.

Diamond drilling shall be performed by the Minerals Engineering Company at a flat rate of $5.00/ft. All costs contingent to the diamond drilling program such as labor, supervision, materials, equipment, supplies, preparation of drill sites, handling of core, and moving, shall be included in the unit rate prescribed above.

The total cost of the diamond drilling project shall not exceed $10,000.00.

2,000 feet of diamond drill holes @ $5/ft. = $10,000.00

The total estimated cost of work to be done under Contract Idm-E300 shall be increased by the sum of $10,000.00 to cover costs entailed in the prescribed diamond drilling program.

It is understood that the locations, directions, and lengths of all diamond drill holes, as well as the handling and disposal of all diamond drill hole cores must meet with the approval of the Government engineers.

Revised

Docket No. DMEA-2440 - Tungsten
Minerals Engineering Co.
Los Creek Mine
Beaverhead County, Montana
Contract Idm-300

Defense Mobilization
OCT 2 1952

Justification for Amendment ~~Item~~ 2

Continuing work at the Lost Creek tungsten exploration project emphasizes the inadequacy of the geologic data gained from the few exposures to effectively control the contract program of drifting in mineralized tactite.

In addition to the paucity of surface exposures, four geologic factors complicate the problem of following the "ore zone." These factors - lateral variation in sedimentation, pre-intrusive folding and faulting irregularity of additive contact-metamorphic effects, and post-mineralization shearing - combine to render projection of data uncertain.

At the lower working (B adit) it is still uncertain that the tactite zone being followed is that which is exposed in the surface cuts. There is even doubt as to correlation of ore zones in the separate cuts. In addition, driving of the B adit has disclosed zones of strong post-mineralization bedding-plane faulting, some of which have necessitated timbering. Prior knowledge of the location of these faulted zones would have speeded progress of the drifting. At the H adit at least two potential ore zones are present; the second known zone being in the hanging wall of the tactite in which the drift is driven.

The possibility that potential ore zones may lie outside the zone followed by the exploration drift at both the B and H adits and the desirability of knowing the position of the strongly sheared ground in the faulted zones at B adit make thorough lateral exploration mandatory for an efficient prosecution of the drifting program. It should be emphasized that this additional lateral exploration would truly be exploration and can in no sense be considered as detailed enough to block out ore.

Accordingly it is believed that exploration would be expedited by a modified program embodying widely spaced relatively long crosscuts in the foot and hanging walls supplemented by diamond drilling from stations between crosscuts. It is planned that three crosscuts would be driven in each working, with distances ranging from 250 to 400 feet between crosscuts. Diamond drilling would be done from intermediate stations located at intervals ranging from 80 to 120 feet. In addition to the planned diamond drill holes which would total about 1700 feet, allowance has been made for about a dozen short holes totaling about

300 feet. These short holes would be used by the operator in solving day-to-day problems at the drift headings.

The accompanying maps portray the geology of the workings (September 11) and indicate diagramatically the approximate positions of the proposed crosscuts and diamond drill holes.

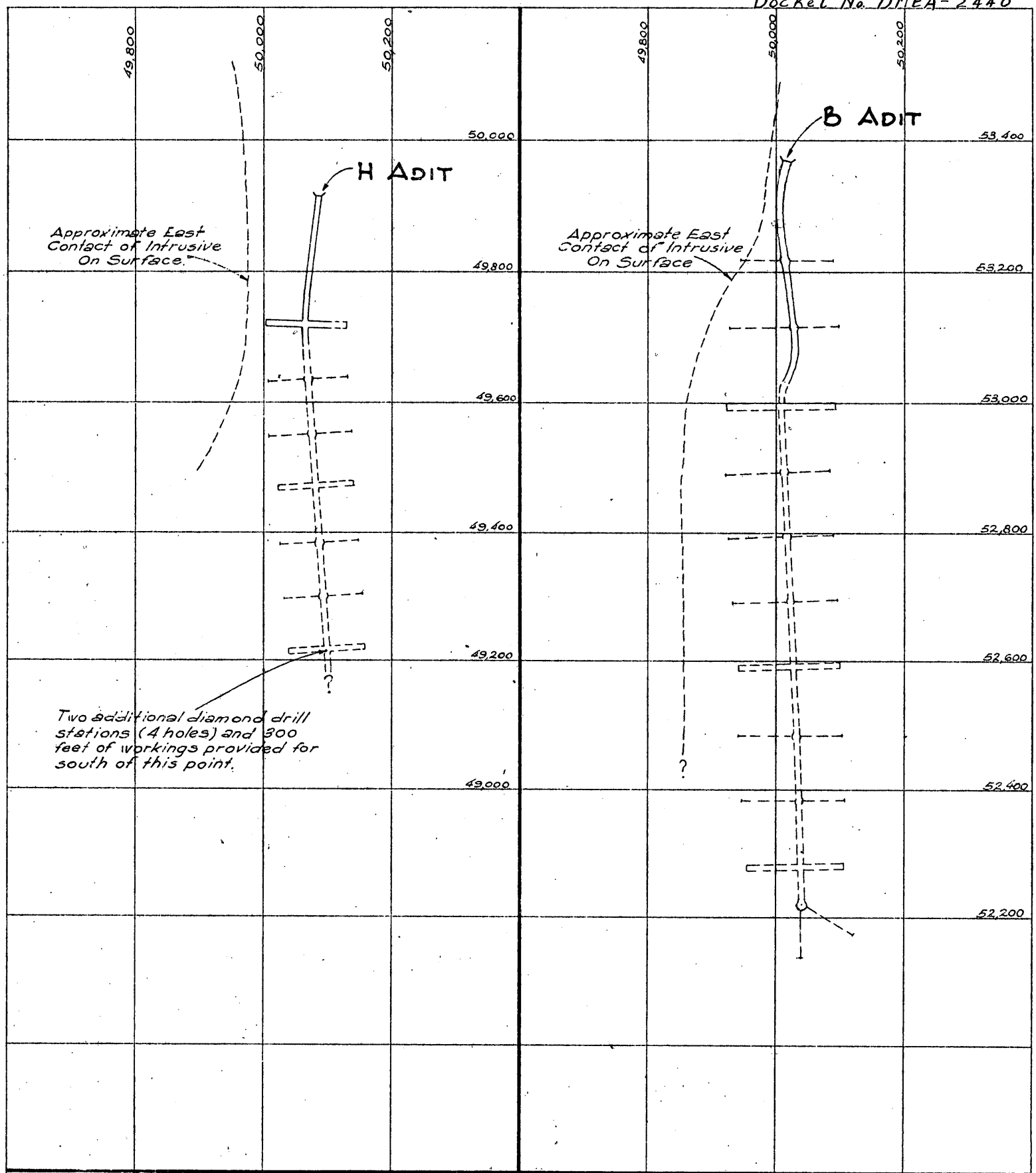
W. B. Myers
Geologist

Attachments-3

SKETCH SHOWING LAYOUT OF PROPOSED CROSS-CUT AND DIAMOND DRILL HOLES, LOST CREEK TUNGSTEN, BEAVERHEAD COUNTY, MONTANA

(CONTRACT IDM-E300)

Docket No. DMEA-2440



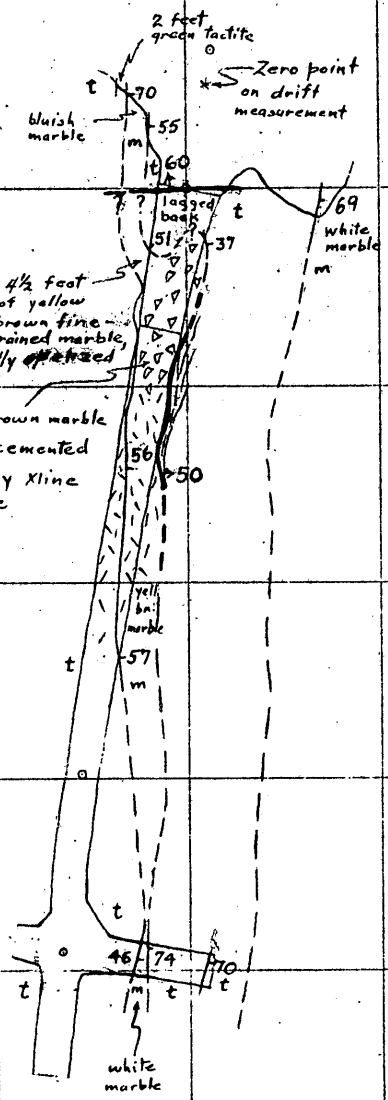
3½° True North Coordinate North

NOTE: COMPANY COORDINATE SYSTEM IS ALIGNED ABOUT N. 3½° E. DUE TO SURVEYING ERROR WHICH DOES NOT EFFECT ACCURACY OF NET.

"ALBANENE" No. 195M K&E CO., N.Y. REG. U.S. PAT. OFF

GEOLOGIC MAP OF H ADIT, LOST CREEK TUNGSTEN
BEAVERHEAD COUNTY, MONTANA
(CONTRACT IDM - E 300)

Docket No DMEA-2440



EXPLANATION

- t — Garnet-rich tactite
- m — Marble
- Fault
- Normal contact
- Joint
- Shear zone
- Tectonic breccia
- Shattered zone

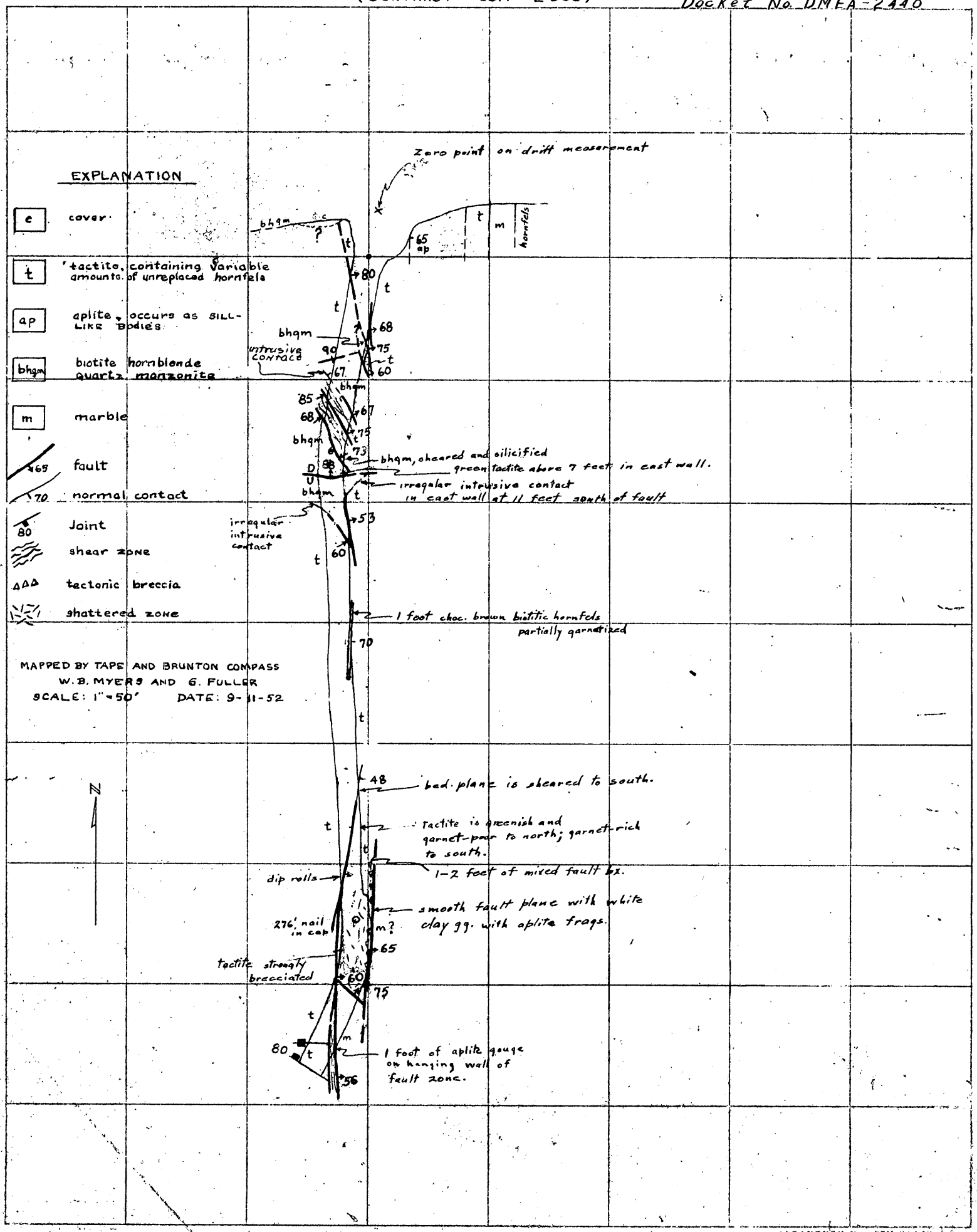
MAPPED BY TAPE and BRUNTON COMPASS
W. B. MYERS and G. FULLER
SCALE: 1" = 50' DATE: 9-11-52

N

"ALBANENE" NO. 105M K&E CO., N.Y.
REG. U.S. PAT. OFF.

GEOLOGIC MAP OF B-ADIT, LOST CREEK TUNGSTEN
BEAVERHEAD COUNTY, MONTANA
(CONTRACT IDM - E 300)

Docket No. DMEA-2440



"ALDARENZ" No. 193M K&E CO., N.Y.
REG. U.S. PAT. OFF.

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

October 1, 1952

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Gentlemen:

Attached is Amendment No. 1 to Contract Idm-E300. This amendment permits crosscutting into the hanging wall of the tactite zone. If this meets with your approval will you kindly sign all the copies, retain one for your files and return the others together with the original to this office.

Amendment No. 2, which will increase the amount of the contract to permit additional crosscutting and drilling along the lines discussed in the field, has been prepared and this is being sent to Washington as it will require Washington approval.

Sincerely yours,

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

AEWeissenborn:dd
Enclosures

cc: USBM (2)
DMEA (2)
Myers

Copy retained 400
George C. Selfridge

Region II

Albany, Oregon
September 26, 1952

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 30 1952

Omer
2440

Re: Contract Idm - F-300
Minerals Engineering Company

Dear Mr. Chambers:

Reference is made to your letter dated September 10, 1952, calling attention to the error made in the June MF-104 payment to the Minerals Engineering Company, wherein $3,500.00 was paid and the correct amount should have been $4,350.00.

In reviewing the voucher it has been determined that in setting the amount of $3,500.00 an error was made in reading the figures appearing on the calculator. The first figure 4 was overlooked, as there were no exceptions taken to the amount claimed.

We will advise the contractor to submit a supplemental MF-104 for the month claiming the balance due of $850.00.

Sincerely yours,

W. Rulon Lee
Finance Officer

WAH:pfh
CC: R/F
Contract
Voucher

Region II

Albany, Oregon
September 26, 1952

Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Re: Contract Idm-1-300

Gentlemen:

Reference is made to your June MF-104, claiming the amount of $5,800.00.

Our attention has been called to the fact that in making payment of the Government's participation of 75% an error was made in approving payment of $3,500.00 whereas the correct amount should have been $4,350.00.

In order to receive the difference of $850.00, it will be necessary for you to prepare a supplemental June MF-104, listing the same totals as previously shown. In the body of the form fill in as follows:

Amount claimed	$ 5,800.00	75%	Due	$ 4,350.00
Amount approved	5,800.00	Paid		3,500.00
Balance due of 75%				$ 850.00

Upon receipt of above form (no others need be prepared) a voucher will be processed for the amount due.

Very truly yours,

W. Rulon Lee
Finance Officer

WAH:pfh
CC: R/F
Contract
Voucher
Volin
Wash. (2)

FILE COPY
SURNAME:

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

Jos Selfridge.

September 23, 1952

Memorandum

To: Administrator, DMEA

From: G. C. Selfridge

Subject: Inspection report
Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
Lost Creek deposit
Beaverhead County, Montana
Contract No. Idm-E-300

The Lost Creek deposit was visited on September 4 with Messrs. Weissenborn, Volin, McNabb, Quinlan, and Myers. Road work provided for in the contract had been completed. Stripping on company account was still in progress. The upper adit, the M, had been driven over 100 feet in length. It follows tactite on the footwall side of a marble. It had wandered a little too far into the footwall or to the west and a short crosscut to the hanging exposed a brown garnet zone and the marble. Examination of the assay map based on a channel sample cut across the face at two round intervals showed an average of approximately 0.20 percent WO_3. Muck samples are also taken for check purposes. That part of the adit near the face will be used as a turnout for the carryall and future advance will follow the marble more closely.

The lower adit, the B, had been driven for more than 300 feet in tactite on the footwall side of an aplite sill. Near the face the adit has encountered heavy ground containing fragments of the aplite. Timber is required. The adit will be turned westward away from the sill. Fluorescence in the face was good. The assay map shows a section of the adit averaging about 0.30 WO_3.

Work to date in the adits and on the surface shows the need for some diamond drilling from the adits. The following day a tentative program was discussed with the Field Team and Mr. Barwell while at Brown's Lake. Diamond drilling may save some of the more expensive crosscutting and will give a clearer picture of the deposit since seemingly the structure and metal content is not as uniform as first thought.

Work on the project is being done in first class fashion. The assay office was visited and the assaying method was explained by M. Shaw who is in charge. Molybdenum is comparatively high.

To date the Government has not sampled any of the work. Sampling was discussed with the Field Team and some check sampling will be done.

George C. Selfridge

Chief, Iron and Ferro-Alloy Division

GCSelfridge:ls
9/23/52

Copy to: Docket
Admn. Read. File
G. C. Selfridge

FILE COPY
SURNAME:

Alley
Chambers

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

SEP 10 1952

Mr. W. Rulon Lee
Finance Officer, Bureau of Mines
P. O. Box 492
Albany, Oregon

Re: Exploration Project
Contract Idm-R-300
Docket DMA-2440
Minerals Engineering Co.

Dear Mr. Lee:

Reference is made to the June MF-10b for Exploration Project Contract Idm-R-300, Docket DMA-2440, Minerals Engineering Company, Grand Junction, Colorado.

It is noted that the voucher was certified in the amount of $3,500.00; however, since Government participation is at the rate of 75% and the gross amount as billed by the contractor and approved by your office is $5,800.00, it would appear that the amount of $4,350.00 would be correct.

Please advise this office as to whether any exceptions were taken in order to arrive at the figure of $3,500.00.

Sincerely yours,

S.H.
9-10-52

Signed

Jay L. Chambers, Chief
Contract Administration and
Audit Division

AMAlley/ama
September 9, 1952

Copy to: Mails and Files
Admr. Reading File
Mr. Chambers

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

So. 157 Howard Street
Spokane 4, Washington

June 10, 1952

Memorandum

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

From: W. B. Myers, U. S. Geological Survey

Subject: The Lost Creek Tungsten Exploration Contract (Idm-E-300) Beaverhead County, Montana, Docket No. DMEA-2440.

The Lost Creek tungsten property was visited on June 2, 1952, in the company of John S. McNabb of the Bureau of Mines. The property was further examined on June 3 by the writer.

Progress

Very encouraging progress has been made by the Minerals Engineering operation in charge of M. N. Shaw. The main access road, dozed out last fall along the north side of Lost Creek canyon is in very good shape. A new road switchbacks up from the camp on Lost Creek and joins an older road above E cut, making all the cuts easily accessible. Seven small frame cabins and a cook house have been erected at the camp, and a waterline has been laid.

At B cut, the portal site for the lower exploration adit, the floor of the cut has been leveled, widened, and surfaced with decomposed quartz monzonite to form a working area about 50 feet wide. Overburden has been stripped from an area 60 feet wide above the cut and on June 3 the face at the portal site was about 13 feet high in fresh tactite and hornfels. Actual entry was due to be made within a few days of that date.

No new work has yet been done at the portal site of the upper exploration adit, near the east end of the lower bench of H cut, but a bulldozer was scheduled to start work there within several days after the writer's visit.

Additional Geologic Information

Further examination of the cuts, made to check the location of the portal sites, revealed geologic information not apparent during the snow-hampered examinations of last fall.

At the upper cut area careful inspection of fragmentary outcrops in the cut floor suggests that the intrusive contact is in part crosscutting and that mineralization occurs at several stratigraphic horizons. The accompanying diagrammatic sketch shows the type of conditions believed to be present. The inferred extent of mineralization and tactitization is purely arbitrary and has only been made to visualize the problems which may be expected in underground exploration. The present plans are to locate the portal of the adit at the level of the lower bench of H cut. It will start in the mineralized zone just west of a marble hanging wall and will attempt to parallel the marble. Information gained underground will determine the detailed course, but it is tentatively planned that the working will be turned to the southwest at a point about 250 feet from the portal, in order to crosscut the southwestern tactite fingers. If geologic conditions here are of the type diagrammed on the accompanying sketch, it is evident that much crosscutting and/or drilling will be necessary in order to appraise the deposit.

At the lower-cut area mineralized tactite has now been exposed by two very shallow intermediate cuts between C and D. Available evidence suggests that the mineralized zone exposed in C and D cuts is probably the same as that exposed in B cut at the portal site, however, the lack of outcrop exposures prevents a definite conclusion. More crosscutting or an underground drilling program may be advisable in order to fully prospect the area.

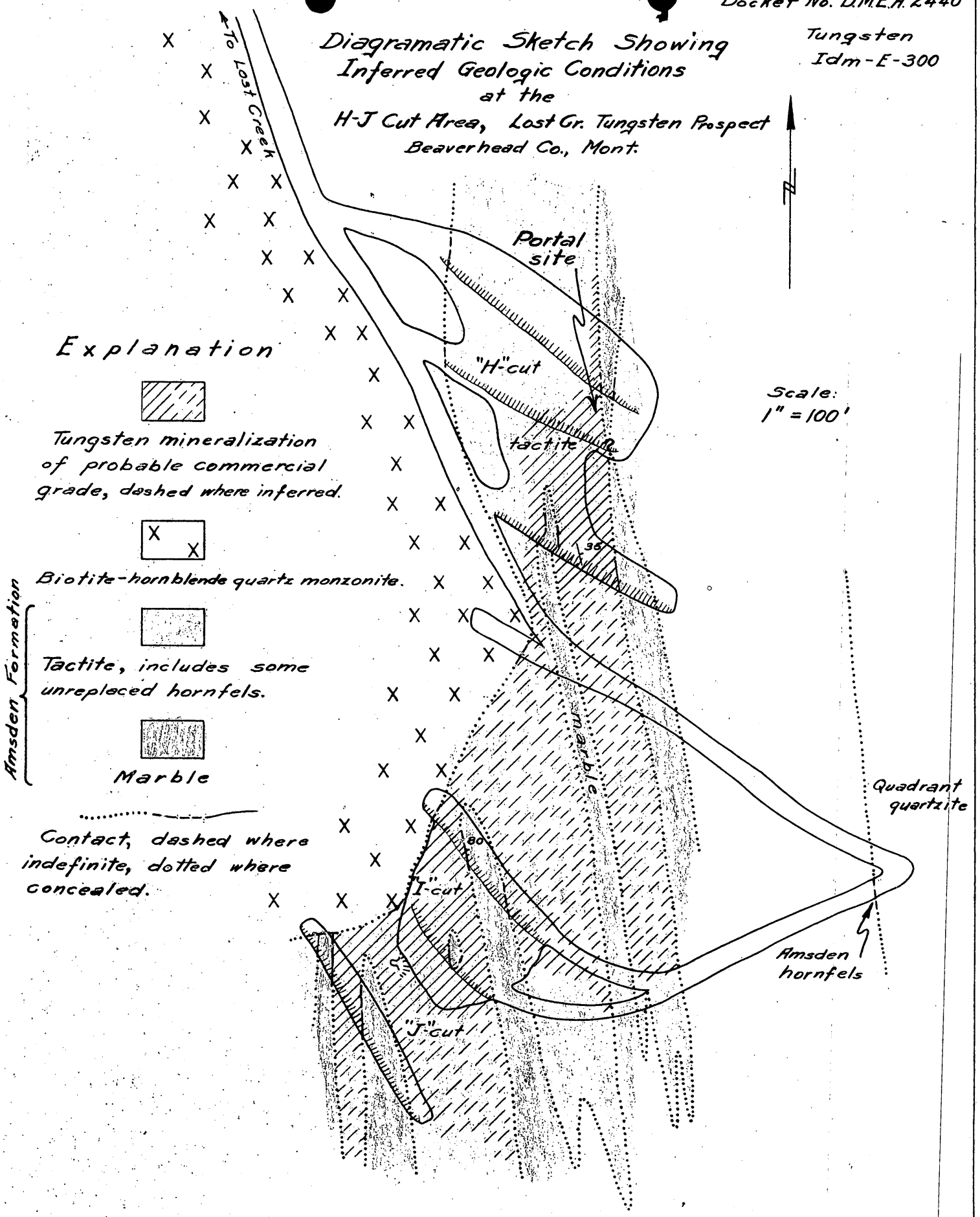
Examination of the E cut indicates that the mineralization is in tactite that probably represents a lower stratigraphic horizon than that in the C and D cuts. The tactite is believed to be a salient projecting northward into quartz monzonite, which is exposed to the east in the cut, as well as to the west. It seems probable that the quartz monzonite was emplaced in the south block of a steep fault trending about N 50 W. This fault, mapped during district study, lies just north of the east end of E cut, and clearly offsets the Quadrant quartzite in the south block about 150 feet to the east. The fault appears to dip 70-75 degrees to the southwest. On the basis of the above assumption the band of mineralization shown on the Minerals Engineering map might well be interrupted from a point just south of the D cut to an indefinite point a short distance north of E cut. On the basis of present information the lower adit might be expected to encounter quartz monzonite, emplaced in the south block of the fault, at about 1,150 feet from the portal. In any case the present contract footage would not allow the adit to extend as far as the E cut showing.

cc: Dwight Lemmon
DMEA
USBM
USGS (SRO)

Docket No. D.M.E.A. 2440

Tungsten
Idm-E-300

Diagramatic Sketch Showing Inferred Geologic Conditions at the H-J Cut Area, Lost Cr. Tungsten Prospect Beaverhead Co., Mont.



June 6, 1952

OFFICE OF THE ADMINISTRATOR

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

So. 157 Howard Street
Spokane 4, Washington

May 5, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

MAY 8 1952

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

Re: Docket No. DMEA 2440, the Lost Creek Mine, Beaverhead County, Montana.

Dear Sir:

Enclosed are the original and three copies of Exploration Project Contract Idm-E300, Minerals Engineering Company, Lost Creek Mine, Beaverhead County, Montana. These copies have been signed by the operator. One copy of the contract was retained by the operator and one copy for the Region II files.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures.

cc: USBM

2361
2440

MINERALS ENGINEERING COMPANY

GRAND JUNCTION, COLORADO

P. O. BOX 957

April 19, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 21 1952

Mr. G. C. Selfridge, Chief
Iron & Ferro-Alloy Division
U. S. Departmentof the Interior
Defense Minerals Administration
Washington 25, D. C.

Dear Mr. Selfridge:

Thank you for your letter of April 14th. In accordance with my telephone conversation, I would appreciate it if you would sent documents to me by registered mail.

Thanking you in advance for this courtesy, I am,

Sincerely yours,

Blair Burwell

Blair Burwell

rol/BB

Mailed to Mr. Burwell
4/18/52

Dnen 2361
2010

400

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

April 18, 1952

Special Delivery

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Dear Mr. Burwell:

I am sending to you herewith, pursuant to your request, the following documents which you left with me:

Option to purchase

Mining deed dated February 28, 1952

Mining deed dated March 11, 1952

Abstract of the record title of land in Beaverhead County, Montana, of Southern Montana Abstract and Title Company

Sincerely yours,

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Enclosures

JLHofflund/emc/bjl

Copy to: Mails & Files
J. L. Hofflund
G. C. Selfridge
Chron.

Minerals Engineering = Lost Creek. DMEA 2440

Sugar Loaf Quartz Lode Mining Claims 1-29 Inc.
Utopia (inactive) M-B. Beaverhead Co, Mont.
W & Mo Work will be on South side of Lost Creek.
CDF ore body, lower HIJ ore body, upper

Samples on CDE ore body are fine and Walker. Two for sample assayed .22 WO_3 Albany, .12 WO_3 Union, away extended unless on float & averaged between .22 & .34 Ave 3 feet = .25% WO_3
E-ent & range up assay problem. Looks like .16 ave.
D- " " " "
Composite CDE .17 & .22 = 0.20 Ave
Union Pac
OK

Adit. recently off level +1000 ft S. Base Range [illegible] adjacent ground?

Adit. recently C-1 ent +1200' S.
please x-cut & KeW at 100-150' in formate T.

Adits 8'x9' = 72 estimated cost $35.00/ft.
3,000 ft drilling HIJ body
3,000 ft " CDE "

$8,000 for widening present Bulldozer trail, [illegible] want this to touch ore for Butte

1000 x 35.00 = $35,000
1200 x 35.00 = 42,000
$77,000

12,500
77,000
45,500 = 1,300 ft
35
for x cuts

+200 x cuts = 65' each

P.D. 75 yd

3 months to start, 12 months to complete.

OVER

150 7 3

MF100

Granite NW of Navy 300 ft x-cut map

CDF body 262½ feet under 1100' ±2 tons/ft 2000

HI " 35 " " 600' ±3 tons/ft 2000

350 ft x-cut map 4000 tons

Memo March 17, 1953

Big sample 0.22% by Bur,

may run between .2 & .3% WO_3

H.I area may be higher grade than CD

143,000 tons, 50, average ty of .20% ore.

Figures derived est. 8.50 45.00

Where will adits go? Will at be on ore? Is organic length of x-cut. Will they go out of ore zone. No. of drill holes, length, ~~alternate~~? Why drill? If drill on surface, adits contingent on drilling. Go off property?

FILE COPY
SURNAME:

Selfridge
Gulam

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

APR 18 1952

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

Re: Docket No. DMEA 2440 - Tungsten
Minerals Engineering Company
The Lost Creek Mine
Beaverhead County, Montana

Dear Mr. Weissenborn:

We are enclosing the original and five copies of the above-reference exploration contract signed by this office for the Government, together with Exhibit "A", two pages, and two maps.

The applicant estimated that it would cost $35.00 per foot to drive the adits and crosscuts less pipe and the services and installations he will carry on company account. No reduction was made in the price estimated for driving the oversize workings, and in lieu of this the items for pipe were eliminated.

The footage item on crosscutting was reduced as it was felt that at the present time two crosscuts to the granite in each of the ore zones would give sufficient information regarding their tungsten content.

The requested diamond drilling was not granted at this time as it was felt that more information concerning the distribution of the scheelite near the surface should be obtained before drilling, and because the drilling in this case would be done largely to block out additional reserves.

The above changes have reduced the estimated cost of the exploration project from $177,370 to $111,280.

CL 4/18

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
~~Acting Administrator~~ (HB)
Defense Minerals Exploration
Administration

J. H. Hedges (HB)
For Bureau of Mines

DM Lemmon
For Geological Survey (HB)

Enclosures

GCSelfridge:ls 4/14/52
cc: Docket
Admn. Reading File
Field Team, Region 2
G. C. Selfridge
Operating Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM

400

APR 14 1952

FILE COPY
SURNAME:

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

Selfridge

April 14, 1952

Mr. Blair Burwell, President
Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

Re: Docket No. DMEA 2440 - Tungsten
The Lost Creek Mine
Beaverhead County, Montana

Dear Mr. Burwell:

Will you please advise us in what manner you wish the documents handled which you left with Mr. Hofflund, Chief Counsel, when you were here? We can either send them to you by registered mail or hold them until such time as you may come to Washington.

Sincerely yours,

Signed E.P.L.

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls

4/11/52

cc: Admn. Reading File
Docket
Mr. G. C. Selfridge
Mr. J. L. Hofflund

FILE COPY
SURNAME:

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

Chief Counsel, D.M.E.A.

April 7, 1952

Selfridge
Chambers

Iron and Ferro-Alloy Division, D.M.E.A.

Review and preparation of Exploration Project Contract:
Docket No. DMEA 2440
Minerals Engineering Company
The Lost Creek Mine
Beaverhead County, Montana

Attached hereto is a rough draft of a proposed Exploration Project Contract, which is accompanied by the subject docket.

This is the first of the short form contracts prepared by the Division. Since the Operator is part-owner and lessee, we did not know just how to handle Article 2(b). I believe that Mr. Burwell, the applicant, left an abstract on the status of the property with you.

N.S
R&R

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Attachment

GCSelfridge:ls

CC: Admn. Reading File
Docket
G. C. Selfridge
J. L. Chambers
J. L. Hofflund

IN REPLY REFER TO:

G-MD-DML

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

April 1, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Exploration application $177,370.00 DMEA 2440 - Tungsten Minerals Engineering Co.
P.O. Box 957
Grand Junction, Colorado

Property: Sugar Loaf Quartz Lode mining claims Nos. 1-29
Lost Creek Canyon
Beaverhead County, Montana

Proposal: It is proposed to drive two adits southward along the contact zone, one from the H Cut for a distance of 1,000 feet, the other from the C-1 Cut for a distance of 1,200 feet. Crosscuts will be run at intervals of 100 to 150 feet. These workings will apparently reach depths of about 300 feet beneath the outcrop, and will leave unexplored about 1,800 feet between the adits. In addition, 6,000 feet of diamond drilling is proposed, apparently to test the contact below the adits. The costs are summarized as follows:

Adits with crosscuts; 3,500 feet at $35 per foot	$122,500
Diamond drilling 6,000 feet at $7.50 per foot	45,000
Road improvement	8,000
Pipe	1,870
	$177,370

Comment: A memorandum from A. E. Weissenborn, dated March 17, 1952, reports a conference March 11 between Mr. Burwell and the Field Team (Weissenborn, Myers, Volin, and Bardill). This memorandum discusses the results of check assaying, which showed that the assays by Lewis and Walker for Minerals Engineering were much too high. It is concluded that the Lost Creek deposits may contain a large tonnage of material averaging between 0.2 and 0.3 percent of WO_3. Data is insufficient to permit any precise estimate of grade.

Burwell's estimate that 90 percent of the WO_3 can be recovered in low-grade concentrates means that the tailings will contain only 0.02 percent, a figure that appears optimistic.

The application states that 6,000 feet of diamond drilling are required to test the ore 100 feet beneath the adit levels. No plan and sections are presented showing the proposed drilling. If the drifts are run first, the drilling might well be eliminated. Determination of content of WO_3 and distribution of ore shoots are more important than determination of extent of tactite at depth. Therefore the drifting probably makes more sense than drilling. The surface profile shows that additional adits are feasible to tap the ore at greater depth.

Conclusion

The Lost Creek deposits appear to be of marginal grade, but have not been sufficiently exposed and sampled to prove whether they could be mined profitably. The most satisfactory way to test them would be by mill runs on material taken from surface cuts, followed by adits beneath the better exposures. After ore shoots are located at the surface and in shallow adits, diamond drilling might then be used advantageously to follow the ore shoots downward.

Recommendation

It is recommended that favorable consideration be given to the proposal to drift and crosscut 3,500 feet in the tactite, and that the requested diamond drilling be denied until more information is obtained about distribution of scheelite near the surface. The drifts should be run in the hanging wall side of the tactite, when the best mineralization is present in surface exposures, thus testing continuity of ore.

If diamond drilling should be approved, holes from the surface on the east side of the tactite would be more effective than underground holes from crosscuts to the west.

DM Lemmon

MINERALS ENGINEERING COMPANY

GRAND JUNCTION, COLORADO

P. O. BOX 957

March 25, 1952

Dmea 2440 —
Sungplen

Mr. G. C. Selfridge, Acting Chief
Iron & Ferro-Alloy Division
U. S. Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Dear Mr. Selfridge:

We are enclosing herewith Form MF-100 to be included with our Application for Exploration Loan on the Sugar Loaf mining claims on Lost Creek.

Yours very truly,

MINERALS ENGINEERING COMPANY

Blair Burwell

Blair Burwell
President

BB/rol

Encl.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 - 1952

EXPLORATION

Subject: DMEA-2440
Re: Exploration Loan
Lost Creek Property
March 24, 1952

Mr. Blair Burwell
Minerals Engineering Company
P. O. Box 957
Grand Junction, Colorado

My dear Mr. Burwell:

This will acknowledge receipt of your application dated March 12, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2440 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2440 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

DMEA-2440

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 24 1952

March 19, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region II

Subject: Application of Minerals Engineering Company for exploration of the Lost Creek tungsten deposit, Beaverhead Co., Montana.

Enclosed are original and three copies of the subject application.

The exploration proposed is in conformity with the plans discussed in a conference between Mr. Blair Burwell and Field Team members in Spokane on March 11. A complete report of this conference is contained in a memorandum from the Executive Officer, DMEA Field Team, Region II, forwarded to you under date of March 17, 1952.

The Field Team believes that the program will accomplish its purpose of determining the grade of the Lost Creek deposit at minimum cost and believes that a large tonnage of material averaging somewhere between 0.20 percent and 0.30 percent WO_3 can be developed. It believes that diamond drilling can be used to determine the extension of the deposit in depth, but that the grade of the deposit can be determined with assurance only by openings such as will be provided by the drifting and crosscutting proposed. Exact determination of the grade is essential because the grade of the material is low and a difference in average grade of only a few hundreths of a percent WO_3 is extremely significant. The over-all cost of the project is high, but is commensurate with the potential size of the deposit.

On the assumption that the DMEA will accept Mr. Burwell's figures on cut-off grade, the Field Team recommends favorable action.

By DMEA Field Team, Region II

Reviewed by
DMEA OPERATING COMMITTEE

(date)

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

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

Enclosures
cc: USBM, Spokane

MEMO - Field Team

OFFICE OF THE ADMINISTRATOR

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

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 20 1952

March 17, 1952

AR-123
Dmea ~~2364~~ 2440

Memorandum

To: Chairman, Operating Committee, DMEA, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Conference with Mr. Blair Burwell, Minerals Engineering Company, Re: Beaverhead County, Montana; tungsten properties of that company.

On March 11, 1952, a conference was held in Spokane with Mr. Blair Burwell representing the Minerals Engineering Company of Grand Junction, Colorado, relative to applications for exploration contracts and for access roads submitted by the above-mentioned company concerning its properties in Beaverhead County, Montana. Those attending representing the Government were M. E. Volin and J. D. Bardill of the U. S. Bureau of Mines, and W. Bradley Myers and A. E. Weissenborn of the U. S. Geological Survey. Most of the day was devoted to a discussion of the various problems involved.

The first discussion dealt with the Lost Creek deposit, concerning which the Field Team had recommended denial of an Access Road application, but had suggested that it would support an exploration program. Since submitting his Access Road application, Mr. Burwell had done a considerable amount of checking of assays and had prepared new maps showing these results. A set of these maps ~~are~~ is attached. Mr. Burwell had also prepared a synthetic sample, which was sent to the Bureau of Mines laboratory at Albany, Oregon, and several commercial laboratories, for analysis. On comparison of the results, it was found that the Bureau of Mines analyses of 0.19 percent WO_3, which had just been received by Mr. Volin, was precisely the calculated amount of WO_3 in the sample.

Work by the Minerals Engineering Company on the Lost Creek deposit has shown two main areas with indications of tungsten mineralization in interesting amounts. One of these in the vicinity of the C-D-E trenches, has an area approximately 1,100 feet long by 26½ feet wide. (See attached map.) The other is in the vicinity of the H-I trench and is approximately 600 feet long by 35 feet wide. Insufficient

Reviewed by
DMEA OPERATING COMMITTEE
3-21-52
(HB) (date)

work there has been done to demonstrate the continuity between the trenches or possible extension beyond the trenches.

Minerals Engineering Company had done considerable checking of the assays in the Lost Creek deposit. In addition the samples taken by W. B. Myers of the U. S. Geological Survey and assayed by Union Assay Company of Salt Lake City have been checked by the Bureau of Mines laboratory. A comparison of the assay results is given below:

U. S. Geological Survey Character Sample				Minerals Engineering Co. (not strictly comparable but sampled in approximately same locality)	
NO.		Union Assay Co. Percent WO_3	USBM Albany	Orig.	Check
9	C cut, Upper bench 21 ft. of H.W. portion	0.18	0.26	0.51, 0.37 } 0.44	0.21, 0.37 } 0.29
10	D cut 15 ft. across H.W.	0.10	0.14	0.41	0.22
11	D cut 15 ft. across F.W. part	0.01*	0.08	0.35	0.28

* Previously recognized as a low assay.

A sample from a 2-ton composite of crushed rock representing 75 to 100 tons of material from C-D-E cut was collected by Minerals Engineering Company. A split assayed by the Bureau of Mines Albany laboratory showed 0.22 percent WO_3; checking exactly Minerals Engineering Company's value from their own assayer.

Results of sampling and assaying in H-I cut are as follows:

12	H cut, 9 ft. garnet rock on H.W. portion only.	0.25	0.31	1/	1/
13	H cut, 15 ft. on H.W., including 9 ft. sampled in 12.	0.08	0.14	0.25 2/	
14	J cut, 48½ ft. sample along face of dozer cut.	0.17	0.23	3/	

1/ No comparable sample
2/ 32 ft. width at approximately same locality as No. 13.
3/ No samples from Minerals Engineering Company

The results of the check assaying have shown a slight increase in the values reported for some of the samples taken by Myers, and a marked decrease in the values of some of the samples taken by Minerals Engineering Company. (Compare also the new maps with the maps submitted by Minerals Engineering Company in support of its Lost Creek Access Road application which shows the original assay.) The bulk sample from C-D-E cuts averaging .22 percent WO_3 is probably significant. Information available therefore suggests that at the Lost Creek vicinity a large tonnage of material may exist which may average somewhere between .2 and .3 percent WO_3. Although sampling is inadequate to make a definite statement, the general results and the general appearance indicate that the H-I area may be somewhat higher grade than the C-D-E trench area. Mr. Burwell's sampling results are slightly more optimistic for both areas than ours, but sampling results are in the same general range. It is obvious that data are insufficient to permit any precise estimate of grade.

There followed a discussion concerning the minimum grade of tungsten that could be mined. Mr. Burwell maintains that in an ore body such as the H-I ore body, the following costs would be reasonable with a 200-ton per day production:

Freight (from siding at Navy (Glen) to Butte, Montana)	$1.21 per ton
Switching (U.P. to Milwaukee)	.29
Milling	3.75
Hauling (mine to siding in Navy (Glen)	.75
Direct Mining	1.15
Royalty	.35
Contingencies	1.00
Total Direct Cost	$8.50

Assuming a 90 percent recovery in a low-grade concentrate and a market price of $49.00 a unit of WO_3, Mr. Burwell figures that 0.20 percent WO_3 would be the minimum grade that would be minable. ($\frac{8.50}{0.20 \times 0.90}$ = $47.20 per unit compared to a market price of $49.00 a unit.) Mr. Burwell further points out that the Nevada-Massachusetts mine in Nevada is mined as an open-pit with a cut-off of .2 percent WO_3. The above cut-off of 0.20 percent WO_3 might be reduced to about 0.15 percent WO_3 in Mr. Burwell's opinion if the property should in the future go to a production of around 700 tons a day and mill its ore on the property.

As stated previously, the Field Team is in agreement that there is a possibility of a large tonnage in the Lost Creek site of material ranging between .2 and .3 percent WO_3, and that if material of this grade is worth serious consideration, then there is undoubtedly a good exploration project on the Lost Creek deposit. Mr. Burwell informally proposed a project to test both the C-D-E, and H-I deposits by tunnels and appropriate crosscuts and by diamond drilling. Inasmuch as this deposit, if it is any good at all, must be a large tonnage one, obviously the over-all cost of exploration will be fairly high. After some discussion with Mr. Burwell, the Field Team agreed that costs of $125,000 for drifting and crosscutting in two adits, one on the C-D-E, and one on the H-I deposit, $45,000 for drilling, and $8,000 for road improvements, or a total of $178,000 would not be too far out of line as a tentative estimate of the cost of the project. The Field Team agreed that it would be willing to seriously consider a project of this magnitude if presented by the Minerals Engineering Company.

The matter of an access road was discussed with Mr. Burwell and it was explained that inasmuch as the deposit is still in its preliminary stages of development it would not qualify for an access road under present regulations. It was further pointed out to Mr. Burwell that if an access road were built it probably would be of a higher quality than what is required at this time for purposes of exploration, but that if the property actually came into production an application could then be put in for an access road with hope of favorable action. It was therefore suggested that what was required was a road merely good enough for exploration and that the road improvement might be made a part of the exploration contract. Mr. Burwell agreed with this point of view and estimated that about $8,000 would suffice for road improvement.

There followed some discussion of Mr. Burwell's plans, which although concerned with matters which are outside the province of the Field Team, are of interest to us and undoubtedly will be of interest to the DMEA as well. Mr. Burwell expects to make an arrangement with the Domestic Manganese mill at Butte to treat 400 tons of ore a day, 200 of which will come from the Minerals Engineering Company deposits, and the remainder from the Brown's Lake deposits of the American Alloys Company and other sources. The mill would produce a 6 to 15 percent WO_3 concentrate, which would be treated in a chemical plant to be erected on the Cole property in Butte next to the Domestic Manganese mill. Mr. Burwell and his associates will build the chemical plant at their own expense, but, presumably to obtain operating funds, they plan to ask the government to buy 100,000 units of low-grade concentrate at $49.00 a unit of contained WO_3. As soon as the chemical

plant is in operation, they then desire to make an arrangement with the Government to convert the low-grade concentrate to a high-grade product, which will be sold at $65.00 a unit. As stated above, these matters must be settled with DMPA, but are of interest in relation to the proposed exploration.

Following this discussion the matter of the Greenstone deposit was taken up. It will be recalled that on this deposit there were very wide discrepancies in assays made by various assayers, including the Bureau of Mines lab, with assays made by Lewis & Walker in Butte. Assays of samples taken by W. B. Myers likewise showed only a fraction of the tungsten assay of presumably comparable company samples assayed by Lewis & Walker. Mr. Burwell did not argue strongly for the validity of the Lewis & Walker assays, which had shown samples running around .35 to .45 percent WO_3, but appeared to have considerable faith in composites of samples of wagon drill holes 1, 2, 3, and 4, from the Greenstone area, which assayed 0.298 percent WO_3 by Lewis & Walker. A duplicate pulp of this sample sent to the Albany lab of the Bureau of Mines by Mr. Burwell assayed .12 percent WO_3. After considerable discussion, Mr. Burwell appeared to tacitly admit that the presently explored part of the Greenstone deposit was probably too low-grade to be of immediate interest. He did point out, however, that assays of float from the extreme northern part of the deposit, where exposures are almost lacking, gave some rather high results including assays made by Union Assay Company. Myers of the Geological Survey pointed out his belief that these assays may have come from float which had been brought down the slope from the north. Myers was pessimistic regarding the presence of appreciable quantities of tungsten in the bed rock in the southern part of the deposit. After considerable discussion, it was agreed that present information was inconclusive on this point and that therefore a limited amount of work could properly be done under the term "exploration", even though the Field Team did not regard the chances of success too favorably. It was agreed that a minimum of three and a maximum of five short diamond drill holes would probably be adequate to determine whether further work should be done. It was recognized that it would be difficult to let a contract for a small amount of drilling, but it was suggested that even though this would have to be considered a different project from the Lost Creek deposit, that perhaps an arrangement could be made with the drilling contractor to drill both of the deposits on one drilling contract. This would permit the abandonment of the Greenstone deposit after a small footage had been drilled if the results were not favorable.

Inasmuch as part of the discussion concerns access roads, an extra copy of this memo plus maps is included for forwarding to DMPA.

Enclosures

cc: DMPA, Wash.
USBM, Spokane

A. E. Weissenborn

Mr. Mittendorf

Resume' Minerals Engineering Co. Docket 2440 Re: Termination Agreement and Royalty Payment.

By A. D. McM

	Geological Survey	Bureau of Mines	DMEA Washington	Field Team	Minerals Engineering Co.	
12-10-54			←	←		No valid basis for certification.
12-23-54	→	→	→			Concurs with F.T. (E.L. Newcomb, Geol.).
1-10-55		→	→			Geehan recommends certification as Govt entitled to royalty on production.
3-11-55			→	→		Termination Agreement with "pseudo" sent to F.T.
4-5-55				→	→	T. Agreement forwarded to Burwell.
4-12-55				←	←	Burwell proposes $28/unit ore value for royalty computation.
4-21-55				→	→	F.T. advises $28 proposal sent to Wash.
4-26-55			←	←		Burwell's proposal sent with comments. F.T. does not agree with $28 value.
5-9-55			→	→		Op. Com. asks F.T. to obtain settlement sheets then make further recommendations.
6-8-55		→	→	→		Bardill's report suggesting "smelter returns" basis for establishing value of mill concentrates.
6-23-55			→	→		Op. Com. believes royalty should be calculated on value of product sold. (synthetic scheelite)
7-25-55			←	←		Clarifies Bardill's recommendation in which he was referring to low-grade concentrates.
8-17-55			→	→		Op. Com. accepts Bardill's method for royalty settlement.
9-9-55				→	→	F.T. submits Bardill's method for Burwell's consideration.
10-18-55		→	→			Bardill verifies Lost Creek Mine ore milled separately.
10-24-55				←	←	Holmes (Bus. Mgr.) makes counter proposal. Converts receipts for concts. back to value per ton of ore ($7.13) and uses 1½% royalty rate.
10-28-55				→	→	F.T. states royalty must be 5%; notes value of concts. @ 107,735.84 & requests royalty of $5,386.79 supported by detailed data.

	Geological Survey	Bureau of Mines	DMEA	Field Team	Minerals Engineering Company	
10-31-55			→			Op. Com. requests F.T. to ask Operator to return proposed Termination Agreement.
11-1-55			←			F.T. recommends certifying but thinks ore submarginal.
11-4-55				→		F.T. requests return of T. Agreement.
11-16-55				←		Burwell recalculates royalty on ore mined showing $9.05 value/ton on concentrate receipts of $136,640.51; royalty @ 2½% or $3,416.02.
11-18-55				→		F.T. points out Annex II requires royalty on form of production sold and requests royalty of $6,832.03 or 5% of $136,640.51.
12-28-55				→		F.T. again requests return of T. Agreement.
1-19-56				←		Burwell states DMEA interpretation of royalty due is unreasonable + arbitrary + caused closing of mining operations - small amount of exploration work continuing.
1-27-56			←			F.T. refers royalty matter to Washington.
1-31-56				→		F.T. advises Burwell of referral + again asks for return of Term. Agreement.
2-1-56			←			F.T. feels Burwell objects to Annex II of Term. Agr. but does not say so; using DMEA as excuse to get out of other obligations ("Whipping Boy"). F.T. maintained certification not valid but impelled to recommend because of sub-marginal production.
2-6-56				←		Burwell advises F.T. of planned visit to Washington
2-8-56			→			Op. Com. advised Cont. Adm. + Audit Div. requested Brading - Denver - to audit Operator's royalty records.

DMEA DOCKET NO. 2440

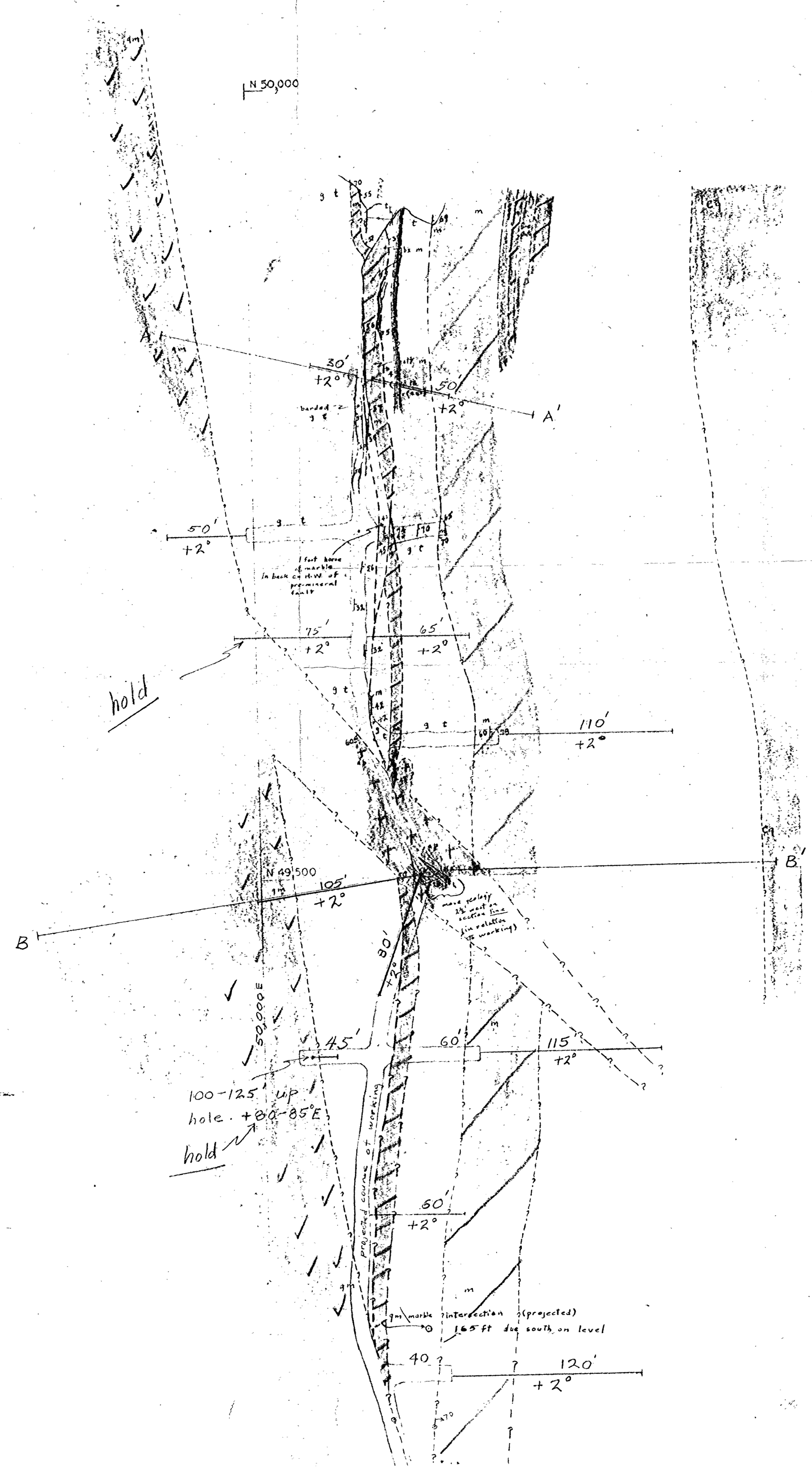
PROPOSED DIAMOND DRILLING PROGRAM
AT
H ADIT, LOST CREEK

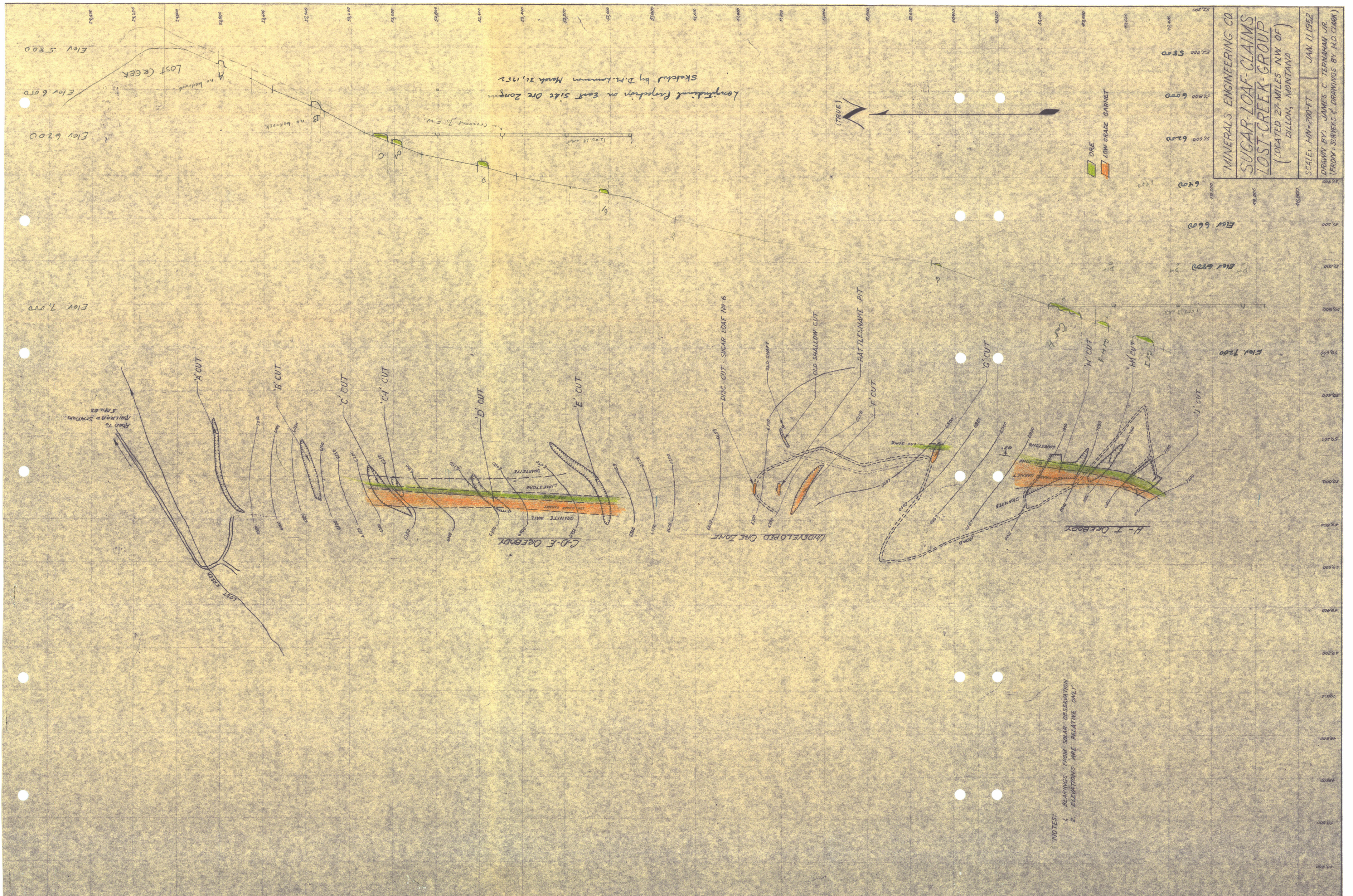
Scale: 1" = 50'

April, 1953

EXPLANATION

ap	Aplite
peg	Pegmatite
qm	Quartz monzonite
t	Undifferentiated tactite
g t	Garnet-rich tactite
gn t	Green tactite
m	Marble
shatt m	Shattered marble
bx m	Brecciated marble
s m	Sandy marble
h	Hornfels
gn h	Green hornfels
sil h	Siliceous hornfels
qtzite	Quartzite
Cq	Quadrant quartzite




MINERALS ENGINEERING CO.
SUGAR-LOAF-CLAIMS
LOST-CREEK-GROUP
(LOCATED 27 MILES NW OF DILLON, MONTANA)
SCALE: HN=200'FT
JAN. 11, 1952
DRAWN BY: JAMES C. TERNAHAN JR.
(FROM SURVEYS & DRAWINGS BY H.D. CLARK)
ORE
LOW GRADE GARNET
(TRUE)
Elev. 7200
Elev. 7,000
Elev. 6800
Elev. 6600
Elev. 6400
Elev. 6200
Elev. 6000
Elev. 5800
LOST CREEK
Road To Railroad Station 5 Miles
'A' CUT
'B' CUT
'C' CUT
'C1' CUT
'D' CUT
'E' CUT
DISC. CUT SUGAR LOAF No 6
OLD SHAFT
OLD SHALLOW CUT
RATTLESNAKE PIT
'F' CUT
'G' CUT
'H' CUT
'H1' CUT
'I' CUT
C-D-E OREBODY
GRANITE WALL
ORE ZONE GARNET
LIMESTONE
QUARTZITE
UNDEVELOPED ORE ZONE
ORE ZONE
H-I OREBODY
GRANITE
GARNET
LIMESTONE
ORE ZONE
Horizontal Projection on East Side Ore Zone Scaled by D.M. Lemmon March 31, 1951
NOTES:
1. BEARINGS FROM SOLAR OBSERVATION
2. ELEVATIONS ARE RELATIVE ONLY