UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

~~Terminated~~ (or cancelled) without certification. DMEA No. 148

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

- ✓ Certificate of Audit (Final).
- Interim Audit(s).
- Report of Review.
- ✓ Termination Notice or Agreement.
- Recision Notice.
- ✓ Assignment of Contract.
- ✓ Contract Amendments (latest on top).
- Contract with all exhibits and annexes.
- Owner's Consent to Lien.
- ✓ Subordination Agreement.
- ✓ Leases and assignments of leases.
- ✓ Application and attachments.
- Schedule of Collections.
- ✓ Operator's monthly reports and all attachments (latest on top).

Right Side

- ✓ Project summary.
- Work completed analysis.
- All other material is filed in chronological order with correspondence including the following reports as checked:
  - Final Field Team Report. (Tab)
  - Operator's Final Report.
  - Interim Reports.
  - ✓ On-site Exam Report(s). (Tab)
  - Settlement Sheets.

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

Maps in folder number _____

Operator's Monthly Reports in folder number _____

JZM
Reviewer's Initials

7973

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Audit Certificate

I have examined the records and transactions of

American Alloy Metals, Inc.
401 Symons Building
Spokane, Washington

WSM

pertaining to Exploration Project Contracts No. Idm-E105, Docket No. 148, for the period of August 1, 1951 to November 15, 1951, and No. Idm-E127, Docket No. 1951, for the period of August 24, 1951 to November 15, 1951.

These two contracts, for purposes of accounting, terminating, and winding up, have been treated as one contract.

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

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

Total cost as billed by contractor		$33,196.08
Exceptions:		
Prior to this audit	$ 100.00	
During this audit	2,257.91	2,357.91
Total accepted cost		$30,838.17

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 Twenty three thousand one hundred twenty eight and 63/100 Dollars,

$23,128.63

is valid and proper.

This certificate is issued on the provision 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.

January 18, 1953

Robert M. Hull
Robert M. Hull, Auditor

I INTRODUCTION

On November 25, 26, 27, and 28, 1952, a final audit was made of the records and accounts of operations of Browns Lake Tungsten, a partnership composed of E. A. Julian, E. L. Cleveland, and Frank Eichelberger, pertaining to Contract Idm-E105, Docket No. DMA 148X, dated August 1, 1951, and American Alloy Metals, Inc., pertaining to Contract Idm-E127, Docket No. DMA 1951X, dated August 24, 1951. These contracts were subsequently combined by an agreement signed by the American Alloy Metals, Inc. and the Government, dated October 1, 1952, into one contract for the purpose of accounting, terminating, winding up the project, and to resolve any confusion in the descriptions of overlying claims.

The exploration project is located in the Vipond Mining District, Beaverhead County, Montana. The accounting records pertaining to the project are located at 401 Symons Building, Spokane, Washington, and the cancelled bank checks are maintained in the San Francisco office of the American Alloy Metals, Inc. at One Montgomery Street, Suite 1225.

During the course of the audit the project engineer, Mr. N. J. Roby, was consulted and his cooperation and assistance greatly facilitated the audit. Mr. Charles A. Turner, DMEA Auditor, collaborated in this audit.

II GENERAL INFORMATION ON RECORDS

The accounting records for the exploration project consist of copies of the Operator's monthly work sheets supported with purchase

invoices or suppliers' statements, receipts for monies received for services performed, and a payroll covering labor from August 1, 1951 through November 9, 1951.

A complete analysis of all the cancelled bank checks pertaining to this project was made by Mr. George Mavor, DMEA Auditor, Region III, San Francisco, Calif. This analysis was forwarded to the Spokane DMEA office.

At the time of the audit the Operator's MF-104 for the month of November 1951 had not been processed for payment because of the pending termination of the project.

III SCOPE OF AUDIT AND FINDINGS

The audit consisted of a detailed examination of all accounting data available to ascertain the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of November 1951. The extent of the audit and the findings under each of the "Items of Cost" follow:

(1) Independent Contracts

Under the terms of the subcontract effective August 1, 1951 for Exploration Contract Idm-E105 and effective August 24, 1951 for Exploration Contract Idm-E127, both approved by the Government on December 14, 1951, the subcontractor agreed to do the diamond drill program, consisting of drilling a minimum of 3000 linear feet with holes ranging from 250 feet to 500 feet in depth, at the following rate:

o to 500 feet per hole at $7.75 per foot

This quotation provided for the furnishing by the subcontractor of all material, labor, equipment, water line, pumping plants, and diamond bits necessary to complete the holes.

An additional charge of $3.50 per foot was provided in the event of the necessity for reaming and landing the casing or placing cement and redrilling the cemented section of the hole.

The monthly statements of charges rendered by the subcontractor were checked and computed for accuracy.

(2) Labor and Supervision

The charges for "labor" were checked against the payroll records maintained by R. S. McClintock, West 416-418 Second Avenue, Spokane 8, Washington, the subcontractor performing the diamond drilling. One payroll covering both projects was submitted for the period of August 1, 1951 through November 9, 1951, in the amount of $1,908.10. This payroll did not include any supervision.

Labor Claimed by Contractor

August 1951 - Idm-E105 Included in Item #11, Incidentals	$ 587.81
October 1951 - Idm-E127 Item #4, Labor	479.25
November 1951 Item #4, Labor	1,908.19
	$2,975.25

Not Allowed by Audit

August Item - Included in Nov. claim	$587.81	
October Item - Included in Nov. claim	479.25	1,067.06
		$1,908.19

The item of $1,908.19 claimed in November 1951 was the payroll for the entire period for both contracts; hence, the charges in August and October were duplicated in the November charge and were properly disallowed by the audit.

The following sums were claimed for supervision and were paid directly to Mr. J. W. Melrose, project engineer, by checks drawn on the First National Bank of Dillon, Montana.

Contract Idm-E105		Contract Idm-E127	
August 1-31, 1951	$600.00	*August 22-Sept 30, 1951	$800.00
September	600.00		
October	200.00	October	400.00
November	100.00	November	100.00
Total	$1500.00	Total	$1300.00

*Contract Idm-E127 effective date August 24, 1951

The cancelled checks revealed the following sums were paid to Mr. Melrose.

Check No.	Date	Amount
104	9-6-51	$ 600.00
119	10-4-51	800.00
143	11-1-51	600.00
161	12-4-51	600.00
179	1-14-52	600.00
Total		$3200.00

Total Supervision charged to DMEA	$2,800.00
Total Received by Mr. Melrose	3,200.00

The project engineer, Mr. J. W. Melrose, supervised and received a salary for his services from both projects which were running concurrently:

Contract Idm-E105	August 1, 1951 to November 15, 1951
Contract Idm-E127	August 24, 1951 to November 15, 1951

The audit allows the sum of $2,100.00 for supervision of the contracts as follows:

August 1951	$600.00
September 1951	600.00
October 1951	600.00
November 1-15	300.00
	$2100.00

The amount claimed on Form MF-104	$2800.00
The amount allowed by audit	2100.00
Disallowed	$ 700.00

(3) Operating Materials and Supplies

The charges for operating materials and supplies were checked and verified from the suppliers' invoices. There had been erroneous distribution, and the items that should have been classified under this heading were claimed under Item 11, "Other (specify)".

	Idm-E105	Idm-E127	Combined Totals
Transportation	$ 62.17	—	$ 62.17
Equipment rent	318.88	100.00	418.88
Repair parts	14.00	10.30	24.30
Oil and gasoline	—	350.16	350.16
Supplies	384.99	219.88	604.87
Explosives	52.95	237.86	290.81
Services	587.81	—	587.81
Timber	60.60	—	60.60
Sampling and assaying	—	1060.68	1060.68
Freight on compressor	—	115.04	115.04
Tires	—	80.45	80.45
Chains	—	17.00	17.00
	$1481.40	$2191.37	$3672.77
Deleted by Certifying Officer October 1951 Equipment rent	—	100.00	100.00
	$1481.40	$2091.37	$3572.77

The proper distribution is as follows:

	Combined Contracts
Rented equipment	$ 418.88
Services	587.81
Timber	60.60
Explosives	290.81
Repair parts	24.30
Misc. supplies	1167.52
Transportation	62.17
Sampling and assaying	1060.68
	$3672.77
Less deletion by Certifying Officer	
Equipment rent	100.00
	$3572.77

Supplies were found to be:

Timber	$ 60.60
Explosives	290.81
Repair parts	24.30
Miscellaneous	1019.24

Miscellaneous supplies were found to be:

Claimed		$1167.52
Disallowed by audit		
Items unsupported	$ 3.24	
Duplicate charges	145.04	148.28
Allowed by audit		$1019.24

(4) Operating Equipment (rented)

Exhibit "A" of the exploration contracts provides for equipment to be rented by the Operator and allowable as follows:

Compressor	$164.00 per month
Rock drill	36.00 per month
Hose and steel	16.90 per month
D-8 tractor w/angle dozer	15.00 per hour (316 hrs. $4,740.00)
Bulldozer	15.00 per hour (100 hrs. $1,500.00)

The charges for operating equipment rented were checked and verified against the suppliers' invoices.

The proper and allowable costs for Operating Equipment - Rented were found to be:

Compressor	2 mo.	@ $164.00	$ 328.00
Rock drill	2 mo.	@ 36.00	72.00
Hose and steel	2 mo.	@ 16.90	33.80
Bulldozer	100 hrs.	@ 15.00	1500.00
Bulldozer	316 hrs.	@ 15.00	4740.00
			$6673.80

Corrected distribution	$6992.68
Not allowed by audit	318.88
Allowed by audit	$6673.80

Disallowed by audit

Rock drill	2 mo.	@ $30.00 duplicated	$60.00

This item was claimed under equipment rented during September and October 1951 as well as under miscellaneous supplies. An item of equipment rental was claimed during August 1951 under No. 11, "Other (specify)" in the amount of $258.88. There was no supporting evidence for this item nor could it be substantiated by the Operator; therefore, it is disallowed.

(5) Rehabilitation and Repairs

The Operator classified under this heading the sum of $993.49 which is properly chargeable as follows:

Buildings	$381.29
Installations	545.00
Fixtures	67.20
	$993.49

The charges to this item were verified for adequate accounting support.

(6) Transportation

The charge against this category was checked against the work sheet and is allowable in the amount claimed - $62.17.

(7) Miscellaneous

a. Sampling and Assaying

The invoices for sampling and assaying were reviewed. The Operator claimed the sum of $1,198.68; however, an item for $23.69 could not be supported and therefore was not allowed. The amount of $1,060.68 properly chargeable to sampling and assaying was erroneously classified under Item 11 (b), Other - Incidentals. The total allowable under this item is $1,174.99.

b. Payroll taxes and insurance

All charges for payroll taxes and insurance were checked by computation at the rates shown by R. S. McClintock, the diamond drill contractor. R. S. McClintock carried the American Alloy Metals, Inc. payroll due to the fact that American Alloy Metals, Inc. were not licensed in the state of Montana.

Social Security Tax	1.5 %
State Unemployment Compensation	2.5 %
Federal Assistance - State Unemployment Compensation	.03%
Montana Employment Comp. Insurance	2.8 %

The Operator figured taxes on the amount of the payroll - $1,908.19.

IV CONCLUSIONS AND RECOMMENDATIONS

This audit has disclosed that all costs as charged to this project, with the exception of the disallowances under Items (2) Labor and Supervision, (3) Operating Materials and Supplies, and (4) Operating Equipment - Rented, of the preceding section of this report, as reflected in Exhibit "A" attached, are in accordance with the terms of the contract and amendments thereto.

The records pertaining to this project were inadequate and maintained in an indifferent manner.

AMERICAN ALLOY METALS, INC.

Combined contracts
Idm-E105 and E127

Exhibit "A"

	Idm-E105 Total Nov. 1951 MF-104	Idm-E127 Total Nov. 1951 MF-104	Combined Totals MF-104	Distribution Corrected	Disallowed by Auditor	Allowed by Auditor
Operating Equipment						
(b) Rented	$ 4,740.00	$1,933.80	$ 6,673.80	$ 6,992.68	$318.88	$ 6,673.80
Rehabilitation and Repairs						
(b) Buildings	---	381.29	381.29	381.29		381.29
(c) Installations	---	545.00	545.00	545.00		545.00
(d) Fixtures	---	67.20	67.20	67.20		67.20
Labor	---	2,387.44	2,387.44	2,975.25	1,067.06	1,908.19
Supervision	1,500.00	1,300.00	2,800.00	2,800.00	700.00	2,100.00
Supplies						
(a) Timber				60.60		60.60
(b) Explosives				290.81		290.81
(c) Repair parts				24.30		24.30
(d) Miscellaneous				1,167.52	148.28	1,019.24
Transportation				62.17		62.17
Contract	11,154.00	5,241.11	16,395.11	16,395.11		16,395.11
Other						
(a) Sampling and Assaying	138.00		138.00	1,198.68	23.69	1,174.99
(b) Incidentals	1,481.40	2,091.37	3,572.77	---		
(c) Payroll taxes						
FOAB	---	28.62	28.62	28.62		28.62
State Unemployment	---	47.70	47.70	47.70		47.70
Federal Unemployment *	---	5.72	5.72	5.72		5.72
Workmen's Compensation	---	53.43	53.43	53.43		53.43
	$19,013.40	$14,082.68	$33,096.08	$33,096.08	$2,257.91	$30,838.17

*Federal Assistance - State Unemployment Compensation

Robert M. Hull

Robert M. Hull, Auditor

GOVERNMENT COPY

AGREEMENT COMBINING TWO EXPLORATION
PROJECT CONTRACTS AND
TERMINATING THEM

This Agreement entered into this 1st day of October, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government" and American Alloy Metals, Inc., hereinafter called the "Operator",

WITNESSETH THAT:

WHEREAS, these parties are parties to three Exploration Project Contracts, as follows:

1. Docket No. 148, Idm-E105, dated August 1, 1951;

2. Docket No. 1951, Idm-E127, dated August 24, 1951;

3. Docket No. 2292, Idm-E247, dated January 29, 1952; and

WHEREAS, the land which is the subject of the first contract includes 16 mining claims one of which is designated as the "Fox"; and

WHEREAS, the land which is the subject of the second contract includes the same 16 claims and in addition a claim designated as the "Ivanhoe Lode Mining Claim," upon which the work referred to in the second contract is to be performed; and

WHEREAS, the land which is the subject of the third contract is the same "Ivanhoe Lode Mining Claim" referred to in the second contract; and

WHEREAS, the said "Fox" claim and the said "Ivanhoe Lode Mining Claim" cover practically identical ground, as was discovered after said two contracts had been entered into; and

WHEREAS, the work described in contracts Nos. 1 and 2 has not been completed, but is suspended in favor of work being prosecuted under contract No. 3; and may not be resumed; and

WHEREAS, under date of April 28, 1952, a "Certification of Discovery or Development" was made by the Government with reference to the second contract, Idm-E127; and

WHEREAS, for purposes of accounting and to resolve any confusion in the descriptions of overlying claims, and for terminating and winding

up the first two contracts, without prejudice to the possibility of entering into a further contract at some subsequent date for a resumption of the work therein described;

NOW THEREFORE, it is understood and agreed as follows:

1. The first two contracts above described, Idm-E105 and Idm-E127, for purposes of accounting, terminating, and winding up, shall be treated as one contract.

2. The Certificate of Discovery or Development dated April 28, 1952, above referred to, shall apply to all three contracts and shall subject the land described in all three contracts and the production therefrom to the Government's percentage royalty and lien for the payment thereof, as provided in those contracts.

3. The Operator's guarantee in lieu of a Landlord's Subordination Agreement attached to the second and third contracts, Idm-E127 and Idm-E247, shall apply equally to the two contracts here combined, Idm-E105 and Idm-E127, with the same force and effect as if they had been made and entered into with reference to those two contracts.

4. The work under the first two contracts, Idm-E105 and Idm-E127, shall be and is hereby terminated as of January 1, 1952. Any work prosecuted or costs incurred by the Operator after the date here fixed for the termination of these two contracts shall be for the sole account of the Operator, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity; and (b) the cost of any reports, accounts, and winding-up and settlement actions provided for in those contracts. The Operator hereby releases and agrees to save harmless the Government from all claims and demands under or arising out of said first two contracts, Idm-E105 and Idm-E127, except as herein expressly otherwise provided.

5. The third contract, Idm-E247, remains in full force and effect, according to the terms thereof, subject, as above provided, to the Certificate of Discovery or Development above referred to. Except that the Certificate of Discovery or Development above referred to is made applicable to said third contract, Idm-E247, and to any and all work performed or to be performed under the terms thereof, the work and the accounting under said Contract Idm-E247 is readily severable and distinguishable from the work and accounting under the first two contracts hereby combined and terminated, and said Contract Idm-E247 is here mentioned only for the purpose of explaining the relationship between the three contracts, and for the purpose of applying the

Certification of Discovery or Development to the third contract. The third contract, Idm-E247, is not amended, terminated, or otherwise affected by this agreement.

IN WITNESS WHEREOF, this Agreement has been made and entered into the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Administrator
Defense Minerals Exploration
Administration

AMERICAN ALLOY METALS, INC.

By Frank Richelberger

MF-200
(June 1951)

Docket No. DMA 148 X
Commodity Tungsten Ore
Idm-E105

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

AUG 24 1951

It is agreed this 1st day of August, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and Browns Lake Tungsten, a partnership, with its principal place of business at 401 Symons Building, Spokane, Washington, composed of E. A. Julian, E. L. Cleveland and Frank Eichelberger.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Beaverhead described as follows: [3] 16 unpatented mining claims located in the Vipond Mining District, Beaverhead County, State of Montana, in Sections 3 and 4, township 4 S, Range 10 W; and Sections 32 and 33, township 3 S, range 10 W; and particularly on the following claims bearing the following index numbers assigned by the county clerk and recorder to wit: Star #1, #66802; Star #2, #66803; Star #3, #66804; High Boy #65989; Mammoth #65990; and Fox #65923.

with respect to which the Operator represents and undertakes:

~~(a) That he is the owner of the property, subject only to the following~~ ~~encumbrances, and the mortgage or agreement of the lessor is attached.~~

(b) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

~~(b) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.~~

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] Tungsten; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 12 months from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. 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.

5. *Fixtures and improvements.* 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. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[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.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

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

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $ 24,967.50, which is 75 percent of the agreed estimated total cost of this project, $ 33,290.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *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 worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

Browns Lake Tungsten, a partnership
(Operator)

By [signature] a partner

THE UNITED STATES OF AMERICA

By [signature]

Director, Production Expansion Division
Defense Minerals Administration

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Brown's Lake Tungsten
DMA Docket No. 148X, Tungsten

Time Schedule:

Month:

1st	1. Build road, trail and cut 8 trenches.
1st, 2nd. and 3rd.	2. Drill 3,000 feet of diamond drill hole, an estimated 14 holes.
	3. Sample trenches, and core and sludge from drilling.

Work to be done and estimated cost is as follows:

1.	Build road and trail and cut trenches, 316 hours at $15.00 per hour.	$4,740.00
2.	Drill 3,000 feet of diamond drill hole at $7.75 per ft. (see attached drilling bid)	23,250.00
3.	Incidentals	1,500.00
4.	400 tungsten assays, each $5.00	2,000.00
5.	Supervision, three months at $600.00 per month	1,800.00
	Total	$33,290.00

Brown's Lake Tungsten
DMA Docket No. 148X, Tungsten

Operating Equipment:

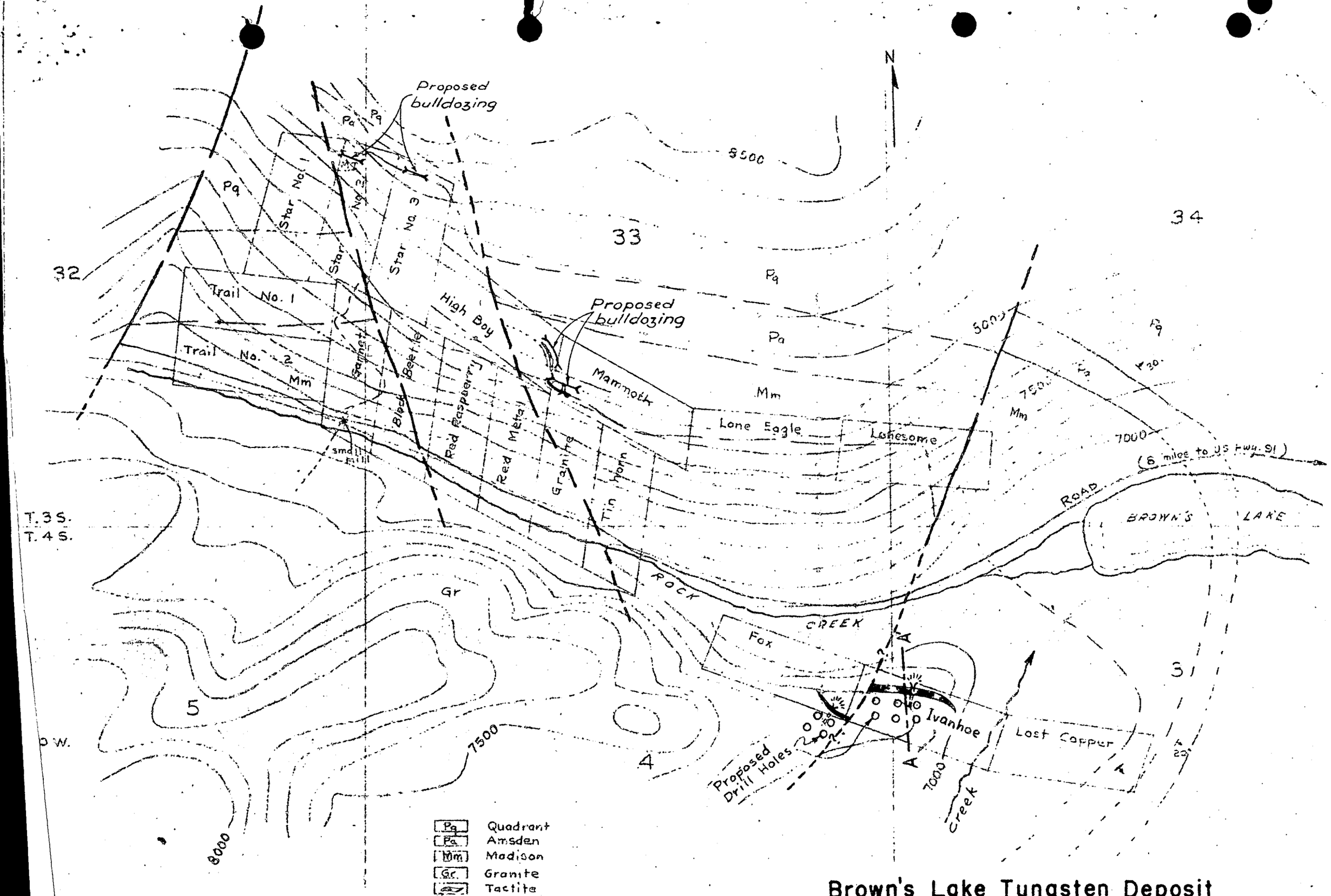
To be Rented:

1 - D-8 tractor with angle dozer fully manned, with fuel and oil supplied by owner; 316 hours at $15.00 per hour	$4,740.00

Labor and Supervision:

Engineer and Superintendent, for three months at $600.00 per month	1,800.00

The existing facilities consisting of eight (8) log and frame cabins need no repair.



Brown's Lake Tungsten Deposit

Beaverhead County, Mont.

R. S. McCLINTOCK
Diamond Drill Contracting
Diamond Drills and Supplies
Castset Bits

TELEPHONE RI. 4197
W. 416-418 Second Ave.
Spokane 8, Washington

Mittendorf

July 6, 1951

Mr. Mittendorf

Mr. Frank Eichelberger
Doing business for: E. L. Cleveland
Estey A. Julian
Frank Eichelberger
Suite 401 Symons Building
Spokane, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 06 1951
LANDON F. STROBEL
Executive Secretary

Dear Mr. Eichelberger:

With regard to a proposed diamond drill program at your Brown Lake property near Melrose, Montana.

We understand that you will drill a minimum of 3000 linear feet, holes ranging from 250 ft to 500 ft in depth, AX size, that you will furnish access road to the site including a bridge across Rock Creek and that you will furnish a tractor which will assist in mobilizing our equipment.

Based on the above, we quote you as follows:

0 to 500 ft per hole $ 7.75 per ft

The above quotation provides for our furnishing all material, labor, equipment, water line, pumping plants and diamond bits necessary to complete these holes.

In the event loose and caving material or water courses are encountered that will tend to make drilling impractical without the use of casing or cement, an additional charge of $3.50 per foot will be made for reaming and landing the casing or placing cement and redrilling the cemented section of the hole.

If, upon completion of the contract our cost figures reflect a net profit in excess of 10% of our expenses which include a 12½% overhead, we will refund the difference.

Our employees will be covered by Workman's Compensation to comply with the State Act and our operation will be covered by Public Liability in the amounts of $100,000 and $300,000 and Property Damage in the amount of $100,000.

Yours very truly,

R. S. McClintock

R. S. MC CLINTOCK

RSM/is

This letter answered after the telephone call S.P.M.

Mr. Mittendorf:
This is in respect to the contract for Fluorescent mining Inc. (Brown's Lake Mint). The contractor wants a higher price than anticipated. We will call you tomorrow regarding a possible revision of the contract. A.E.W. amendment

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

Know All Men By These Presents:

Whereas, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Beaverhead, State of Montana, described in a certain Exploration Project Contract dated August 1, 1951, between Browns Lake Tungsten, a partnership, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 17,1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 13th day of June, 1951

Fluorescent Mines Corporation

By R. C. McLaughlin
President

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

RECEIVED SEP 4 1951 G.A.O.

AUG 3 1 1951

Contract Service Section
General Accounting Office
Washington 25, D. C.

Re: Docket No. DMA-148X, Tungsten
Idm-E105
American Alloys Metals, Inc.
San Francisco, California

Gentlemen:

Please find herewith a copy of the assignment of Exploration Contract Idm-E105, Docket No. DMA-148X by Estey A. Julian, Frank Eichelberger and E. L. Cleveland, a partnership, to the American Alloy Metals, Inc.

This assignment has been approved by this office for the Government and the American Alloy Metals, Inc. thus assume all of the perogatives and obligations under the subject contract.

The copy herewith is to be attached to the contract in your possession and future correspondence made in the name of the American Alloys Metals, Inc., 1 Montgomery Street, San Francisco, California.

SEP 6 SEP 17

Sincerely yours,

RECEIVED CONTRACT SERV. SEC.

C O Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

Enclosure

Cont. Serv. Sec.
Change Order
Filed D. E.
Viewed

KNOW ALL MEN BY THESE PRESENTS:

We, the undersigned, ESTEY A. JULIAN, FRANK EICHELBERGER and E. L. CLEVELAND, being all of the 'Operators' referred to in that Exploration Project Contract (Docket No. 148 and for which application was filed April 18, 1951) between the undersigned and the United States of America, acting through the Department of the Interior, Defense Minerals Administration, concerning exploration for tungsten ore in Beaverhead County, Montana, do hereby assign and set over all of our rights thereunder and our interests therein to AMERICAN ALLOY METALS, INC., a Nevada corporation, its successors and assigns forever.

Dated: August 20, 1951.

Estey A. Julian
EAJ

Frank Eichelberger
FE

E L C

The above assignment is hereby accepted, and AMERICAN ALLOY METALS, INC., a Nevada corporation, hereby assumes all of the obligations imposed on, or agreed to by, the 'Operator,' as provided in the above-mentioned Exploration Project Contract.

Dated: August 20, 1951.

AMERICAN ALLOY METALS, INC.,

By E. L. Cleveland
ELC President

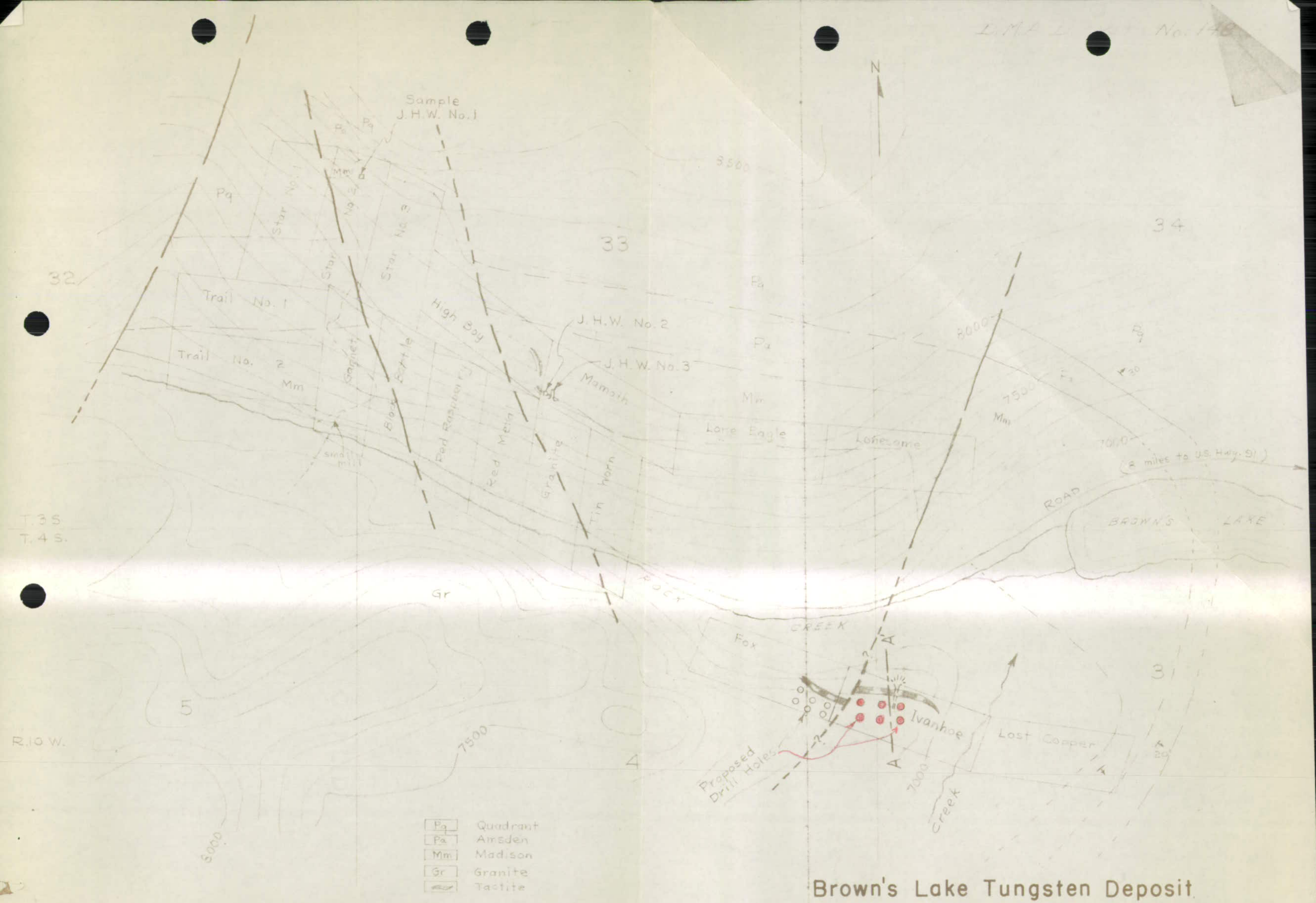
By Geraldine Smith
G Smith Secretary

Consent is hereby given to the foregoing assignment and transfer of the above-mentioned Exploration Project Contract.

THE UNITED STATES OF AMERICA,

By C. O. Mitchenor
Director, Production Expansion Division
Defense Minerals Administration

[illegible]



Brown's Lake Tungsten Deposit

Beaverhead County, Mont.

F-1625

APPROVAL

December 14, 1951
Date

Under authority granted by Order No. 2653 of the Acting Secretary of the Interior, approval is hereby given to a subcontract between American Alloys Metals, Inc., 1 Montgomery Street, San Francisco, Calif. Contracting Officer, and R. S. McClintock, Contractor, described in attached copy of letter dated July 6, 1951, an approved copy of which shall be kept on file in the Regional Office of the DMA Field Team, Region II, for a portion of the work to be performed under Exploration Contract Idm-E105 dated August 1, 1951.

This approval shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of the costs which the Government may be obligated to pay, under the provisions of Article 13 of the contract form.

O. E. Weinzlorn
Executive Officer, DMA
Field Team, Region II

Member, DMA
Field Team, Region II

Mr. Frank Eichelberger
Doing business for: E. L. Cleveland
Estey A. Julian
Frank Eichelberger
Suite 401, Symons Building
Spokane, Washington

Dear Mr. Eichelberger:

With regard to a proposed diamond drill program at your Brown Lake property near Melrose, Montana.

We understand that you will drill a minimum of 3000 linear feet, holes ranging from 250 feet to 500 feet in depth, AX size, that you will furnish access road to the site including a bridge across Rock Creek and that you will furnish a tractor which will assist in mobilizing our equipment.

Based on the above, we quote you as follows:

0 to 500 feet per hole	$7.75 per foot

The above quotation provides for our furnishing all material, labor, equipment, water line, pumping plants and diamond bits necessary to complete these holes.

In the event loose and caving material or water courses are encountered that will tend to make drilling impractical without the use of casing or cement, an additional charge of $3.50 per foot will be made for reaming and landing the casing or placing cement and redrilling the cemented section of the hole.

If, upon completion of the contract our cost figures reflect a net profit in excess of 10% of our expenses which include a 12½% overhead, we will refund the difference.

Our employees will be covered by Workman's Compensation to comply with the State Act and our operation will be covered by Public Liability in the amounts of $100,000 and $300,000 and Property Damage in the amount of $100,000.

Yours very truly,

/s/ R. S. McClintock

RSM/is

APPROVAL

December 14, 1951
Date

Under authority granted by Order No. 2653 of the Acting Secretary of the Interior, approval is hereby given to a subcontract between American Alloys Metals, Inc., 1 Montgomery Street, San Francisco, Calif. Contracting Officer, and Paul W. Smith, Contractor, described in attached copy of the AGREEMENT dated July 16, 1951, an approved copy of which shall be kept on file in the Regional Office of the DMA Field Team, Region II, for a portion of the work to be performed under Exploration Contract Idm-E105 dated 1 August 1951.

This approval shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of the costs which the Government may be obligated to pay, under the provisions of Article 13 of the contract form.

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

W. E. Allen
Member, DMA
Field Team, Region II

C
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A G R E E M E N T

This agreement made and entered into this 16th day of July, 1951, by and between Frank Eichelberger and Paul W. Smith for the purpose of bulldozing at the Browns Lake tungsten property.

The work will be charged for at the rate of $15 an hour, with a minimum of 300 hours worth of work to be done, and a maximum of 500 hours worth of bulldozing under this contract.

The work is to be continuous until completed.

/s/ Frank Eichelberger

/s/ Paul W. Smith

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of [illegible], State of [illegible], described in a certain Exploration Project Contract dated April 18, 1951, between E. L. Cleveland et al, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 17, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 13th day of June, 1951

R. C. McLaughlin
Fluorescent Mines Corporation, President

U. S. GOVERNMENT PRINTING OFFICE 940768

C
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KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned are the assignees of the lessee under that certain mining lease by and between PARAMOUNT MINES, a Montana corporation, as lessor, and E. L. CLEVELAND, as lessee, dated January 17, 1951, and covering the following described mining claims situate in the Vipond Mining District of Beaverhead County, Montana:

"STAR NO. 1" Mining Claim as located January 23, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations at pages 300 and 301 thereof, official records of Beaverhead County, Montana;

"STAR NO. 2" Mining Claim, as located January 23, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 301 and 302 thereof, official records of Beaverhead County, Montana;

"STAR NO. 3" Mining Claim, as located January 23, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 302 and 303 thereof, official records of Beaverhead County, Montana;

"BLACK BUTTER" Mining Claim, as located August 26, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 358 and 359 thereof, official records of Beaverhead County, Montana;

"LOST COPPER" Mining Claim, as located July 19, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 342 and 343 thereof, official records of Beaverhead County, Montana;

"NEW MOON" Mining Claim, as located August 12, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 351 and 352 thereof, official records of Beaverhead County, Montana;

"BOND PAGES" Mining Claim, as located August 25, 1943, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at page 357 thereof, official records of Beaverhead County, Montana;

"GRANIT" Mining Claim, as located August 12, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 393 and 394 thereof, official records of Beaverhead County, Montana;

"RED RASPBERRY" Mining Claim, as located August 26, 1942, the certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 359 and 360 thereof, official records of Beaverhead County, Montana;

"RED METAL" Mining Claim, as located August 12, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 392 and 393 thereof, official records of Beaverhead County, Montana;

"TRAIL NO. 1" Mining Claim, as located August 15, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at page 356 thereof, official records of Beaverhead County, Montana;

"HIGH BOY" Mining Claim, as located August 20, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 354, and 355 thereof, official records of Beaverhead County, Montana;

"DANDRUFF" Mining Claim, as located August 25, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 357 and 358 thereof, official records of Beaverhead County, Montana;

"MAMMOTH" Mining Claim, as located August 20, 1942, the Certificate of Location thereof being recorded in book 101 of Lode Locations, at pages 355 and 356 thereof, official records of Beaverhead County, Montana;

"GARNET" Mining Claim, as located July 20, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 249 and 250 thereof, official records of Beaverhead County, Montana;

"FOX" Mining Claim, as located July 15, 1942, the Certificate of Location thereof being recorded in Book 101 of Lode Locations, at pages 241 and 242 thereof, official records of Beaverhead County, Montana; and

WHEREAS, the undersigned are the assignees of the lessee under that certain agreement and lease by and

between GEORGE W. PARLIN, lessor, and E. L. CLEVELAND, lessee, dated May 26, 1951, and covering the Ivanhoe Lode Mining Claim, Lode No. 37 located in Township 4 South of Range 10 West, M.P.M. and situated in Beaverhead County, State of Montana; and

WHEREAS, the undersigned are the assignees of that certain option to buy real property given on June 13, 1951 by R. C. McLAUGHLIN to E. L. CLEVELAND, and covering the property known as Browns Lake, situate in Beaverhead County, Montana, and more particularly described as follows:

> Beginning at corner No. 1, a red fir tree twenty-four inches in diameter marked 1-4596, from which a red fir tree ten inches in diameter marked 1-4596 B.T. bears south twenty degrees and thirty minutes east nineteen feet distant; a red fir tree thirteen inches in diameter marked 1-4596 B.T. bears north sixty-eight degrees and thirty minutes east twenty-seven feet distant, and Initial Point No. 1, bears south thirty-eight degrees and thirty minutes west two thousand and eighty-three feet distant.
> Thence, first course, magnetic variation eighteen degrees and thirty minutes east, north sixty-five degrees and thirteen minutes east one thousand three hundred and seventy-three and three tenths feet to corner No. 2.
> Thence second course, magnetic variation eighteen degrees and thirty minutes east, north forty-eight degrees and five minutes west six hundred and fifty feet the west end of No. 1 excavation, seven hundred and fifty feet to corner No. 3.
> Thence, third course, magnetic variation eighteen degrees and fifteen minutes east, north eight-five degrees and twenty minutes east one thousand five hundred and thirty-seven and four tenths feet to corner No. 4.
> Thence fourth course, magnetic variation seventeen degrees and thirty minutes east, south forty-two degrees and thirty minutes east seventy-five feet to corner No. 5.
> Thence, fifth course, magnetic variation seventeen degrees and ~~XXXXX~~ fifteen minutes east, north seventy-five degrees and nine minutes east two hundred and sixty-two feet to corner No. 6.
> Thence, sixth course, magnetic variation eighteen degrees and thirty minutes east, south eighty-three degrees and twenty-two minutes east four hundred and fifty-seven foot to a point from which the center of No. 4 excavation bears south fifty-eight degrees west

one hundred and twenty feet distant; and the north-east corner of a dam across Rock Creek bears south twenty-four degrees and thirty-eight minutes west two hundred and forty-four feet distant; five hundred and ninety-nine feet to corner No. 7.
Thence, seventh course, magnetic variation eighteen degrees and fifteen minutes east, south twenty-three degrees and fifteen minutes east fifty-five feet to said Rock Creek; five hundred and eighty-nine feet to corner No. 8.
Thence, eighth course, magnetic variation eighteen degrees and thirty minutes east, south forty-nine degrees and thirty-five minutes west three hundred and fifty-five feet to corner No. 9.
Thence, ninth course, magnetic variation eighteen degrees and fifteen minutes east, south eight-six degrees and thirty-two minutes west one hundred and fifteen feet croppings of lime rock; nine hundred and seventy-three and eight-tenths feet to corner No. 10, from which corner No. 2 of this survey bears north seventy-three degrees and ten minutes west nine hundred and two feet distant.
Thence, tenth course, magnetic variation eighteen degrees and fifteen minutes east, south forty degrees and twenty-four minutes west, one hundred and eighty-five feet croppings of lime rock; five hundred and eighty-two feet to corner No. 11.
Thence, eleventh course, magnetic variation eighteen degrees east, south sixty-six degrees and forty minutes west seven hundred and twenty-three feet croppings of lime rock; one thousand seven hundred and thirty-two feet to corner No. 12.
Thence, twelfth course, magnetic variation eighteen degrees east north nine degrees and fifty-five minutes west four hundred and ninety feet to said Rock Creek; eight hundred and twenty-seven feet to corner No. 1, the place of beginning, containing 73.78 acres, more or less;

NOW, THEREFORE, the undersigned, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable considerations to them paid, receipt thereof is hereby acknowledged, hereby sell, release, quit claim and assign unto AMERICAN ALLOY METALS, INC., a Nevada corporation, its successors and assigns forever, all of our right, title and interest in and to the aforesaid leases, agreements and options.

IN WITNESS WHEREOF, we have hereunto set our

hands this 20th day of August, 1951.

(S) Estey A. Julian
Estey A. Julian

(S) Frank Eichelberger
Frank Eichelberger

(S) E. L. Cleveland
E. L. Cleveland

STATE OF California)
) ss.
County of San Francisco)

On this 20th day of August, 1951, before me, Eugene P. Jones, a Notary Public in and for the County of San Francisco, residing therein, duly commissioned and sworn, personally appeared BETTY A. JULIAN, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the County of San Francisco, the day and year in this certificate first above written.

(S) Eugene P. Jones
NOTARY PUBLIC
in and for the County of San Francisco,
State of California.

(SEAL)

STATE OF Washington)
County of Spokane) ss.

On this 9 day of August, 1951, before me, E. E. Ellersick, a Notary Public in and for the County of Spokane, residing therein, duly commissioned and sworn, personally appeared FRANK MICHELBERGER, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the County of Spokane, the day and year in this certificate first above written.

(S) E. E. Ellersick
NOTARY PUBLIC
in and for the County of Spokane
State of ~~California~~.
Washington

(Seal)

STATE OF Nevada)
)ss.
County of Washoe)

On this 15th day of August , 1951, before me, Oliver C. Custer, a Notary Public in and for the County of Washoe , residing therein, duly commissioned and sworn, personally appeared E. L. CLEVELAND, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at my office in the County of Washoe , the day and year in this certificate first above written.

(S) Oliver C. Custer
NOTARY PUBLIC
in and for the County of Washoe
State of ~~California~~.
Nevada

(Seal)

My commission expires February 10, ????

A S S I G N M E N T

For and in consideration of One Dollar ($1.00) and other consideration, the receipt whereof is hereby acknowledged, the undersigned E. A. JULIAN, No. 1 Montgomery Street, San Francisco, California, E. L. CLEVELAND, Box 2267, Reno, Nevada, and FRANK EICHELBERGER, 401 Symons Building, Spokane 4, Washington, hereby assign, set over and transfer to the Browns Lake Tungsten, a partnership, all their right, title and interest of any kind and character in the mining lease hereto attached and made a part hereof.

/s/ E. A. JULIAN

/s/ E. L. CLEVELAND

/s/ FRANK EICHELBERGER

OK. Frank Eichelberger

103
1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. .....

Date received .....

Participation .....

E. L. Cleveland
15 East First Street
Reno, Nevada

Name and address of applicant

Date 18 April 1951

FILL IN THIS BLOCK

Date of application April 18, 1951

Estimated cost $20,000

Mineral or metal Tungsten (Scheelite)

Percentage of Government participation 75%

Location of mine Beaverhead County
Montana

Date of filing MF-100 .....

DMA Docket Number, if available .....

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

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

NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*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.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

E. L. CLEVELAND Lessee
(Name of ~~company~~)

By Frank Schelbergen
(Signature of authorized official)

(Date)

Corp. Engineer & Partner
(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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

E. L. Cleveland
15 East First Street
Reno, Nevada

1. Partnership

2. E. L. Cleveland, 15 East First Street, Reno, Nevada.
Estey A. Julian, 1 Montgomery Street, San Francisco, California.
Frank Eicholberger, Symons Building, Spokane, Washington.

3. Inapplicable.

4. E. L. Cleveland has been in business for himself for 20 years mostly engaged in mining.
Julian and Eicholberger are graduate mining engineers and have been actively engaged in mining for 40 years.

5. Lessee.

6. Inapplicable.

7. Lease is in good standing. There are no liens or encumbrances against property.

8. Impossible. No work has been started so there are no assets or liabilities and no profits or losses.

9. $5,000 - It is sufficient to pay our part of the cost of project.

10. (a) See attached list of claims.
(b) Both areas are the same.

11. Flourescent Mining Corporation is both present and former name.

12. Property located about 15 miles S.W. of Melrose, Montana, in Beaverhead County in T.4 S, R10W, Secs. 3 and 4 and T. 3 South, R 10 West, Section 32, 33 and 34. It is 8 miles from U.S. Highway 91 by Forest Service Road. The highway and O.S.L. Railroad parallel each other and are adjacent where this road crosses. Butte is about 50 miles north on Highway 91 and the Oregon Short Line Railroad.

13. Water Supply, Brown's Lake - plentiful supply all year.
Power will have to be installed, probably diesel compressors of the portable type. As this is an exploration loan, amount of power needed is conjectured, but probably 1 or 2 portable diesel driven compressors would be sufficient for all purposes of exploration.

14. A small mill on the property could be rehabilitated sufficiently to permit its use as a sampling mill and as an office and storehouse for tools, supplies, etc.

No living facilities available. A motor camp on Brown's Lake could be used for workers.

15. If ore in sufficient quantities and of commercial grade is developed, the small mill on the property will have to be further equipped and rehabilitated for production. It may be used as a sample mill.

16. (a) See Report of Walter E. Bauer, attached hereto.
(b) " " " " " " " "
(c) " " " " " " " "

17. Property is dormant.

18. (a) and (b) See attached report.
(c) 25,000 tons are estimated of .50% or .60% grade is indicated, and 11,000 tons probable of like grade as given in Bauer Report.

19. Bureau of Mines and U.S.G.S. have stated verbally that more exploration and sampling should be done before considering the building of a mill.

20. For tungsten minerals Scheelite predominating and Powellite. These ores occur in tacite in the Amsden and Madison formation.

21. We propose to do bulldozing where feasible, diamond drilling for depth, tunnelling and shafting for determining widths of deposits as well as permitting extensive sampling.

22. See attached reports by W. E. Bauer.

23. (a) 2 Miners @ $14.00 each - $28.00 - 50 days - - - - - - - - - - $1400
2 Helpers @ $13.00 each - $26.00 - 50 days - - - - - - - - - - 1300
1 Common Laborer @ $12.00 - 50 days - - - - - - - - - - - - - - 600

(b) Supervising Geologist and Sampler @ $500 per month-3 months- 1500

(c) Rehabilitating old mill for use as office, warehouse, storage, etc. 1000

(d) Freight or trucking of equipment to property - - - - - - - - - 300
Installation of equipment and starting expense - - - - - - - - 500
Labor and watchmen during installation - - - - - - - - - - - - - 500

(e) 2 machine drills complete with steel, hose, bits, water tank, etc. - - - - - - - - 2000
Pipe, rails, ties and small tools - - - - - - - - - - - - - - - 500

(f) Rental of Diesel Compressor @ $500 per month, 2 months @ - 1000
" " Bulldozer 10 days @ $65.00 per day - - - - - - - 650
" " 2 ore cars @ $25.00 per month, 2 months - - - - 100
" " Pickup Truck @ $150 per month - - - - - - - - - - 300
" " Laboratory crushing and sampling equipment - - - 200
" " housing facilities for Managing Geologist - - - 100

(g) Nothing, no rentals will be charged

(h) Powder caps, fuse, drill bits, machine repair parts - - - - 500
Fuel oil, gasoline, lubricants, car repairs - - - - - - - 1300
Assaying, sample sacks, and express on samples - - - - - - 500
Diamond Drilling on contract @ $4.50 per foot, 1000 ft.- - 4500

(i) Unforeseen expenses incurred in starting and operating - - 1250

Total $20,000

24. Time Schedule

It is believed a crew could be assembled, equipment rented and supplies purchased in one month after project is approved and money made available. Two months of intensive exploration, diamond drilling and sampling should be sufficient to prove tonnages and values to warrant the erection of a mill and mining plant.

During the first month of preparation and purchasing about $7,500 would be spent, the second month $8,000, and the third month $4,500, bring the total to $20,000.

REPORT ON THE BROWN'S LAKE TUNGSTEN PROPERTY NEAR MELROSE, BEAVERHEAD COUNTY, MONTANA

By - Walter E. Bauer June 25, 1948

Introduction:

The examinationof the Brown's Lake Tungsten Property was made at the request of Mr. R. C. McLaughlin, President of the Fluorescent Mining Corporation. It was undertaken primarily for the purpose of determining the extent and geologic conditions under which the tungsten tactite zones were occurring. The field study was made on June 2,3,4, and 12, 1948.

Location:

The property is located 15 miles southwest of Melrose, Montana in T 4 S, R 10 W, Sec. 3 and 4: T 3 S, R 10 W, Sec. 32, 33 and 34.

Ownership:

Seventeen unpatented lode claims comprise the present holdings. These claims were incorporated in April 1943 asthe Fluorescent Mining Corporation. Present owners are R. C. McLaughlin 51%, Vernon W. McLaughlin 20%, Mrs. R. C. McLaughlin 15%, W. H. Perkins 8%, Amos L. Wright 5%, and A. E. Contway 1%.

Physical Features:

A good Forestry Service road extends from Highway 91 (8 miles away) through the center of the claims. Abundant timber and water for mining and milling are available on or near the claims. The claims lit on the sides of a large glacial valley and all proposed mining would be either from open cuts mde available by bulldozer roads to the outcroppings, or by tunneling to the lodes from just above the Forestry Road. Winter operations need not be curtailed for any large operation. Snowfall is moderate for this section of the country.

Geology:

The country rocks in the area are paleozoic sediments intruded by a late cretaceous-early tertiary granitic stock. The Scheelite-Powellite areas are contact-metamorphic tactite zones formed at intervals around the northern edge of the granitic intrusion. A noteworthy exception is the Ivanhoe-Fox lode which was formed in a roof pendant of Madison Limestone. This lode wasthe largest observed during the examination.

Large scale faulting is evident and is shown on the geologic map (Fig. 1). Smaller faults are to be expected and were noted in the Mammoth Tunnel.

Tactite Occurrences:

Where actual tactite outcrops were noted, they occurred within the limestones (Fig. 2) ten or twenty feet from the granite and paralleling the bedding planes. These zones arein both the Madison Limestone and the Amsdem Formation. Of the two the Madison Limestone is the more favorable as a host rock.

Excluding the Fox-Ivanhoe lode, which will be considered separately, nine other tactite outcrops were observed. They are strong, persistent and quite massive bodies averaging 100 ft. in strike length and +10 ft. in width. (The exposure at the Mammoth Tunnel is 19 ft. thick.) They have an average dip of 30° - 35° north, on the north side of the property, and south on the southern side.

The Fox-Ivanhoe exposure includes a large tactite zone 1700 feet long having an average width of 50 feet. This tactite dips from 12 to 54 to the south with the steeper dip being observed on the Fox claim. A fault with a horizontal displacement of 350 to 400 feet cut through the roof pendant near the Fox-Ivanhoe endline. The Fox outcropping lies 330 feet above the road; the Ivanhoe section 250 feet.

Ore Minerals:

All economic values appear to lie within the tactite zones, although it is quite possible that veins exist within the granite and will be found by later mining operations.

The scheelite-powellite combination in the tactite fluoresces a light cream color and suggests a 2-3% molybdenum impurity. An interesting occurrance of pure scheelite was noted at the Garnet mill-site, as well as some molybdenite. The WO_3 values vary from 1/2% to 1% or more, with the better values being confined to the tactite within the madison limestone. The copper content of the tactite (occurring as chalcopyrite) should be investigated to see if it should be saved by flotation methods.

Gangue Minerals:

A preponderance of quartz was noted (up to 50%) within the tactite zones, as well as garnets, epidote, actinolite, magnetite, specular hematite, and hedenbergite (?). The magnetite and epidote were observed occurring outside of the ore limits of the tactite, or in barren tactite. Only one specimen of actinolite was noted.

Samples and Tonnage Estimates:

Chip samples have been taken at various places in the tactite and reveal WO_3 values from 1/2% to 3%. However I don't believe this is the proper procedure for sampling such a large exposure. Anyone interested in obtaining an overall estimate of the grade of the tactite ores should lamp all exposures in order to visually obtain a quantitative concept of the WO_3 content of the tactite zones. This usually requires an experienced tungsten man, preferably one who has lamped similar tungsten ores before. The only accurate method of sampling such a deposit is by a representative sample of several hundred tons of mill feed. I would expect a large tonnage mill feed to run 0.6% to 0.7%. A higher grade could be obtained by lamp sorting or selective mining.

At present the only large ore reserve is on the Mammoth claim which has 25,600 tons of proven ore and 11,370 tons of probable ore. Additional tonnage will develop rapidly with more work. In addition to the Mammoth lode, a total of 90,000 sq. ft. of outcrop was examined which when given a depth of 100 ft. would develop 1,000,000 tons. I do not suggest that the ore-bodies will only extend a 100 feet, but that for each 100 feet of development down the dip of the vein an additional 1,000,000 tons may be expected.

It is difficult to predict the depth that one may expect from an ore body of this type. As long as the ore occurrs along bedding planes it will gradually leave the influence of the granite, and I would expect the ore to lens out within a few hundred feet of this point. However another strong possibility is that several different layers of tactite may occurr one over the other but separated by limestone gangue.

The actual depth of these tactite zones can only be determined by mining or diamond drilling. However I would suggest planning on 500 feet until proven otherwise.

Conclusion:

It is quite evident, Mr. McLaughlin, that you have a large low-grade tungsten property. It's future will depend upon the marketability of the tungsten concentrates and upon the amount of capital available for development. In this respect it may require someone with sufficient determination and means to carry the project through to completion. This type of deposit is well known in Nevada and California but so far as I know yours is the only one occurring in Montana.

Respectfully submitted,

(S) Walter E. Bauer
Mining Geologist

Feb. 17, 1951

SUPPLEMENT TO THE BROWN'S LAKE TUNGSTEN REPORT.

April 5, 1949

Mr. Otto Rohlfs has suggested a supplement in order to bring my previous report up to date. I believe this is an excellent idea.

A few months ago Mr. McLaughlin sent me a representive sample of a scheelite-powellite concentrate obtained from his small mill last fall. I had this assayed for him and found that it contained 62.8% WO_3 and 2.93% Mo with no other impurities that would be penalized for. The Wah Chang Trading Corp. of New York informed us that they would buy this concentrate at $26.00 per unit on a standard of 65% WO_3 and 0.4% Mo, and that for each % of Mo over 0.4% they would deduct $1.30. Therefore a concentrate of 65% WO_3 and 3% Mo would be worth $23.00 per unit and a 0.6% WO_3 ore with 3% Mo would be worth $14.00 a ton.

I have also prepared for you a 1000 scale map of this area showing a somewhat generalized location of the claims, contour lines, and outcroppings of tactite ore. The contours and section lines, as far as I know, were obtained from a forestry map and are fairly reliable. McLaughlin and I believe the claim locations to be fairly close but no formal survey has been made of them. Outcrop locations are located from their positions as mapped on aerial photographs or from claim corners where possible.

Additional information on outcrops was suggested and the following is taken from field notes obtained during June 2-12, 1948 and will be presented by claims.

Fox. This lode 10 (see 1000 scale map) outcrops conspicuously and there is not much question about the length and width shown on the map. There are at least four pits and short adits in it (see sketch 10 below). It is possible that the two steep dips shown are actually faults; in that case a fault would form a western limit of the ore as shown. Diamong drilling would be very useful in determining the full extent and grade of this ore. (Sketch 10.)

Ivanhoe. This claim is not owned by McLaughlin, but he can obtain a lease and option on it to turn over to any interested third party. The key point here would be to conduct any further investigation quietly until the claim was tied up. I did not spend a great deal of time on this property although I did walk the outcrop. A plane-table survey would give quite a bit more detail. The outcrops are quite strong, forming ridges and even small cliffs. As far as I know this is the largest outcropping in the district. See sketch 11, also 11 on 1000 scale map. (Sketch 11)

Lost Copper. This claim has two small pits on it as shown in sketch 12. Other than that little is known about the claim due to the overburden and duff. A bulldozer here would expose the lode without much trouble. (Sketch 12)

Garnet. For the sake of discussion this is broken into three parts. Sketch 1, shows the Garnet adit 1 which may have intersected a split from a fissure-like tactite zone striking N. 65E. This in turn may be the same fissure 2 that has several pits on it and lies further N.E. of the adit. This ore is characteristically pulverant or crumbly and the scheelite-powellite occurs at least in part as loose disseminated grains several m.m. in size. It's width on the surface is from 2 to 5 feet; the grade varies from 1 to 2% WO_3. (Sketch 1.)

Part 2 is a lode 1100 feet north of the adit which has been exposed by one incline (now caved) and a surface trench. The tactite in the incline was massive while the trench had a pulverant tactite. I had the impression that an ore body 50 feet long by 30 feet wide could be expected although a bulldozer might expose more. Throughout the entire district this pulverant tactite will assay twice as much or more than the massive tactite. See sketch 3. (Sketch 3)

Part 3 is an areaof tactite float 4 lying 25 feet north of Part 2, and is found in rather large pieces over an area 50 feet in diameter. This is the massive tactite and should be investigated further.

Star No. 2. There are two exposures on this claim. One, at 5 is an area 120 feet long along which massive tactite is found. The other is at 6 and has two pits on it. One pit was obviously in the footwall while the other had about 8 feet of massive tactite in the pit. I believe the grade would be lower than average. See sketch 6. (Sketch 6)

Star No. 3. This lode with one pit and two very good exposures is a lode at least 350 feet long with a width of 5 to 20 feet. This is the massive tactite. McLaughlin tells me it assays around a half % WO_3. See sketch 7. (Sketch 7)

The Mammoth-High Boy. These can be divided into the upper and lower groups. The lower one 9 has the Mammoth adit driven in it for 80 feet and is a well defined exposure, see Fig. 2 and sketch 9. This outcrop is easily traced for 130 feet and with the one above it 8 offers first class mining possibilities.

The upper lode has a 260 feet exposure with a suggested width at its widest point of 45 feet. It is quite possible that the two lodes will join at depth. (Sketch 9)

Lone Eagle-Lonesome. Each of these claims have a small outcrop of tactite 2 to 3 feet thick. I doubt if they are of immediate value although they may represent the tops of larger lodes. McLaughlin has shown me several large pieces of scheelite-powellite the size of the first joint of a finger and they came from these outcrops.

Water supply may be of further interest. There is one water right on the creek owned by a rancher a mile or two below Brown's Lake, but I don't think it covers the full flow of the stream which is quite large. McLaughlin was talking to a Forestry official about the water supply for a future mine and mill operation. The official said there would be plenty of water for that and suggested that the water from Rainbow Lake (see Fig. 1) could be used to generate electricity for the mill. This water would have a drop of 450 feet.

Otto was wondering where Melrose, Montana was; it lies 36 miles south of Butte, Montana on Highway 01.

Regarding any future examination of the claims, one should not attempt to cover the claims in a day or two. To illustrate my point, it takes nearly a full day to walk from the Garnet adit northward to the Star claims and eastward to the High Boy Mammoth group stoppingonly for a general observation of the outcrops. Much of this, although not mountain climbing, is strenuous and any engineer expecting to fully cover the property should plan on two weeks, with an assistant, to map, sample, and lamp the property. McLaughlin has a fishing resort at Brown's Lake and would make any examining engineer feel quite welcome. He also has a collection of tungsten specimen from his property that will impress anyone interested in this sort of thing.

Two more items are worthy of note. The leaser who drove the Garnet adit also sank a short shaft about 10 feet west of the Garnet adit. (12) In 10 feet or so he got through the overburden and found himself in a large massive tactite area. He mined out about 60 tons and piled it just across the road from the adit. Since he

had enough ore for a mill test, and apparently not wanting other people to know about it, he filled the shaft in. Most of this ore still lies where he put it. Some of the finer stuff McLaughlin ran through his small gravity mill. The ore looks very promising to me and although I did not put this ore-body in any ore estimate that I have made I am positive it is there and feel that anyone operating the property should uncover this ore-body again.

The last item I have to offer is that a underground exposure in the Ivanhoe is reported to have assayed 18% WO_3 for its three foot width of pulverant tactite. I would not be too quick to discredit the tale. I have lamped the exposure and it is the richest I have seen although my impression was that the Mo content was higher than usual. An interesting problem develops when one assumes the 18% WO_3 to be correct with a 10% impurity of Mo. Such an ore would still have gross value of $288.08 per ton.

Respectfully submitted

/s/ Walter E. Bauer

Walter E. Bauer
Mining Geologist

P.S. A small mill is located just south of the Garnet adit and consists of a 50-ton Jaw Crusher, 3 ton ball mill, small classifer and a Wilfley concentrating table. With the addition ofa small set of rolls this could be converted to a 25-ton capacity sample mill.

C O P Y

BOND AND LEASE
FOR
MINING PROPERTY

This agreement of lease made and entered into this 17 day of January, 1951, by and between FLOURESCENT MINES, a corporation, of Dillon, Montana, hereinafter called the lessor, and E. L. Cleveland, of 15 East First St., Reno, Nevada, hereinafter called the lessee;

WITNESSETH that the lessor for and in consideration of the rents, royalties, covenants and agreements hereinafter expressed to be paid, kept and performed by the lessee, has leased, let and demised, and by these presents does lease, let and demise unto the lessee the following described mining property and premises, situate in the VIPOND mining District, Beaverhead County, State of Montana, to-wit:

All of the following named mining claims, the notices of location of which are of record in the office of the County Clerk & Recorder of Beaverhead County, Montana and to which notices of location reference is hereby made for a more particular description of such claims; and which notices of location are each identified by the filing number assigned by said Clerk & Recorder, hereinafter set out following the name of each of such claims:

NAME OF CLAIM	INDEX NUMBER
Star No. 1 X	66802
Star No. 2 X	66803
Star No. 3 X	66804
Black Bottle	66014
Lost Copper	65924
Tin Horn	65986
Lone Eagle	66012
Granite	65988
Red Raspberry	66015
Red Metal	65987
Trail No. 1	66011
High Boy X	65989
Lonesome	66013
Mammoth X	65990
Garnet	65974
Fox X	65923

To have and to hold the above described premises for the purpose of mining, from the 17th day of January, 1951, to the 17th day of January, 1961, unless sooner forfeited or terminated through the violation of any of the covenants and conditions herein contained.

The lessee in consideration of the premises has covenanted, contracted and agreed and by these presents does covenant, contract and agree to and with the lessor, his executors, administrators and assigns, as follows:

1. To enter upon said leased premises and to work the same in mine fashion in manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of said mine or mining premises, as a workable mining property, and to the special covenants herein contained.

2. To enter upon said mines under the terms of this contract and to prospect the same and remove ore therefrom and do development work in order to ascertain the location, extent, and value of the ore bodies of said mines.

3. To allow the lessor or his agent from time to time to enter upon and descend into all parts of said leased premises, for the purpose of inspection, surveys or taking samples therefrom, and to render to said parties proper assistance in making such inspection, surveys or examination.

4. To occupy and hold as the property of the lessor all cross and parallel lodes, spurs and mineral deposits of every kind which may be uncovered, disclosed or discovered within said leased ground by the said lessee or any person or persons under or in privity with him, with privilege to said lessee to work and mine the same as part and parcel of said premises.

5. To keep at all times, the drifts, shafts, tunnels and other workings, thoroughly drained and clear of loose rock and rubbish, unless prevented by extraordinary mining casualty.

6. To make all working shafts at least four (4) feet by (8) feet in the clear; all drifts and tunnels at least three and one-half (3½) feet by six and one-half (6½) feet in the clear, and all winzes and raises at least three and one-half (3½) feet by seven (7) feet in the clear.

7. The lessor reserves the property and right of property in and to all ores extracted from said premises during the period of this lease, and the lessee covenants and agrees to pay and allow the lessor as royalty upon all ores mined, shipped or sold from said leased premises in any manner during the life of this lease, as follows, to-wit:

> A Royalty of 8% of net Smelter or Mill Returns from the sale of ore or concentrates.

All settlements to be made upon the smelter, mill or sampler net assay values, deducting therefrom only the actual cost of transportation and treatment.

8. Lessor agrees that lessee may enter upon said mines or claims, and each of them, at any time while this agreement is in force. Lessee agrees to perform all assessment work required by law to be done upon said claims if this agreement is in force on June 17, 1951.

9. Lessee agrees that in the event the royalty return paid to the lessor for the period from March 18, 1951 to April 17, 1951, or from April 18, 1951 to May 17, 1951, or either of such periods shall not amount to $100.00, then lessee shall pay lessor such an amount as will, when added to the royalty actually paid lessor during either or any of such periods, amount to $100.00.

Lessee agrees that in the event the royalty return paid to the lessor for the period from May 18, 1951 to June 17, 1951 or from June 18, 1951 to July 17, 1951, or from July 18, 1951 to August 17th, 1951, or either of such periods shall not amount to $200.00 then lessee shall pay lessor such an amount as will when added to the royalty actually paid lessor during either or any of such periods, amount to $200.00.

10. Lessee further agrees that thereafter he will guarantee a minimum royalty return of $300.00 per month to lessor for the monthly period ending at midnight on September 17th, 1951, and for each monthly period thereafter ending on the 17th day of each and every month as long as this agreement is in force.

11. It is expressly agreed by and between the parties that in the event lessee shall default in the performance of any of the acts required to be performed by him under the terms of this agreement and if he shall continue to refuse to perform any of said conditions or acts for more than 30 days after receipt of notice thereof in writing, forwarded by registered U. S. Mail, return receipt requested, postage prepaid, addressed to lessee at the above address, then this agreement shall immediately terminate and each of the parties shall be released from the terms hereof and shall not be held liable for performance of any further acts required by the terms of this agreement.

12. All bills and expenses incurred by the lessee or those in privity with him shall be promptly paid by the lessee, and by such prompt payment said lessee shall prevent the filing of any and all liens of miners, mechanics or materialmen, against said demised premises; and if by reason of the failure of lessee to pay such bills or expenses, any lien or liens shall be filed against said premises the lessor may forthwith pay off and discharge the same, and the lessee holds himself bound to pay to lessor all sums so advanced or paid to clear said premises from liens which may be filed as aforesaid, and the lessor may also at his election declare a forfeiture of this lease.

13. Upon the violation of any covenant or condition herein contained, this lease shall at the option of lessor expire, and terminate, and the said premises with the appurtenances and all buildings and other improvements shall become forfeited to the lessor, and the lessor or his agent may thereupon, after demand in writing for possession, enter upon said premises and dispossess all persons occupying the same, with or without force, and with or without process of law, or at the option of the lessor the lessee and all persons found occupying said premises or any part thereof may be proceeded against as guilty of unlawful detainer, provided that Lessee may within 30 days after termination of this lease remove all personal property and machinery installed upon the claims leased to Lessee and installed by him.

Time is of the essence of this agreement, and each and every clause of this indenture and all the covenants and conditions contained herein expressed or implied shall extend to the successors, heirs, executors, administrators and lawful assigns of all of the parties hereto.

In witness whereof, the parties hereto have hereunto subscribed their names the day and year first above written.

FLUORESCENT MINES, a Corporation

Attest: Vernon McLaughlin
Its Secretary

(SEAL)

FLUORESCENT MINES, a Corporation

By R. C. McLaughlin
Its President. Lessor

E. L. Cleveland
Lessee

Residing at Reno, Nevada

KNOW ALL MEN BY THESE PRESENTS, that FLUORESCENT MINES, a Corporation of Dillon, Montana, described as the lessor in the foregoing lease, party of the First Part, is held firmly bound unto E. L. Cleveland of 15 East First St., Reno, Nevada, described as lessee in said lease, party of Second Part, in the penal sum of

Twenty Thousand DOLLARS, for the payment of which well and truly to be made, the said corporation hereby binds itself, its heirs, successors and assigns firmly by these presents.

WITNESS, the signature of the authorized officers of the above named corporation, this 17 day of January, A. D. 1951.

Attest:

FLUORESCENT MINES, a Corporation

Vernon McLaughlin
Its Secretary

By R. C. McLaughlin
Its President

(SEAL)

But the condition of the foregoing obligations is such that whereas the above bounden party of the first part has on this day agreed to sell to the party of the second part the following described mining property, to-wit; situated in the VIPOND mining District, Beaverhead County, State of Montana,

All of the following named mining claims, the notices of location of which are of record in the office of the County Clerk & Recorder of Beaverhead County, Montana and to which notices of location reference is hereby made for a more particular description of such claims; and which notices of location are each identified by the filing number assigned by said Clerk & Recorder, hereinafter set out following the name of each of such claims:

NAME OF CLAIM	INDEX NUMBER
Star No. 1	66802
Star No. 2	66803
Star No. 3	66804
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Lone Eagle	66012
Granite	65988
Red Raspberry	66015
Red Metal	65987
Trail No. 1	66011
High Boy	65989
Lonesome	66013
Mammoth	65990
Garnet	65974
Fox	65923

and being the same property as embraced in the forgoing lease, which is simultaneously executed herewith upon the following terms:

That the total purchase price shall be the sum of $300,000.00 payable in cash upon delivery of a good and sufficient deed conveying said claims, provided however that lessee, his heirs, executors, administrators or assigns shall be credited with the full amount of all royalty or other payments made by him or them to lessor as rental or royalty during the term of the above mentioned lease, upon the said purchase price so that said purchase price of $300,000.00 shall be reduced by the aggregate amount of said credits.

Now if the said party of the second part shall well and truly make the aforesaid payments within the time above limited, the party of the first part

will forthwith convey said property to the party of the second part by a good and sufficient mining deed, and will also furnish an abstract of title to said premises, certified by a competent abstractor, showing title to said premises in lessor, free and clear of all liens and incumbrances at the time of said conveyance.

The further condition of this bond is that if by reason of the violation of any of the covenants or conditions contained in the foregoing lease said lease shall be forfeited under the terms thereof, then the forfeiture of said lease shall likewise operate to terminate this bond and to release the party of the first part from any further obligations hereunder.

Now if the party of the first part shall well and faithfully perform the foregoing covenants and conditions then this obligation to be null and void, otherwise to remain in full force and effect according to the terms hereof.

It is mutually agreed between the parties hereto, and this bond is executed by the party of the first part, and received by the party of the second part, with the understanding that should a portion of said purchase price be paid and default should thereafter be made by the party of the second part by reason whereof the party of the first part shall be relieved from any further liability to carry out the terms of the foregoing obligation, then all moneys which have been thus paid prior to said default shall be forfeited to the party of the first part as liquidated damages and second party shall be liable to no other payments under the terms hereof provided all royalty payments then due have been paid.

ATTEST:

Vernon McLaughlin
Its Secretary

(SEAL)

FLUORESCENT MINES, a Corporation

By R. C. McLaughlin
Its President

E. L. Cleveland
Lessee

State of Montana,)
(ss.
County of Beaverhead)

On this 17th day of January, in the year 1951, before me the undersigned, a Notary Public, personally appeared R. C. McLaughlin and Vernon McLaughlin known to me, respectively to be the President and Secretary of the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

(Notarial Seal)

W. G. Gilbert Jr.
Notary Public for the State of Montana,
Residing at Dillon, Montana;
My commission expires October 19, 1952.

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

On this 17th day of January, in the year1951, before me the undersigned, a Notary Public, personally appeared E. L. Cleveland, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same

W. G. Gilbert, Jr.
Notary Public for the State of Montana,
Residing at Dillon, Montana;
My Commission expires October 19, 1952.

(Notarial Seal)

C O P Y

Letterhead of: Estey A. Julian
San Francisco

April 14, 1951

Mr. R. C. McLaughlin
Fluorescent Mines
Dillon, Montana

Dear Sir:

Please find enclosed check for $100 to Fluorescent Mines, being payment for the March 18-April 17 period in accordance with paragraph 9 of the "Bond and Lease For Mining Property" of January 17, 1951, between Fluorescent Mines, lessor, and E. L. Cleveland, Lessee.

Very truly yours,

Original signed by)
Estey A. Julian) (Stamp)
Estey A. Julian

EAJ/m
encl

cc Mr. E. L. Cleveland
P. O. Box 2267
Reno, Nevada

Mr. Frank Eichelberger
Washington, D. C.

A G R E E M E N T

This agreement made as of March 1, 1951, by and between E. L. Cleveland of Reno, Nevada, Frank Eichelberger of Spokane, Washington, and Estey A. Julian of San Francisco, California:

Witnesseth:

Cleveland, as lessee, has a "Bond and Lease for Mining Property" dated January 17, 1951, from Fluorescent Mines, a corporation of Dillon, Montana, covering sixteen mining claims in the Vipond Mining District, Beaverhead County, Montana, recorded under index numbers 66802, 66803, 66804, 66014, 65924, 65986, 66012, 65988. 66015, 65987, 66011, 65989, 66013, 65990, 65974, and 65923 in the County Clerk and Recorder's office, Beaverhead County, said claims being known by the parties hereto as the Brown's Lake Tungsten Property. Cleveland has to date out-of-pocket expense in acquiring the rights to this property in amount of $1,500. It is expected that the present Bond and Lease will be replaced by a straight lease agreement and the parties hereto agree this should be done and Cleveland is undertaking to accomplish this.

Eichelberger and Julian hereby join Cleveland in a project to explore, develop and finance the Browns Lake Tungsten Property with purpose of putting it in production, the parties hereto agreeing as follows:

1. Eichelberger and Julian have reimbursed Cleveland his out-of-pocket expense of $1,500, and further agree to advance such additional money, up to $3,500, for exploring, developing and financing the property as in their judgment seems advisable.

2. In consideration of the above financing, Cleveland agrees that Eichelberger and Julian shall each hereby have a thirty percent (30%) interest in the said Browns Lake Tungsten Property, making the interests of the parties hereto Eichelberger 30%, Julian 30% and Cleveland 40%. Cleveland is obligated to the extent of 10% in obtaining the Bond and Lease covering the Browns Lake Tungsten Property and agrees to take care of this 10% obligation out of his 40%.

3. Should the exploration and development of the property be encouraging, Eichelberger and Julian shall use their best efforts to finance the property and get it in production.

4. The parties hereto will make no charge for their time in connection with use of the money mentioned above;

however, to the extent of the money mentioned above, all out-of-pocket expenses of Cleveland shall be financed by Eichelberger and Julian, and out-of-pocket expenses of Eichelberger and Julian shall be returnable to them or count as advance against the $3500.

5. In replacing the present Bond and Lease, Cleveland agrees to consult Eichelberger and Julian to the end that the new lease will have terms satisfactory to all parties.

6. Should Eichelberger and Julian decide to withdraw at any time during the period of financing covered by the hereinabove mentioned $3,500, they may do so by written notice to Cleveland, in which event the 30% interests of the withdrawing parties shall revert to Cleveland. After such withdrawal should the project become profitable to Cleveland either through operation or sale he will return, as soon as there are profits out of which to do so, the money paid or advanced under this agreement.

7. After the point of $5,000 of expenditures as mentioned above is reached, each interest of the parties hereto shall bear its proportionate part of all further costs and expenditures, but there shall be no obligation on the part of any of the interests or parties hereto to advance further money or stand further costs or expenses after the $5,000 point. However, should further money be advanced or there be further costs and expenditures not put up proportionately by each interest of the parties hereto, such outlays shall be returnable to those advancing them first and before any participation of the ownership interests of the parties hereto.

8. It is also agreed that Eichelberger and Julian shall be entitled to have returned them the $1,500 and up to the $3,500 provided for in paragraph numbered 1 hereof before any participation of the ownership interests of the parties hereto.

IN WITNESS WHEREOF the parties have hereunto subscribed their names.

(signed) Estey A. Julian

(signed) E. L. Cleveland

(signed) Frank Eichelberger

Form MF-100
(March 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. 148

Date received

E. L. Cleveland
15 East First Street
Reno, Nevada

Name and address of applicant

Date 18 April 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124–A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

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

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

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

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Interest ~~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)
E. L. Cleveland	Lessee	None	50,000	40%	Interest	None	
Estey A. Julian	Partner	"	over 100,000	30%	"	"	
Frank Eichelberger	"	"	over 100,000	30%	"	"	
	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: None

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
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.)		None			
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. Yes. We expect to develope property by underground work and diamond drilling.

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.

See attached rep[illegible]

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

(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)	25,600	.70%	$45.50	$40.00	$25.00
Indicated (probable)	11,000	.60%	$39.00	$35.00	$25.00

(*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. Answered in 3.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.
Brown's Lake - a rather large lake.

15. Power:

State amount of power used, rate per hour, and source thereof. No Power available.

16. Labor: None now employed

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

17. Equipment and Facilities: A small mill partially equipped in fair condition.

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.
No.

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.

E.L. CLEVELAND
(Name of ~~company~~) owner

By Grant Pichelbergs
(Signature of authorized official)

Com. Engineer + Partner
(Title)

(Date)

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

E. L. Cleveland
15 East First Street
Reno, Nevada

1. Materials produced:

   (a) Tungsten concentrates of Scheelite and Powellite will be produced if and when a mill is erected.

   (b) There are no byproducts.

E. L. Cleveland
15 East First Street
Reno, Nevada

2. The name of the mine is the Flourescent Mine. The names of the claims are given in the attached lease. This is a tungsten ore prospect which needs further exploration, careful sampling and diamond drilling (U.S.G.S. recommendation) before a mill would be warranted.

   (a) About 60' of shafts, 8 pits of varying sizes and depths.

   (b) About 180' of adits and prospect holes scarecely large enough to be called adits.

   (c) Answered in (b) above.

   (d) Some bulldozing and trenching have been done as well as some small diggings but many of these are now filled either by sloughing or intentionally.

None of these workings are flooded and all mining will probably be done by open quarries or adits and drifts, at least for the foreseeable future.

E. L. Cleveland
15 East First Street
Reno, Nevada

3. -

(a) Nearest town and shipping point is Melrose, Montana, 15 miles in air line NE of mine workings, 8 miles by Forest Service Road and 12 miles by surfaced road (U.S. Highway 91). Butte, Montana, is nearest large town where supplies of all kinds are obtained - 35 north of Melrose.

(b) Vipond Mining District.

(c) T. 4S, R. 10 W Secs. 3 and 4 and T 3S - R 10 W - Secs. 32, 33, and 34.

(d) Beaverhead County, Montana.

E. L. Cleveland
15 East First Street
Reno, Nevada

4. -

(a) Property is not in operation.

(b) Will operate as Lessee.

E. L. Cleveland
15 East First Street
Reno, Nevada

5. Not in Production.

This project is to follow recommendation of U.S.G.S. to further explore and develop property by mining, bulldozing and diamond drilling and to thoroughly sample ore exposed by this work.

This exploration work can be started 30 days after exploration loan is granted and money made available.

E. L. Cleveland
15 East First Street
Reno, Nevada

6. E. L. Cleveland has been engaged in business for about 20 years most of which time he has been in mining.

Estey A. Julian and Frank Eichelberger are graduate engineers with 40 years continuous experience in mining. Actual operations will be under their supervision.

E. L. Cleveland
15 East First Street
Reno, Nevada

7. -

(a) I do not know very much about early history of property, because actually little mining has ever been done, and rumors and gossip have no supporting factual data. Some operations were attempted when tungsten was high in 1943 and 1944, but the ore could not be produced at a profit when the price of tungsten fell. Also, the early operators were never adequately financed.

(b) There are no adjoining or adjacent properties.

(c) Report of Walter E. Bauer of Salt Lake City is appended hereto. Mr. Bauer is a consulting geologist of Salt Lake City.

E. L. Cleveland
15 East First Street
Reno, Nevada

17. There is a small partially equipped mill on property which Bauer, in his report, states could be made in a 25-ton per day sampling mill. The condition of mill is only fair and will require some rehabilitation to be useable for storage warehouse, office, and sample preparation.

    The mill has a small jaw crusher, 3 tons per hour Ball mill and classifier and 1 Wilflay concentrating table, driven by diesel engine. With the addition of a fine crusher or set of rolls, it could be used as a sample mill, but this is not contemplated in our program, which is to be purely exploration and development. If the results warrant, a proper mill would have to be erected.

FEB 17 1951

SUPPLEMENT TO THE BROWN'S LAKE TUNGSTEN REPORT.

April 5, 1949

Mr. Otto Rohlfs has suggested a supplement in order to bring my previous report up to date. I believe this is an excellent idea.

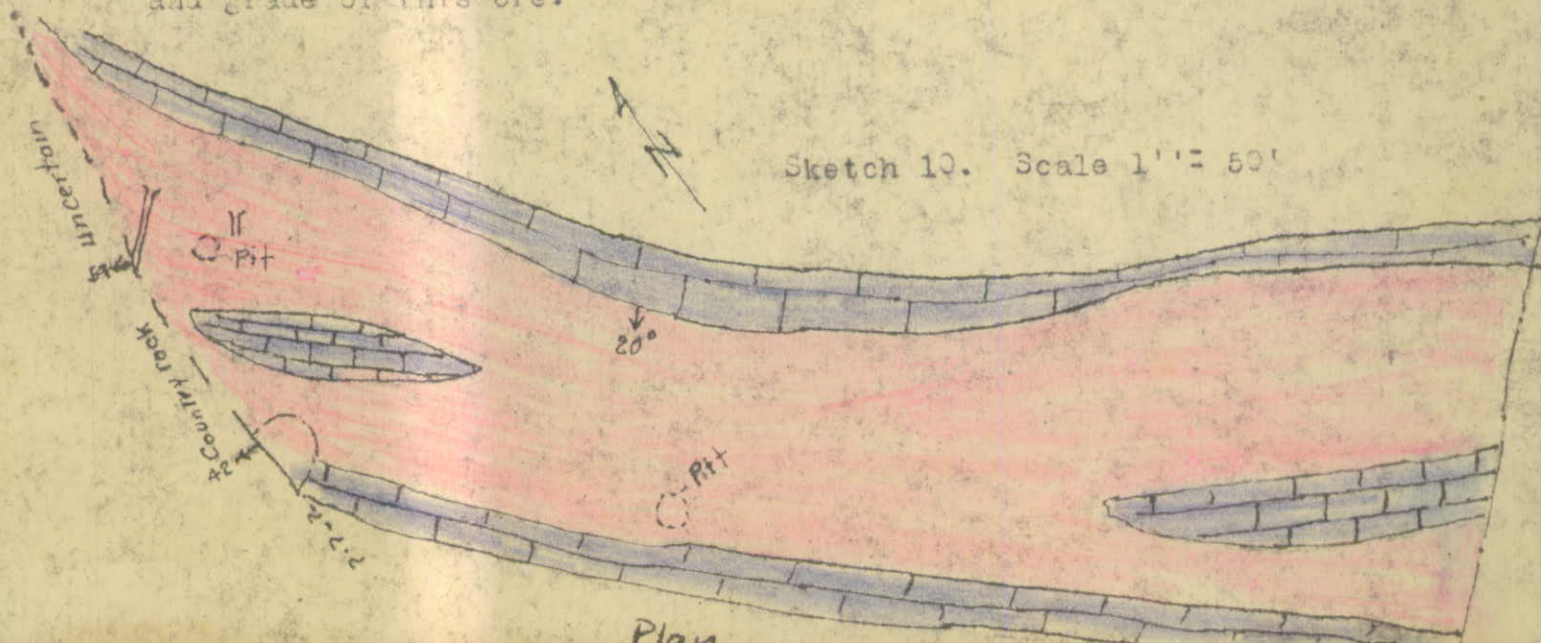
A few months ago Mr. McLaughlin sent me a representive sample of a scheelite-powellite concentrate obtained from his small mill last fall. I had this assayed for him and found that it contained 62.8% WO_3 and 2.93% Mo with no other impurities that would be penalized for. The Wah Chang Trading Corp. of New York informed us that they would buy this concentrate at $26.00 per unit on a standard of 65% WO_3 and 0.4% Mo, and that for each % of Mo over 0.4% they would deduct $1.00. Therefore a concentrate of 65% WO_3 and 3% Mo would be worth $23.00 per unit and a 0.6% WO_3 ore with 3% Mo would be worth $14.00 a ton.

ore from 10 shaft marked (12)

I have also prepared for you a 1000 scale map of this area showing a somewhat generalized location of the claims, contour lines, and outcroppings of tactite ore. The contours and section lines, as far as I know, were obtained from a forestry map and are fairly reliable. McLaughlin and I believe the claim locations to be fairly close but no formal survey has been made of them. Outcrop locations are located from their positions as mapped on aerial photographs or from claim corners where possible.

Additional information on outcrops was suggested and the following is taken from field notes obtained during June 2-12, 1948 and will be presented by claims.

Fox. This lode 10 (see 1000 scale map) outcrops conspicuously and there is not much question about the length and width shown on the map. There are at least four pits and short adits in it (see sketch 10 below). It is possible that the two steep dips shown are actually faults; in that case a fault would form a western limit of the ore as shown. Diamond drilling would be very useful in determining the full extent and grade of this ore.



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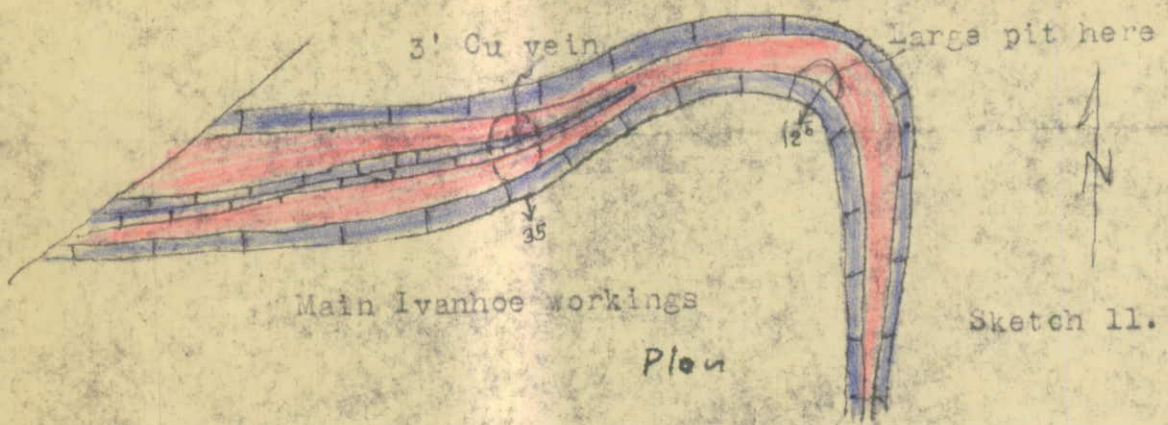
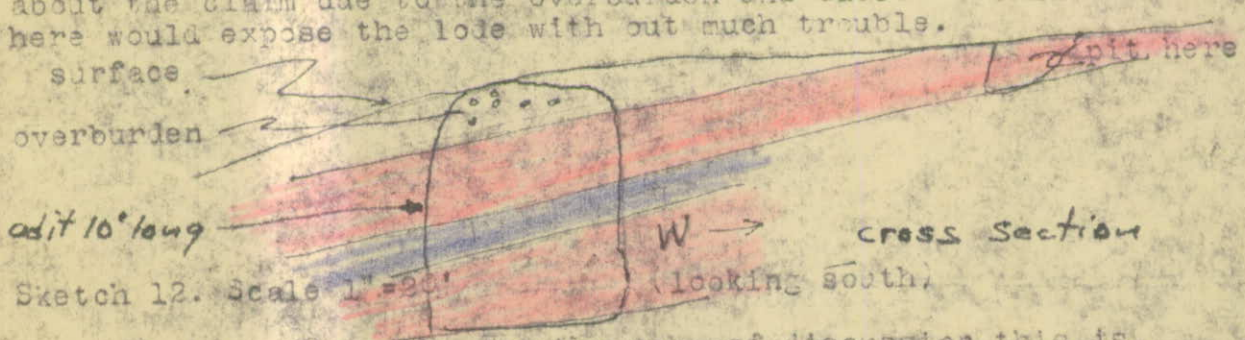
Ivanhoe. This claim is not owned by McLaughlin but he can obtain a lease and option on it to turn over to any interested third party. The key point here would be to conduct any further investigation quietly until the claim was tied up. I did not spend a great deal of time on this property although I did walk the outcrop. A plane-table survey would give quite a bit more detail. The outcrops are quite strong, forming ridges and even small cliffs. As far as I know this is the largest outcropping in the district. See sketch 11, also 11 on 1000' scale map.



Main Ivanhoe workings

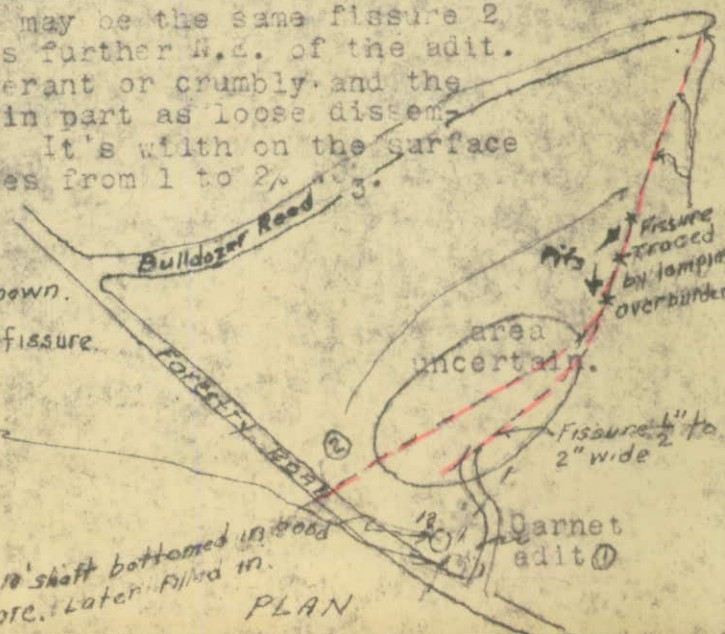
Sketch 11. Scale 1"=200'

Lost Copper. This claim has two small pits on it as shown in sketch 12. Other than that little is known about the claim due to the overburden and duff. A bulldozer here would expose the lode with out much trouble.



Sketch 12. Scale 1"=20'

Garnet. For the sake of discussion this is broken into three parts. Sketch 1, shows the Garnet adit 1 which may have intersected a split from a fissure-like tactite zone striking N.65E.. This in turn may be the same fissure 2 that has several pits on it and lies further N.E. of the adit. This one is characteristically pulverant or crumbly and the sheelite-powellite occurs at least in part as loose disseminated grains several m.m. in size. It's width on the surface is from 2 to 5 feet; the grade varies from 1 to 2% WO3.



Reason for lessor driving in granite unknown. McLaughlin turned adit westward & cut small fissure. To narrow to be commercial

Sketch 1. 1"=200'

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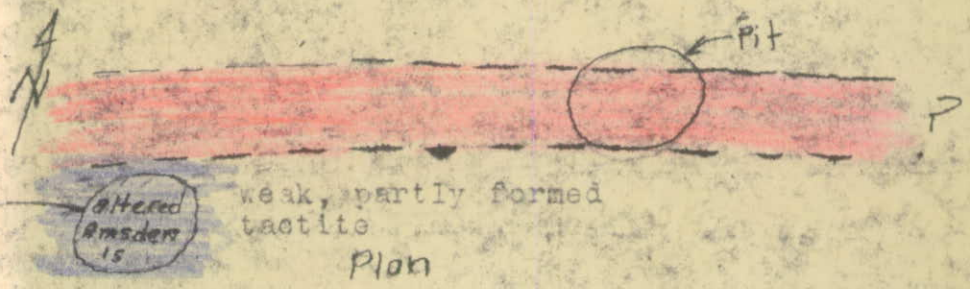
Part 2 is a lode 1100 feet north of the adit which has been exposed by one incline (now caved) and a surface trench. The tactite in the incline was massive while the trench had a pulverant tactite. I had the impression that an ore body 50 feet long by 30 feet wide could be expected although a bulldozer might expose more. Throughout the entire district this pulverant tactite will assay twice as much or more than the massive tactite. See sketch 3.

Plan

Sketch 3. Scale 1"=20'

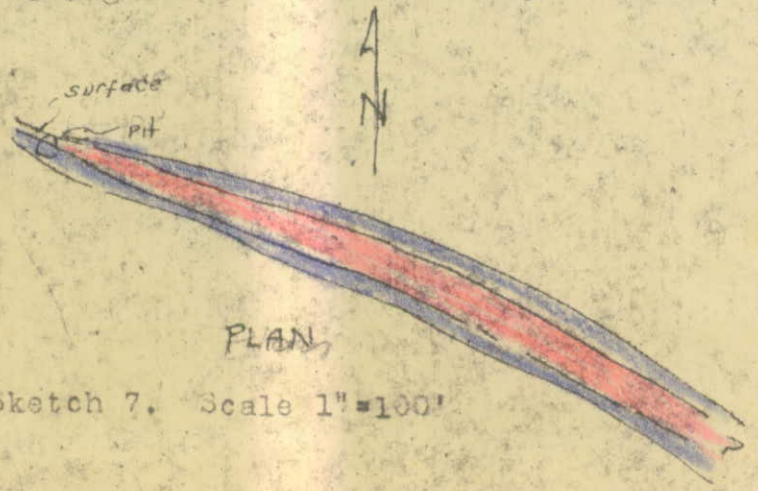
Part 3 is an area of tactite float 4 lying 250 feet north of Part 2, and is found in rather large pieces over an area 50 feet in diameter. This is the massive tactite and should be investigated further.

Star No. 2. There are two exposures on this claim. One, at 5 is an area 120 feet long along which massive tactite is found. The other is at 6 and has two pits on it. One pit was obviously in the footwall while the other had about 8 feet of massive tactite in the pit. I believe the grade would be lower than average. See sketch 6.



Sketch 6. 1"=20'

Star No. 3. This lode with one pit and two very good exposures is a lode at least 350 feet long with a width of 5 to 20 feet. This is the massive tactite. McLaughlin tells me it assays around a half % WO_3. See sketch 7.



Sketch 7. Scale 1"=100'

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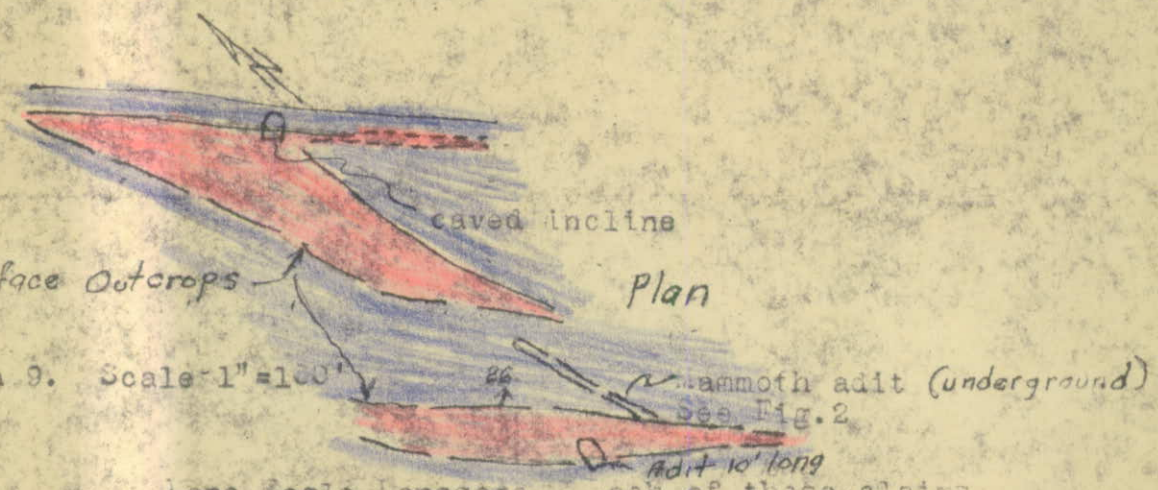
The Mammoth-High Boy. These can be divided into the upper and lower groups. The lower one 9 has the Mammoth adit driven in it for 80 feet and is a well defined exposure, see Fig. 2 and sketch 9. This outcrop is easily traced for 130 feet and with the one above it 8 offers first class mining possibilities.

The upper lode has a 260 feet exposure with a suggested width at it's widest point of 45 feet. It is quite possible that the two lodes will join at depth.



Sketch 9. Scale 1"=100'

Lone Eagle-Lonesome. Each of these claims have a small outcrop of tactite 2 to 3 feet thick. I doubt if they are of immediate value although they may represent the tops of larger lodes. McLaughlin has shown me several large pieces of scheelite-powellite the size of the first joint of a finger and they came from these outcrops.

Water supply may be of further interest. There is one water right on the creek owned by a rancher a mile or two below Brown's Lake, but I dont think it covers the full flow of the stream which is quite large. McLaughlin was talking to a Forestry official about the water supply for a future mine and mill operation. The official said there would be plenty of water for that and suggested that the water from Rainbow Lake (see Fig.1) could be used to generate electricity for the mill. This water would have a drop of 450 feet.

Otto was wondering where Melrose, Montana was; it lies 36 miles south of Butte, Montana on Highway 91.

Regarding any future examination of the claims, one should not attemt to cover the claims in a day or two. To illustrate my point, it takes nearly a full day to walk from the Garnet adit northward to the Star claims and eastward to the High-Boy Mammoth group stopping only for a general observation of the outcrops. Much of this, although not

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mountain climbing, is strenuous and any engineer expecting to fully cover the property should plan on two weeks, with an assistant, to map, sample, and lamp the property. McLaughlin has a fishing resort at Brown's Lake and would make any examining engineer feel quite welcome. He also has a collection of tungsten specimen from his property that will impress anyone interested in this sort of thing.

Two more items are worthy of note. The leaser who lpove the Garnet adit also sank a short shaft about 10 feet west of the Garnet adit. In 10 feet or so he got through the overburden and found himself in a large massive tactite area. He mined out about 60 tons and piled it just across the road from the adit. Since he had enough ore for a mill test, and apparently not wanting other people to know about it, he filled the shaft in. Most of this ore still lies where he put it. Some of the finer stuff McLaughlin ran through his small gravity mill. The ore looks very promising to me and although I did not put this ore-body in any ore estimate that I have made I am positive it is there and feel that anyone operating the property should uncover this ore-body again.

The last item I have to offer is that a underground exposure in the Ivanhoe is reported to have assayed 18% WO_3 for its three foot width of pulverant tactite. I would not be toquick to discredit the tale. I have lamped the exposure and it is the richest I have seen although my impression was that the Mo content was higher than usual. An interesting problem develops when one assumes the 18% WO_3 to be correct with a 1% impurity of Mo. Such an ore would still have a gross value of $288.00 per ton.

Respectfully submitted,

Walter E. Bauer

Walter E. Bauer
Mining Geologist

PS: A small mill is located just south of the Garnet adit and consists of a 50 ton Jaw crusher, 3 ton ball mill, small Classifer and a wilfley Concentrating table. With the addition of a small set of rolls this could be converted to a 25 ton capacity, sample mill.

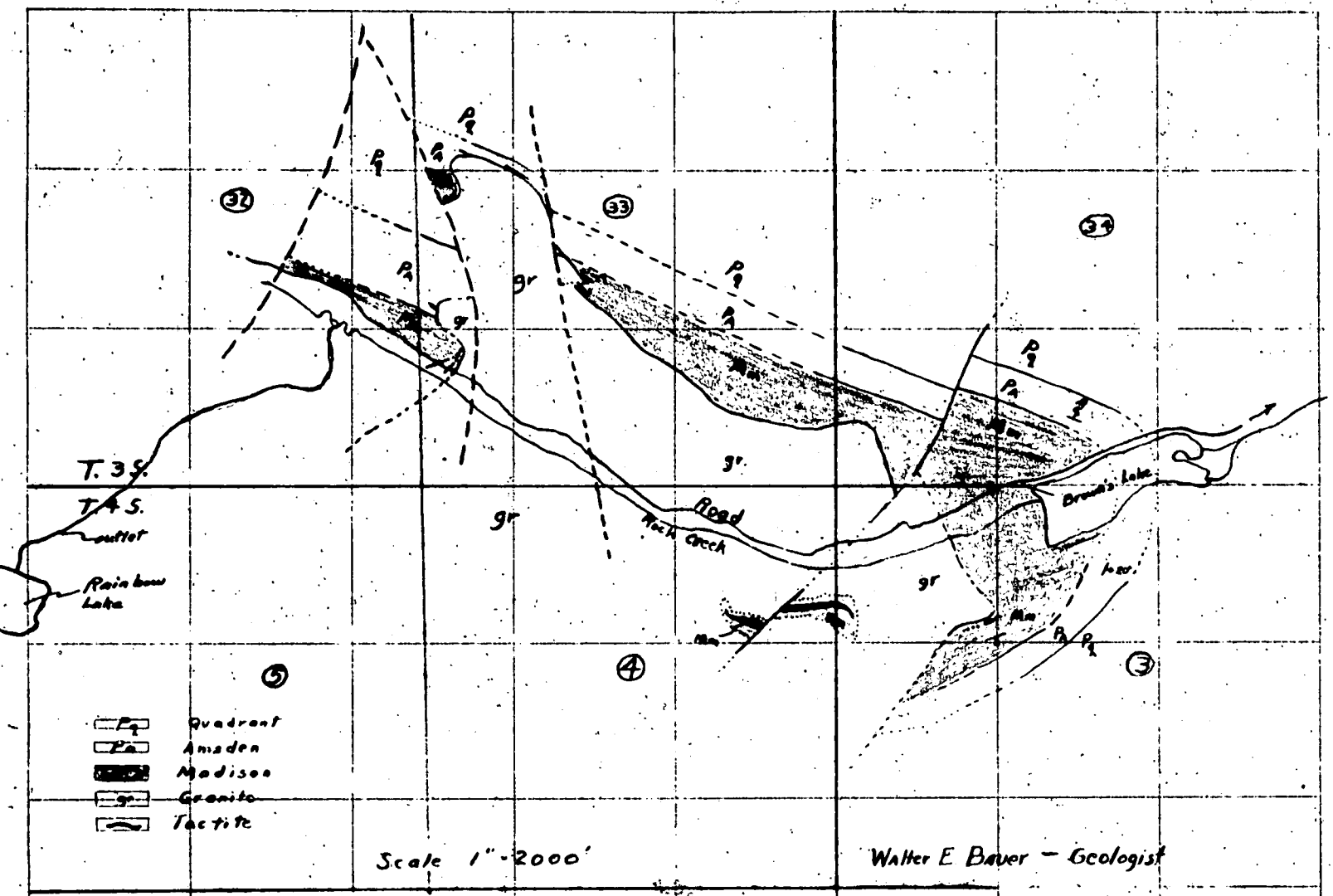

Fig. 1 Geologic Map of Brown's Lake Region, Beaverhead, Montana

"ALBANENE" NO. 1989M K&E CO., N.Y.
REG. U.S. PAT. OFF.

63 65

200

60,000

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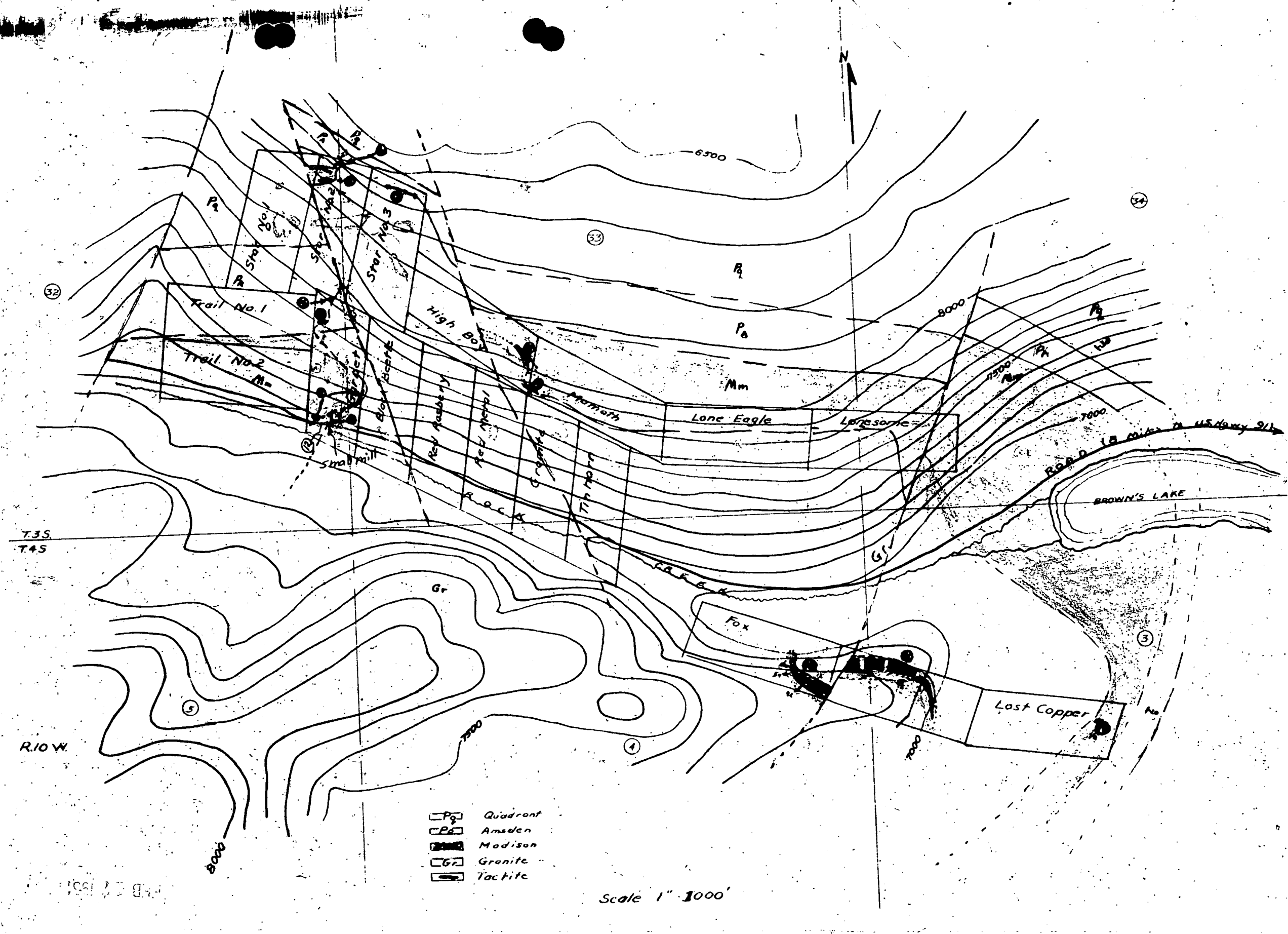

N
6500
8000
7500
7000
Star No. 1
Star No. 2
Star No. 3
Trail No. 1
Trail No. 2
High Boy
Mammoth
Lone Eagle
Lonesome
Red Rabbit
Red Metal
Grant
Tip Top
Big Bertie
Small mill
ROCK CREEK
ROAD (8 miles to U.S. Hwy 91)
BROWN'S LAKE
Fox
Lost Copper
T.3S.
T.4S.
R.10 W.
Gr
Mm
Pq
Pa
Pk
Quadrant
Amsden
Madison
Granite
Tactite
Scale 1" 1000'

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

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

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

Bu. Vou. No. 649

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

FEB 10 1953

Voucher prepared at ..... , Feb. 10, 1953
(Give place and date)

THE UNITED STATES, Dr., Payee's Account Idm-E105 and Idm-E127

To American Alloy Metals, Inc.
(Payee)

Glen, Montana
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	November 1951	Contract Idm-E127				2,941 28	
	November 1951	Contract Idm-E105				100 00	
						3,041 28	
		Less deletions by Mr. Hull, audit report dated 1/18/53				2,257 91	
		Approved total				783 37	
		Less Operator's pro-rata share of 25% approved cost				195.84	
		Use continuation sheet(s) if necessary					

PAYMENT:
- Complete ☐
- Partial ☐
- Final ☐

Shipped from to Weight Government B/L No. Total 587 53

(Payee must NOT use this space)

Differences .....

Account verified; correct for 587 53

(Signature or initials) .....

Contract No. Date Req. No. Date Invoice Rec'd.

MEMORANDUM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount

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

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

16—22900a-2

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

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

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

ABSENCE OF ADVERTISING

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

.....

.....

.....

.....

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

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

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

16—22900a-2

'MF-104'
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No. Idm-E 105

Name of Operator American Alloy Metals, Inc.
Docket No. DMA 148X Idm-E-105
Total Contract Amount $ 33,290.00
Government Participation: 75 % Amount, $ 24,967.50
Distribution of Expenditures for Month of November, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
FEB 1 0 1953

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

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

American Alloy Metals, Inc.
(Name of Company)

By J. W. Nelson
(Signature of Authorized Official)
J. W. Nelson

February 12, 1952
(Date)

Project Manager
(Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(a) Facilities						
(b) Buildings						
(c) Fixtures						
2. Operating Equipment:						
(a) Purchased[1]						
(b) Rented[2]	None	4,740.00	4,740.00			
(c) Furnished by operator						
3. Rehabilitation and Repairs:						
(a) Facilities						
(b) Buildings						
(c) Installations						

NARRATIVE

Drilling stopped with the start of cold weather, the first of November. However, it was possible to continue surveying on the Ivanhoe claim preparatory to future work in the spring. Lines were run from the last drill holes on the east end of the Ivanhoe claim down the cliffs to the lower old workings and to the end of the jeep road. This work continued until the 15th of the month.

J W Melrose

J. W. Melrose
Project Engineer

EXPLANATION - LABOR

At the beginning of the exploration project, August 1, 1951, it was soon found certain labor would be needed to get the job done. This included labor on the access road, sampling, camp repairs and mapping.

American Alloy Metals, Inc. was not registered in Montana at the time, so an arrangement was made with the R. S. McClintock Diamond Drilling Company to handle the payroll.

The men working for American Alloy Metals, Inc. also at times worked for R. S. McClintock. American Alloy Metals only used the men when it was absolutely necessary to aid in getting the job done in the most expeditious manner possible.

There were days when it was necessary for the men to work their regular shift of eight hours for McClintock and put in overtime for American Alloy Metals. As a consequence, it will be noted on the accompanying payroll that some men are shown as working fractions of days and yet receiving overtime for this work.

J W Melrose

J. W. Melrose
Project Manager

EXHIBIT
EXPLANATION

At the close of our surface exploration work at Browns Lake we had not submitted items of expense totalling $797.62, and a labor item of $838.61.

The former expense had to do with supplies purchased and should be charged to Idm-E-127. In our contract we have an item of $1,800.00 for sampling, assaying and miscellaneous supplies, but have used $1,293.75 of this amount. Although the supply cost is $301.49 over the amount remaining under the above item, we feel that because this was a legitimate expense in getting the job done it should properly be vouchered from remaining funds.

To date we have submitted labor costs of $587.81 listed as services in August Idm-E-105, $138.00 on September Idm-E-105, under sampling costs, and $479.25 on October Idm-E-127, under labor. This totals $1,205.06. We did not break the labor down into unit costs at the time of submission because of the difficulty of doing this through our arrangement with the McClintock Company. A certified copy of our payroll is attached. Our total labor costs, including F. O. A. B., State Unemployment, and Industrial Insurance, were $2,043.67, leaving a balance of $838.61.

The labor recap is as follows:

Access road	$ 882.19
Mapping	417.00
Sampling	259.50
Repair buildings	349.50
	$1,908.19

In order to prepare the unit costs properly, the original labor items have been deleted from each contract and the total labor submitted on November #127 contract.

Following is the supervision recap:

Supervision Recap

	Was Charged			Should Have Been Charged	
	#105	#127		#105	#127
Aug	$ 600.00	$ 800.00	Aug-Sept	$ 400.00	$ 200.00
Sept	600.00			300.00	300.00
Oct	200.00	400.00		300.00	300.00
Nov	None	None		100.00	100.00
Total	$1,400.00	$1,200.00		$1,100.00	$1,100.00

Deletion $450.00

J. W. Melrose
Project Manager

*Deletion : ro-rated $225.00 each contract.

EXPLANATION - RECAP OF ATTACHED RECEIPTS

Assay - Union Assay Office	$ 6.00
Repair chain saw - Butte Machinery	3.30
Assay - Washington Technical Laboratories	26.00
Gas - George Steel Company	15.00
Tires - Huggins Chevron Service, Dillon	30.45
Supplies - McClintock's	397.73
Gasoline - pickup - November	21.65
Pickup repairs - Buchanan Chevrolet Company	7.00
Drafting supplies - Grahams	.56
Chains for pickup - Huggins Chevron Service	17.00
Oil - Huggins Chevron Service	5.50
Hardware - Actis Mercantile, Melrose	43.66
Blueprints - Gendron Company, Spokane	12.41
Gas and oil - Sage Service	46.32
Freight on compressor - Andrews Equipment Co.	115.04
Total	$797.62

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	100.00	1,400.00	1,500.00			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work	None	11,154.00	11,154.00			
11. Other (specify)						
Sampling & freighting	None	133.00	133.00			
Incidentals	None	1,141.40	1,141.40			
Total	$100.00	$13,913.40	$13,913.40			
Deletions			950.81			
Adjusted totals			$13,062.59			
Totals previously reported		$13,913.40	13,913.40			
Totals to date			13,062.59			

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by 2/10/53
Amount approved for payment See MF104 for Nov. 1951
Remarks Contract Edm-E127.

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF _____

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals										

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No. Idm-E 105

148
OCT

Name of Operator American Alloy Metals, Inc.
Docket No. DMA 148X Idm-E-105
Total Contract Amount $ 33,290.00
Government Participation: 75 % Amount, $ 24,967.50
Distribution of Expenditures for Month of October, 1951

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

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

American Alloy Metals, Inc.
(Name of Company)

By J W Melrose
(Signature of Authorized Official)

J. W. Melrose
Project Manager
(Title)

November 1, 1951
(Date)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Fixtures						
2. Operating Equipment:						
(*a*) Purchased[1]						
(*b*) Rented[2]	615.00	4,125.00	4,740.00			
(*c*) Furnished by operator						
3. Rehabilitation and Repairs:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Installations						

EXHIBIT EXPLANATION

Item 2 (b) Rented

	See attached bulldozing invoice		$615.00
5	Supervision		
	See explanation attached letter and statement		200.00
11	Incidentals		
	Lumber supplies	$60.60	
	Drafting supplies	.96	
	Hardware	9.79	
	Caps	4.50	
	Rock drill rental*	30.00	
		$105.85	

*See attached invoice

NARRATIVE STATEMENT

During the month a bulldozer road was begun up the north side of Rock Creek Valley to reach orebodies exposed on the Mammoth and High Boy Claims at an elevation of 8,400 feet. Because of the early severe weather, we had to stop for the year approximately 3,000 feet from our objective. However, a possible commercial orebody was disclosed while building the road, at a point we had not expected to find it.

The lower portion of the claims and road on the north valley wall were mapped during the month.

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	200.00	1,200.00	1,400.00			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work	None	11,154.00	11,154.00			
11. Other (specify)						
Sampling and assaying	None	138.00	138.00 ~~133.87~~			
Incidentals	105.85	1,375.55	1,481.40			
Total	920.85	17,992.55	~~19,509.27~~ 18913.80			
Deletions						
Adjusted totals						
Totals previously reported						
Totals to date	920.85	17,992.55	~~19,509.27~~			

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by Glenn A. Reed
Amount approved for payment
Remarks

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF October, 1951

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics	200.00				200.00	Month	1/3	2	2-1/3	3
Trenching										
Sampling and assaying										
Roads and trails				615.00	615.00	Hour	41	275	316	316
Test pits										
Other (specify)										
Incidentals				105.85	105.85					
Totals	200.00			720.85	920.85					

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No.
Idm-E 105

Name of Operator American Alloy Metals, Inc.
Docket No. DMA 148X Idm-E-105
Total Contract Amount $ 33,290.00
Government Participation: 75 % Amount, $ 24,967.50
Distribution of Expenditures for Month of September, 1951

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C.
NOV 30 1 59 PM '51

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

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

American Alloy Metals, Inc.
(Name of Company)
401 Symons Building, Spokane 4, Wash.

By J. W. Melrose
(Signature of Authorized Official)
J. W. Melrose

October 1, 1951
(Date)

Project Manager
(Title)

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

16—64068-3

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(a) Facilities						
(b) Buildings						
(c) Fixtures						
2. Operating Equipment:						
(a) Purchased[1]						
(b) Rented[2]	1,230.00	2,895.00	4,125.00			
(c) Furnished by operator						
3. Rehabilitation and Repairs:						
(a) Facilities						
(b) Buildings						
(c) Installations						

NARRATIVE STATEMENT

The access road to the orebody on the south side of Rock Creek Valley was completed October 1 (See map). It was deemed not feasible to spend more money to continue the road east along the mountainside because of the rugged terrain. Therefore the diamond drill contracting company erected a high line to hoist this equipment to drill hole levels and are building tote trails to tug machines and material the remaining distance to theeast.

Two more machines were brought in by the company during the month. Three holes were completed. Two did not show ore, but the third looks favorable. This makes a total of three holes (two in August) that encountered tactite.

An access road to claims on the north side of Rock Creek Valley was started during the month in order to trench, sample and otherwise explore claims in this area. Although difficulty will be encountered in building this road, it will not be as difficult as the south side road.

Building repairs which included a shower room, greatly boosted the morale of the men.

Bulk samples for metallurgical study by the U. S. Bureau of Mines are being taken. Because of the precipitous nature of the face of the orebody the securing of these samples will take time.

Attached is a preliminary geologic map of the south side orebody. A map is now being made of the north side.

J. W. Melrose
Project Manager

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

EXHIBIT

EXPLANATION

ITEM			
2(b)	Rented 1 D8 caterpillar tractor for road-trail, per contract 32 hours completed to date		$1,230.00
10	Contract work 996 ft of hole drilled @ $7.75 per foot	$7,719.00 and	
	20 ft of reaming 3.50 per foot	70.00	
			7,789.00
11	Other (specify) Incidentals per contract Equipment rental $ 30.00 Supplies	87.47	
			117.47
	Sampling & assaying Services, for preparation of surfacing sampling		138.00

U. S. CUSTOMS DIST. DIVISION
RECEIVED
MAR 2 1967

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	600.00	600.00	1,200.00			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
			11,154.00 New			
10. Contract Work	7,789.00	3,365.00	~~11,084.00~~			
11. Other (specify)						
Sampling & assaying	138.00	None	138.00			
Incidentals per contr.	117.47	1,258.08	1,375.55			
Total	9,874.47	8,118.08	17,992.55			
Deletions						
Adjusted totals						
Totals previously reported						
Totals to date	9,874.47	8,118.08	17,992.55			

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by B Sanders
Entered by
Approved by Glenn A Reed M E Holm
Amount approved for payment 7405.85
Remarks

16—64068-3

+ Includes Bonding and Compensation

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF September 1951

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes				7,789.00	7,789.00	foot	996	408	~~1,304~~ 1404	3,000
Overburden										
Rehabilitation and preparation										
Geology and geophysics	600.00				600.00	month	1	1	2	3
Trenching										
Sampling and assaying				138.00	138.00					
Roads and trails				1,230.00	1,230.00	hours	82	193	275	316
Test pits										
Other (specify)										
Incidentals per contract				117.47	117.47					
Totals	600.00			9,274.47	9,874.47					

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

Includes supervision

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

Standard Form No. 1034a—Rev.
Form approved by
Comptroller General, U. S.
May 26, 1938
(Amended August 15, 1941)

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

COPY

OCT 15 1951

D. O. Vou. No. _____

Bu. Vou. No. DMA-23

GENERAL ACCOUNTING OFFICE PREAUDIT

Certified for payment in the sum of $_____

Comptroller General of the United States

By _____

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

Voucher prepared at Albany, Oregon October 12, 1951
(Give place and date)

THE UNITED STATES, Dr.,

To American Alloy Metals, Inc.
(Payee)

Address 401 Symons Building, Spokane 4, Washington

Payee's Account No. Idm-E-105

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	Articles or Services (Enter description, item number of contract or general supply schedule, and other information deemed necessary) Terms _____% Discount Cash _____ days	Quantity	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
		Brought forward from continuation sheet(s)					
	8/1-31/51	Certified form MF-104, dtd 10/1/51				6,088	56
	9/1-30/51	Certified form MF-104, dtd 10/1/51				7,405	85

Shipped from _____ to _____ Weight _____ Government B/L No. _____ Total 13,494 41

(Payee must NOT use this space)

Differences _____

Account verified; correct for 13,494 41

(Signature or initials) _____

Contract No. Idm-E-105 Date 6/13/51 Req. No. _____ Date _____ Invoice Rec'd _____

13,494.41

MEMORANDUM

ACCOUNTING CLASSIFICATION (for completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n or Proj't Amount	Appropriation Amount
14X4401	Revolving Fund, Defense Production Act, Interior	13,494.41	13,494.41

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

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

Cash, $_____, on _____, 19____, Payee _____
(Sign original only)

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary", or "Treasurer", as the case may be.
† If the ability to certify and authority to approve are combined in one person, one signature only is necessary; otherwise the approving officer will sign in the blank space below "Approved for $_____", and over his official title.

16—22900a-1

Per _____

Title _____

METHOD OF OR ABSENCE OF ADVERTISING

(Section 3709 of the Revised Statutes)

1. After advertising in newspapers.

2. (*a*) After advertising by circular letters sent to _____ dealers.

   (*b*) And by notices posted in public places.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made. The notation on the certificate on the face of the voucher must be "2(*a*)(*b*)" or "2(*a*)", depending on whether or not notices were posted.)

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.

4. Without advertising in accordance with _____

5. Without advertising, it being impracticable to secure competition because of _____

_____

_____

_____

_____

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

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, Supplement No. 6, General Accounting Office, Aug. 20, 1930.)

U.S. GOVERNMENT PRINTING OFFICE: 1946 O-88934 16—22900-1

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No. Idm-E 105

Name of Operator American Alloy Metals, Inc.
Docket No. DMA 148X Idm E105
Total Contract Amount $ 33,290.00
Government Participation: 75 % Amount, $ 24,967.50
Distribution of Expenditures for Month of August, 1951

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C.
NOV 30 1 59 PM '51

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

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

American Alloy Metals, Inc.
(Name of Company)
401 Symons Building, Spokane 4, Wash.

By J W Melrose
(Signature of Authorized Official)

October 1, 1951
(Date)

Project Manager
(Title)

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

16—64068-3

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(a) Facilities						
(b) Buildings						
(c) Fixtures						
2. Operating Equipment:						
(a) Purchased[1]						
(b) Rented[2]	2,895.00	None	2,895.00			
(c) Furnished by operator						
3. Rehabilitation and Repairs:						
(a) Facilities						
(b) Buildings						
(c) Installations						

NARRATIVE STATEMENT

Extreme difficulty was encountered at the start of the project, due to the rugged terrain it was necessary to negotiate to reach the drill sites.

Where we had anticipated but a few days for the road to be completed, it took just a month to reach the footwall of the Fox claim orebody. Upon digging into the overburden, we encountered many very large boulders and had to shoot our way ahead of the dozer.

In the meantime, the diamond drill crew had to tug their equipment up a 45-degree slope, approximately 1,200 feet to the first set-up. This took 16 days.

Lack of access road also slowed down map work and sampling. Unusual rainy weather was of no help to the mapping.

Now that the road is completed to the ore horizon, all phases of the project will be greatly facilitated.

Two holes were completed on the Fox claim during the month. No. 1, near the west end of the orebody, encountered 41 feet of tactite and No. 2, 140 feet to the east, 54 feet of tactite. No. 1 is 50 feet south of the cropping and No. 2, 100 feet. The tactite has not been assayed, but under the lamp appears favorable.

A plane table map has been started and will be completed during September.

J. W. Melrose

J. W. Melrose
Project Manager

EXHIBIT

EXPLANATION

ITEM

2 (b)	Rented	1 - D8 caterpillar tractor for road and trail per contract - 193 hours completed to date @ $15 per hour	$2,895.00
10	Contract work	408 feet of hole drilled @ $7.75 per foot $3,162.00 and 58 feet of reaming @ 3.50 per foot 203.00	3,365.00
11	Other (specify)	Incidentals as per contract	
		Transportation $ 62.17	
		Equipment rental 258.88	
		Repair parts 14.00	
		Supplies 282.27	
		Explosives 52.95	
		Services 587.81	1,258.08

U. S. BUREAU OF MINES
RECEIVED
OCT 24 1951
ALBANY, OREGON

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	600.00	None	600.00			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work	3,365.00	None	3,365.00			
11. Other (specify)						
Incidentals as per contract	1,258.08	None	1,253.03			
Total	8,118.08		8,118.08			
Deletions						
Adjusted totals						
Totals previously reported	None		None			
Totals to date	8,118.08		8,118.08			

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

Note.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by
Amount approved for payment 6088.56
Remarks

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF _____

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals										

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

Includes Supervision

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

NARRATIVE STATEMENT

Extreme difficulty was encountered at the start of the project, due to the rugged terrain it was necessary to negotiate to reach the drill sites.

Where we had anticipated but a few days for the road to be completed, it took just a month to reach the footwall of the Fox claim orebody. Upon digging into the overburden, we encountered many very large boulders and had to shoot our way ahead of the dozer.

In the meantime, the diamond drill crew had to tug their equipment up a 45-degree slope, approximately 1,200 feet to the first set-up. This took 16 days.

Lack of access road also slowed down map work and sampling. Unusual rainy weather was of no help to the mapping.

Now that the road is completed to the ore horizon, all phases of the project will be greatly facilitated.

Two holes were completed on the Fox claim during the month. No. 1, near the west end of the orebody, encountered 41 feet of tactite and No. 2, 140 feet to the east, 54 feet of tactite. No. 1 is 50 feet south of the cropping and No. 2, 100 feet. The tactite has not been assayed, but under the lamp appears favorable.

A plane table map has been started and will be completed during September.

J. W. Melrose
Project Manager

EXHIBIT

EXPLANATION

ITEM			
2(b)	Rented 1 D8 caterpillar tractor for road-trail, per contract 32 hours completed to date		$1,230.00
10	Contract work 996 ft of hole drilled @ $7.75 per foot	$7,719.00 and	
	20 ft of reaming @ 3.50 per foot	70.00	
			7,789.00
11	Other (specify) Incidentals per contract Equipment rental @ 30.00 Supplies	87.47	
			117.47
	Sampling & assaying services, for preparation of surfacing sampling		138.00

EXHIBIT

CALCULATIONS

ITEM

2 (a)	Rented	1 - D8 caterpillar tractor for road and trail per contract - 193 hours completed to date @ $15 per hour	$2,895.00
10	Contract work	408 feet of hole drilled @ $7.75 per foot $3,162.00 and 58 feet of reaming @ 3.50 per foot 203.00	3,365.00
11	Other (specify)	Incidentals as per contract	
		Transportation $ 62.17	
		Equipment rental 258.38	
		Repair parts 14.00	
		Supplies 242.27	
		Explosives 52.95	
		Services 527.31	1,258.08

Memo

To: G. C. Selfridge, Chief, Iron and Ferro-Alloys Division, DMEA

From: J. A. Rathbone

Subject: Summary of project work to date.
Exploration Project Contract No. Idm-E105
Docket No. DMA-148X, Tungsten
American Alloy Metals, Inc.
Browns Lake Tungsten
Beaverhead County, Montana

Exploration at the Browns Lake Tungsten deposit was outlined to consist of building road and trail by bulldozer and dozer excavation of eight trenches. A total of 316 bulldozer hours was allotted for this work. Contract diamond drilling of 3,000 feet (AX hole @ $7.25) was also made to cover an estimated 14 holes.

The project was started in August and ended at the end of the October period. By this time 1404 feet of diamond drilling had been completed at a cost of $11,154.00. This included a charge of $70.00 covering 20 feet of reaming @ $3.50 per foot in addition to the basic charge of $7.15 a foot. In addition all of the 316 hours of contract bulldozing had been expended with the road still 3000 feet short of its objective. Project was discontinued at close of October period.

Wire (3/20/52) suggest contract date be corrected.

ow

and new contract to be written covering underground
work on Ivanhoe & Lot claims (?)

Exploration Project Contract No. Idm-E105
Docket No. DMA-148X, Tungsten
American Alloys Metals, Inc.
Brown's Lake Tungsten
Beaverhead County, Montana

Total contract $33,290.00 (Government participation 75% - $24,967.50)

Scheduled exploration

3,000 diamond drill holes @ $7.75	23,250.00
316 hours bulldozing @ $15.00	4,740.00
Other	5,300.00
	33,290.00

Date of contract August 1, 1951
Time Limit 12 months

Month	Drilling		Bulldozing		Cumulative Progress			
	feet	cost	hours	cost	% of work completed Drilling	% of work completed Dozing	% of time consumed	% of total funds used
August	408	$3,365.00	193	$2,895.00	13.6	61.1	8.3	24.4
September	996	7,789.00	82	1,230.00	33.2	25.9	16.6	29.6
Oct.	—	—	41	615.00	—	13.0	25.0	2.8
Sub-total	1404	$11,154.00	316	$4,740.00	46.8	100.0	25.0	56.8

Note: Total monthly charges as follows: August - $8,118.08; Sept. - $9,874.47; and Oct. - $920.85; Total $18,913.40

In Narrative Statement for August, two holes had been completed on Lot claim. No 1 encountered 41 feet of tactite and No 2 54 feet. The tactite has not been assayed, but under the lamp appears favorable.

In Narrative Statement for September, one out of the three holes drilled showed ore. "This makes a total of three holes that encountered tactite".

In Narrative Statement for October, a possible commercial ore body was disclosed while building the road on the north side of the valley.

No assays or copies of the maps prepared by the operator have been received

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
1201 North Division Street
Spokane 2, Washington
February 23, 1956

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Royalty Receipts
American Alloys Metals, Inc.
Contracts Idm-E105, Idm-E127
and Idm-E247.

Dear Mr. Chambers:

It looks as though we were in error in crediting all of the royalty payments received to Idm-E247. While the Certificate of Discovery covers all three contracts, I think only Idm-E105 and Idm-E127 were actually combined. I have transferred $23,128.63 from the repayments previously credited to Idm-E247, to Idm-E127 to correct this error. This leaves a total of $43,725.17 in the repayment account of Idm-E247.

Yours very truly,

/s/ Myrtle Purdy

Myrtle Purdy
Authorized Certifying Officer
Region I, NW District

Glenn 148

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 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.

Alma 148 - E-105

Copied from The Mining Record - Thursday, October 22, 1953, Page 5

MONTANA PLANT FOR TUNGSTEN ORE WILL HELP MINERS

Butte, Mont.-- Minerals Engineering Co., Grand Junction, Colo., is building a 300-ton flotation mill, four miles northwest of Glen (P.O. Reichle), Beaverhead county, about 40 miles south of Butte, to beneficate tungsten ores from Lost Creek mines of the company and Brown's Lake mine of the American Alloy Metals, Inc., the latter company being a subsidiary of Goldfield Consolidated Mines Co. of Reno, Nev., and San Francisco.

The new plant is approximately one mile west of the Big Hole River basin, to prevent pollution of that stream. Roads are being built to facilitate the development of outcrops of ore in the area and to prepare for mining. A 7,000 foot water line is being installed to serve the mill from wells in the district.

Montana Power Co. is putting in a high tension line from Maiden Rock, Silver Bow county, to service the area. The concentrates from the Glen mill will be shipped to the Salt Lake Tungsten company's refinery at 2160 Indiana Ave., Salt Lake City, which is owned jointly by Minerals Engineering Co. and Sylvania Electric Products, Inc.

The Salt Lake refinery shortly will issue a schedule giving terms of delivery and refining charges for custom tungsten ores and concentrates. Blair Burwell, Grand Junction, Colo., is president and general manager of Minerals Engineering Co. and also president of the Salt Lake Tungsten Co.

The American Alloy Metals, Inc. has sub-leased its Brown's Lake tungsten operations to the Minerals Engineering Co., according to William Toby, superintendent for Minerals Engineering in Beaverhead county.

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

February 10, 1953

Mr. Frank Eichelberger
American Alloy Metals
401 Symons Building
Spokane, Washington

Re: Contracts Idm-E105 and E127
Browns Lake Tungsten
Beaverhead County, Montana

Dear Mr. Eichelberger:

Enclosed please find a copy of an Audit Certificate, pertaining to the subject contracts, and a copy of a list showing items disallowed by the audit.

You will note in the audit that the Government has been billed for a total of $33,096.08 of which $2,357.91 has been disallowed leaving an acceptable total of $30,838.17. Of this total 75 percent or $23,128.63 is payable by the Government. Inasmuch as $22,541.10 has already been paid there remains as payable $587.53, which amount will reach you shortly.

Items that have been disallowed are explained in the accompanying notice. The bulk of the disallowed amount consisted of wages, claims for which had been submitted in duplicate, and of supervision which had been claimed in excess. Of those disallowed items, if you could properly substantiate your claim of August 1951 for $258.88 for other equipment, and your sampling and assaying claims of August and September 1951, we could probably recommend their payment.

As you probably know, all disallowances have been thoroughly discussed with Mr. Neil Roby. At the time of this discussion there was no evidence presented that could be used to substantiate those claims listed as disallowed by audit and it was therefore recommended that the Government not participate in payment thereof.

Sincerely yours,

cc: DMEA (2)
USBM (2)
Myers

Thor H. Killsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

400

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 1, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
FEB 9 1953

WSM

February 5, 1953

Mr. Ray Hindman
Certifying Officer, DMA, Region III
U. S. Bureau of Mines
1201 N. Division
Spokane, Washington

Re: Completed Contracts Idm-105
and Idm-6127
American Alloy Metals, Inc.

Dear Mr. Hindman:

This is to inform you that a report dated October 31, 1951 entitled, "Report on the Tungsten Occurrences - Browns Lake, Montana and a Program for Exploration and Production" submitted by Mr. J. [illegible] Malcolm, company project engineer, is considered by the Field Team as an acceptable Operator's report for the above-cited completed contracts.

By Field Team, Region III

A. S. Weissenborn, Sec. Officer
(U. S. Geological Survey)

H. E. Volln, Owner
(U. S. Bureau of Mines)

cc: [illegible] (3)
Cont. Adm. & Fed. Div., [illegible], D. C.
[illegible] (2)
Auditor [illegible], [illegible]

1201 N. Division St.
Spokane 2, Washington

January 21, 1953

Mr. Jay L. Chambers, Chief
Contract Administration & Audit Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Contracts E-105 and E-127
American Alloy Metals, Inc.

Dear Mr. Chambers:

Reference is made to Mr. Mavor's letter of December 16, 1952. It states that the MF-104's in the San Francisco office of American Alloy Metals, Inc., show the cost of the projects to be as follows:

E-105 August 1951 to October 1951	$19,509.27
E-127 August 1951 to November 1951	12,705.44

The records available in Spokane show the cost of the projects to be as follows:

E-105 August 1951 to October 1951	$19,013.40
E-127 August 1951 to November 1951	14,082.68

These figures do not take into consideration the disallowance made by the audit.

It would appear that the records maintained by the Spokane office of American Alloy Metals, Inc., and their San Francisco office are not in agreement.

There are numerous items that were expended by the Company that were not properly chargeable to the Government, therefore, their total costs are greater than those reflected by the forms MF-104.

The audit was made very difficult due to the poor records maintained by the Operator. The audit report is being forwarded to you under separate cover.

Sincerely yours,

Robert M. Hull

1201 North Division Street,
Spokane 2, Washington

January 20, 1953

Mr. George Mavor
DMEA Auditor
1012 Flood Building,
870 Market Street,
San Francisco 2, California

Dear George:

Thank you very much for the examination you made on the cancelled bank checks pertaining to Contracts E-105 and E-127, American Alloy Metals, Inc.

The information available in Spokane has been rather limited and Mr. Melrose did not keep very good records.

I will look forward to seeing you in Denver.

Sincerely yours,

Robert M. Hull

cc: Mr. Jay L. Chambers

FILE COPY
SURNAME:

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

Chamberlain

BW.

DEC 12 1952

D. M. E. A.

Jay L. Chambers
2612

14A3923.97 Working Fund, DMEA

3719

Mr. George Mayor, DMEA Auditor, Region III, 1012 Flood Building
870 Market Street, San Francisco 2, California

Received following wire from Hull in Spokane:

"Please request DMEA auditor Mayor to verify all payments made to J. A. Melrose as pertains to Exploration Contracts Idaho 105 and 1127, American Alloy Metals, Incorporated. The cancelled checks are under the control of Earl Grislawn, Suite 1225, One Montgomery Street, San Francisco, California. These checks, according to information available Spokane, are drawn on the First National Bank of Billings, Montana. Also ascertain the distribution of these payments as between contracts 1105 and 1127. Please have this information forwarded Spokane direct at the earliest possible date. This information necessary to complete audit and

is not available in Spokane."

Contact him direct for further information if necessary and also give findings directly to him.

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/vb
December 12, 1952

S.H.
12-12-52

Copy to: Hails & Files
Admr. Reading File
Dr. Minor Accounts
Mr. Hull
Mr. Chambers

218 WA SP /I-BOM/

SPOKANE 11-21-52 900A

E D TALBERT

ACTING CHIEF CONTRACT ADMINISTRATION AND AUDIT DIVISION

DEFENSE MINERALS ADMINISTRATION

WASHINGTON D C

RECEIVED
NOV 21 12 45 PM '52
GENERAL SERVICES ADMIN.
PUBLIC BLDGS. SERVICE
BMD - COMMUNICATIONS

REUR TT 11-19-52. AUDIT SCHEDULED NOVEMBER 24 1952. THIS FIRST DATE OPERATOR REPRESENTATIVE WILL BE AVAILABLE.

ROBERT M. HULL, DMEA AUDITOR, US BOM, SP.

11-19-52 24 1952

VA 901A

Acknowledge advance

11/21/52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 21 1952

NOV 21 . 3 20 PM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

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

T. V. E. A.

E. D. Talbert
3719 3612

14X923.770 Working Fund, DMA
November 19, 1952

Mr. Robert M. Hull, DMA Auditor, 1201 North Division Street
Spokane, Washington

In re American Alloy Metals, Inc., Contracts [illegible]105 and [illegible]127, Dockets [illegible]-145 and [illegible], combined for accounting purposes and terminated by agreement dated October 1, 1952. These contracts should have high priority on your audit program of terminated projects per my letter of November 7. Advise tentative dates on which you have scheduled their audit.

(Signed) E. D. Talbert

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

EDTalbert/wb
November 19, 1952

cc: Docket
Adm. Reading File
Bu Mines Audit
Mr. Selfridge
Mr. Talbert

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 1952

10/6/52

So. 157 Howard Street
Spokane 4, Washington

September 29, 1952

Air Mail

Idm-148

Mr. Frank Eichelberger
c/o Windsor Park Hotel
Washington, D. C.

Dear Mr. Eichelberger:

Enclosed are the original and five copies of a proposed agreement combining two of your exploration projects (Idm-E105 and Idm-E~~107~~) and terminating them.
127

If this meets with your approval, would you please sign all copies and insert on page 1 the date this is done. After signature, retain one copy, marked "Operator's Copy", and return the rest to this office for distribution. If any part of the agreement does not meet with your approval, please return all copies to this office together with appropriate comments.

Sincerely yours,

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

Enclosure

P. S. In the event this does not meet with your approval, it might save time, as long as you are in Washington, to take the enclosures to DMEA and discuss it with Mr. George Selfridge.

cc: DMEA (2)✓
USBM (2)

AEW

DMW 148

MONTANA GROUP ON ROAD TO SUCCESS

American Alloy Metals, Inc., headed by E. A. Julian, San Francisco, and Frank Eichelberger, Spokane, has completed work provided by a Government exploration loan on a group of tungsten claims in Beaverhead county, south of Butte.

The work has been certified, which means that the company now is in a position to seek other federal help for development of the deposits. A compressor has been installed, a 250-foot double track driven to the adit level which has been advanced about 50 feet toward the underground extension of the orebody from outcrops on the surface.

NOTE: Excerpt from The Mining Record, Thursday, September 25, 1952.

400

FILE COPY
SURNAME:

Martin
Selfridge
Geer
Hoffman

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

SEP 2 2 1952

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

Re: Dockets Nos. 148, 1951, & 2292 - Tungsten
American Alloy Metals, Inc.
Browns Lake property
Beaverhead County, Montana
Contracts Nos. Idm-E-105, E-127, & E-247

Dear Mr. Weissenborn:

Enclosed are the original and five copies of a proposed agreement combining two exploration projects (Idm-E-105 and Idm-E-127) and terminating them. We have left blank the date of the agreement in the first line of the first page and the date of the termination under section 4, page 2, to be completed by you.

Please have the above executed by American Alloy Metals, Inc., and returned to us if the agreement is satisfactory to the Operator. If any part of the agreement does not have the Operator's approval, please return all six copies to this office, together with the proposed changes for consideration.

In addition to the foregoing, we are returning herewith all the copies of a Guaranty signed by Mr. Frank Eichelberger which we have left undated because it will not be required if the proposed agreement is consummated.

Sincerely yours,

9-24-52

(signed) FRANK E. JOHNSON
Chairman, Operating Committee

Enclosures

WSMartin:ls 9/16/52

Approved:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

cc: Docket
Admn. Read. File
Field Team, Region 2
Operating Committee
W. S. Martin
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM

S & J-
9-24-52

COPY

August 31, 1952

ar Bill:

Just a note on DMBA 2654, McRae, Red Bluff property. Talked part of it over with boys. Reno's map showing new road and claims is not correct as far as road is concerned. The road in the contract is from Middle Fork Smith Creek to claim No. 1. Reno's memo says 24,860 tons. This was based on a depth of 179 feet from surface. Is optimistic. I told them the x-cuts on 40' centers, 100 ft. was blocking out ore. I suggested the main x-cut should cut thru the vein and maybe 2 others 1/3 and 2/3's of the way over to the S end of the drift on the ore. Maybe 20' x-cuts for this main x-cut should allow some leeway. Lemmon suggested eliminating the raising. If the values on the surface come down uniformly in the drift, I would agree with Lemmon that raising would be development. If they don't, then allow all raising to find bottom of ore and explore it to the extent necessary to get some idea of values. Talk it over with him and then get the thing out as quickly as possible. I understand the guy is already on the property and will pick up when contract is dated. I am going to the No. 3 project at Bradley's Ima mine and they tell me here that they sent us a review on the new costs which apparently I didn't see before leaving.

The boys have a lot of auditing problems. The mixed unit costs and actual costs in same contract may be a headache.

Please tell the Lawyer Hofflund, that Weissenborn thinks the agreement O.K. I didn't have a chance to check the Docket No. 1951 about 16 claims but I guess it is O.K. On page 2, paragraph 2, "three contracts" should read "two contracts" and refer to Idm-E-105 and E-127. Maybe "closing out" would be preferable to "winding up" in paragraph 5 on same page. Please check certification on E-127 is sufficiently complete to take care of paragraph No. 2 on page 3.

Am taking advantage of the week end. Will leave Tuesday and reach S.L.C., Utah, c/o R. J. Roberts, USGS Room 208, 222 South West Temple, Monday morning, September 8. Will leave S.L.C. Wednesday, 10th, for Denver.

Hasta la vista

Signed: George

FILE COPY
SURNAME:
800

Chambers

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

August 27, 1952

Memorandum

To: Mr. J. L. Hofflund
Chief Counsel

From: Jay L. Chambers, Chief (Signed) J. L. Chambers
Contract Administration

Subject: American Alloy Metals, Inc., Docket No. 148, Idm-E105; Docket No. 1951, Idm-E127; and Docket No. 2292, Idm-E247

Reference is made to your memorandum of August 26, 1952 in regard to the above-referenced projects.

I have read your proposed amendment to combine these three projects. I believe this proposed amendment will solve the difficulties which we have experienced in certifying the reimbursements on these projects.

n. s. in R. & R.

Attachments

JLChambers/wb
August 27, 1952

Copy to: Mails & Files
Admr. Reading File
Mr. Selfridge
Mr. Chambers

FILE COPY
SURNAME:

140

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

August 26, 1952

Memorandum

To: Mr. J. L. Chambers

From: Chief Counsel

Subject: American Alloy Metals, Inc., Docket No. 148, Idm-E105; Docket No. 1951, Idm-E127; and Docket No. 2292, Idm-E247

Attached is a rough draft of "Agreement Combining Two Exploration Project Contracts and Terminating Them," which I have made pursuant to Mr. Selfridge's request and his memorandum to me dated August 6. I understand that this proposed contract is largely for the benefit of accounting and auditing the two contracts in question.

Mr. Selfridge left today on his trip West, and took a copy of this draft agreement with him. It has been examined by Mr. Martin of Mr. Selfridge's office, who advises me that he thinks it is in good order, but suggests that we wait until we hear from Mr. Selfridge before we put it in final form. In the meantime please examine this draft agreement and see if it will accomplish the purpose.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

JLHofflund/em
Copy to: Mails and Files
W. S. Martin J. L. Hofflund chron

Docket # DMA 148

FILE COPY
SURNAME:

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

Mr. John L. Enfsburd, Chief Counsel, DMEA

August 6, 1952

Iron and Ferro-Alloy Division, DMEA

Consolidation of two exploration contracts--
Dockets Nos. DMA 148 and DMA 1951
American Alloy Metals, Inc.
Browns Lake tungsten deposit
Beaverhead County, Montana
Contracts Nos. Idm-E-105 and Idm-E-127

Because of auditing difficulties, it has been proposed that the subject contracts be combined and considered as one. Contract No. Idm-E-105 was executed August 1, 1951, and provided for work on a group of claims held by the Fluorescent Mining Company. With the exception of one claim (the Fox), all of the claims lie on the north side of a valley. Contract No. Idm-E-127 was executed August 24, 1951, and provided for work on the Ivanhoe claim adjoining the Fox claim, both on the south side of the valley. Shortly after exploration work was started, it was discovered that the Fox claim laid practically inside of the Ivanhoe claim and that it was the younger claim. Thus, work that had been done on the Fox claim under Contract No. Idm-E-105 really had been done on the Ivanhoe claim. A certificate of discovery was issued under Contract No. Idm-E-127.

Because of this, auditing difficulties arose in separating the charges to the respective contracts, and seemingly the only method of straightening out these difficulties is to combine the two contracts and consider them as one. It has been thought that this can be taken care of by formulating a statement setting forth that they can be considered as one contract. Both of the contracts have now expired and it is believed best that they be closed, leaving a third contract in operation.

Attached are a number of copies of a guaranty that Mr. Frank Eichelberger has signed to take care of any legal difficulties with regard to repayment of the exploration loans. Under Contract No. Idm-E-105 a subordination agreement was secured from the lessor, while under Contract No. Idm-E-127 a guaranty was submitted in lieu of a subordination agreement. It is noted that in the attached guaranty the Contract No. Idm-E-105 is used. Actually no ore has been found on the claims included under Contract No. Idm-E-105 and it would be impossible to issue a certificate of discovery or development under that contract. As previously stated, a certification of discovery and development has been issued based on the exploration work on the Ivanhoe claim, Contract No. Idm-E-127.

During the review of our contract file, it was noted that the Ivanhoe claim had been leased by Mr. McLaughlin and then assigned to a Mr. Cleveland on a small additional royalty basis. Later the lease was changed. It is not clear just how American Alloy Metals received control from Mr. Cleveland. It might be well to check the legal chain before reaching a definite conclusion regarding the ultimate combining of the two contracts.

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

GCSelfridge:ls
8/6/52

cc: Docket No. DMA 148
Admn. Reading File
G. C. Selfridge
Docket No. DMA 1951

G. C. Selfridge, Rm. 3538, Ext. 5284

U. S. Department of the Interior
Defense Minerals Exploration
Administration

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

148X

Selfridge

STRAIGHT WIRE

MARCH 20, 1952

A. E. WEISSENBORN
SOUTH 157 HOWARD STREET
SPOKANE 8, WASHINGTON

WE HAVE NO RECORD REGARDING CANCELLATION OF ONE AMERICAN ALLOYS (BROWN'S LAKE) CONTRACT. PLEASE SEND COMPLETE DETAILS.

C. O. Mittendorf (for) 3/20

C. O. MITTENDORF
ACTING ADMINISTRATOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

GCSelfridge:ls
3/20/52

cc: Admn. Reading File
Docket
Confirmation to Reg. 2
G. C. Selfridge

BL

FILE COPY
SURNAME:

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

FEB 18 1952

Koontz
Hofflund
Selfridge

Mr. A. E. Weissenborn
Executive Officer, Region II
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMA-148 - Tungsten
Browns Lake Property
American Alloys Metals, Inc.
Exploration Project Contract
No. Idm-E105

Dear Mr. Weissenborn:

Reference is made to your letter of January 31, 1951, on the above subject.

The employment of labor on what is commonly termed a contract basis does not constitute a subcontract within the meaning of Article 4 of the Exploration Project Contract form. Accordingly, it is neither necessary nor required that employment of labor under those conditions be in writing or approved by the Government.

Sincerely yours,

C. O. Mittendorf (for) J.N. 6.18.52

Acting Administrator

GCSelfridge;CJKoontz/bjl (written 2/14/52)

Copy to: Admin. Reading File
Mails & Files
Docket
Field Team, Region II
D. M. Lemmon, USGS
R. W. Geehan, USGM
G. C. Selfridge
J. L. Hofflund
C. J. Koontz
Chron.
Pending

OK

148

MONTANA

BEAVERHEAD COUNTY

February 1, 1952

Browns Lake Tungsten, Idm-E105

75-25 of $33,290.00

One year

The work is to consist of road and trail building, bulldozing, and a diamond drilling program totaling 3,000 feet.

Work to date has been inconclusive. The exploration program has been largely discouraging but more work is needed before a final appraisal can be made.

DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.
FEB 8 8 55 PM '52

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

Ferro-alloy

January 31, 1952

DMA-48

Mr. C. O. Mittendorf
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

DMA-148

Dear Mr. Mittendorf:

This is in reply to your letter of January 24 re the approval of a subcontract between American Alloy Metals, Inc., (No. Idm-E105) and Paul W. Smith. This particular subcontract did actually include in the $15.00 hourly charge for bulldozer rental the wages of operator, field lubrication, repairs, etc., although it is not specifically stated in the approval. In the future, we will see that these subcontracts are more specific.

There is some difficulty in doing this because a good many of our subcontracts, including this one, are merely informal verbal agreements between the operator and the subcontractor. In this case, it would have been relatively easy to provide all the information that the legal department requires. In others, it will be more difficult, for, as you know, it is not uncommon that the contract price for the labor in driving a drift may be the result of only a verbal agreement between the operator and some miner. The miner may work for one or two weeks and then leave the job and be replaced by somebody else, continuing under the same agreement. This, of course, is particularly true in some of the small prospects in the hills. I hope it will not be necessary to make a separate approval for each miner that may operate under a subcontract for labor, but that a "blanket" approval can be given to the subcontract that will cover all the various persons who may operate under the same agreement. I would appreciate your opinion on this. I urge that every effort be made to keep all the contracts and subcontracts as simple as possible.

Sincerely yours,

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

cc: USBM, Spokane

FILE COPY
SURNAME:

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

JAN 24 1952

Selfridge
Mitt

BH

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

Re: Docket No. DMA 148 - Tungsten
Browns Lake Property
American Alloys Metals, Inc.
Exploration Project Contract
No. Idm-E105

Dear Mr. Weissenborn:

Please refer to your approval form dated December 14, 1951, transmitting a copy of a subcontract between American Alloys Metals, Inc., and Paul W. Smith.

The subcontract agreement calls for an hourly rate of $15 without qualification other than a minimum of 300 hours worth of work to be done. All subcontract agreements such as this one should specify that the hourly charge includes the wages of an operator, fuel, lubrication, repairs, and transportation unless otherwise specified. The Legal Department states that the size and nature of the equipment involved should be specified in the bulldozer subcontract.

Sincerely yours,

C. O. Mittendorf (Hw)

S.N. 1-24-52

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
1/23/52

Copy to: Adm. Reading File
Docket
R. W. Geehan, USBM
D. Lemmon, USGS
G. C. Selfridge
Field Team, Region II

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1201 N. Division St.
Spokane 2, Wash.
January 11, 1952

Reviewed by
DMEA OPERATING COMMITTEE
1-21-52
(date) 2163

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington 25, D. C.

From: Field Team, Region II

Subject: Analysis of revised exploration program, Docket DMA 148, Brown's Lake Tungsten, Beaverhead County, Mont.

An analysis of the subject revised exploration program by M. R. Klepper, U. S. Geological Survey, together with pertinent notes by M. E. Volin, mining engineer, Bureau of Mines, is forwarded herewith for your information.

The Field Team recommends approval of the project as revised for reasons developed in the enclosed analysis.

By Field Team, Region II

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

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

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D. C.
JAN 15 8 39 AM '52

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1201 N. Division St.
Spokane 2, Wash.
January 11, 1952

MEMORANDUM

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

From: M. E. Volin, Member, Field Team

Subject: Revised exploration project contract, Docket DMA 148, Brown's Lake tungsten, Beaverhead County, Mont.

In reviewing the costs given for the proposed subject contract it seems to me that an item for payroll taxes in the form of Workmen's Compensation and Old Age Benefits, amounting to an estimated 10 percent of the wage rates shown, would have been in order and allowable.

Attention also is called to the fact that there is provision for a superintendent at the rate of $600 a month. At this rate a qualified mining engineer should be obtainable. It does not seem to me reasonable, therefore, that a separate charge should be made for engineering as is shown under Item 9 because the superintendent should be able to take care of that work.

I do not think it would be too much of a burden on the superintendent also to be responsible for the field accounting work.

In view of the fact that there is an item for geology it is suggested that the Field Team should require that geologic information to the extent necessary for direction and evaluation of the project be required.

M. E. Volin

M. E. Volin

This was received on 1/22/52 after contract had been drawn up, and largely typed by Lg. ab.

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
JAN 15 8 39 AM '52

OFFICE OF THE ADMINISTRATOR

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

BH

So. 157 Howard Street
Spokane 4, Washington

December 19, 1951

D inc No. 148

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of Interior
Washington 25, D. C.

Re: Exploration Contracts
~~Idm-E-123~~ & Idm-E-105

Dear Sir:

Enclosed are three copies of an approval to amend contract ~~Idm-E-123~~, and five Field Team approvals concerning contract Idm-E-105. These copies are to be appended to copies of the exploration contract which you have retained for your files.

One copy of each of the approvals has been retained at this office, one copy forwarded to Fiscal Office, Albany, Oregon, and one copy forwarded to the Operator.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer DMEA
Field Team, Region II

Enclosures

c.c. to: U.S.B.M.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 26 1951

STANDARD FORM NO. 64

Mr. Mittendorf,
Room 4640 Interior Building.

Office Memorandum • UNITED STATES GOVERNMENT

TO : C. O. Mittendorf, Acting Administrator
D. M. E. A. THRU James Douglas

DATE: December 26, 1951

FROM : J. D. Harlan, Consultant, DMPA

SUBJECT: Beaverhead County, Montana - Tungsten

DMA 148

Attached is a copy of Harlan's memorandum on the subject. It was written to cover the Brown's Lake and Minerals Engineering projects to date, and also to enclose a list of supporting documents and maps. A copy of the list and a set of maps are enclosed for your files.

It is probable that you have received a second application on the Brown's Lake project, and it is expected you will receive an application from Minerals Engineering.

A copy of the memo and a set of maps have been given Dwight Lemmon in Room 5214 GSA Building.

All of the documents as listed and one set of maps are attached to the original of the memo for Holderer's files.

J D Harlan

Attachments.

J. D. Harlan

Copy for [illegible]

To: George B. Holderer, Chief, Ferro Alloys Br., DMPA

Through: Deputy Administrator, DMPA

December 19, 1951

From: J. D. Harlan

Subject: Tungsten - Beaverhead County, Montana
(Memorandum in 3 Parts)

GENERAL

The following on the subject is quoted from page 10 of memorandum of November 23 - 26 (Harlan to Young) "Procurement of Tungsten". On a recent field trip an item that was covered in Dillon and Butte, Montana was the Brown's Lake and Minerals Engineering projects in Beaverhead County, Montana, including a comprehensive proposal by Barwell and Griswold, copies of which were sent ahead for a reading and to await further data from the principals and to be discussed fully thereafter prior to decision.

"Later these same projects were discussed with Barwell and associates in Grand Junction, Colorado, with Eichelberger by phone, and again with Weissenborn and staff in Spokane. The latter included discussion of a report on the subject by John D. Bardill, metallurgist, an important document in the matter. All will be fully discussed in Washington. In the meantime, however, any proposals of further exploration of the projects should be expedited all possible."

PART I - Brown's Lake Project (DMA Docket 148X)

This project is otherwise known as the Eichelberger project, the principals being Frank Eichelberger of Spokane, Estey Julian of San Francisco and a Mr. Cleveland.

References to the subject have been made in letters to Howard Young, October 27, November 11 and November 14. The latter is quoted as follows:

"DMA participated in diamond drilling the past season. Results of four or five holes at the westerly end of the Ivanhoe claim were disappointing as compared with outcrop and some mine development. Drilling of holes 6 to 12 or 13 toward the southerly end of the claim is inconclusive in that three holes under way were stopped for the winter before the ore zone could be intercepted.

"Nevertheless the project is sufficiently hopeful to justify further exploration jointly by DMA and Eichelberger. By phone yesterday

from San Francisco Eichelberger indicated that his group would now propose extension of a tunnel, beginning soon, that would be aimed to intercept the orebody on its 25 to 35 degree pitch at a depth that would be good exploration and at the same time provide a basis of mine preparation and exploitation. If the field engineers under Weissenborn are in agreement that the tunnel proposal is a worthy project for DMA participation I hope it will be approved very promptly so that the operators may go right ahead with plans before further winter weather adds to cost."

See Lemmon also.

Following the letter of November 14 the subject was discussed in Spokane with Al Weissenborn of Region II and J. W. Melrose, agent for Eichelberger. They were then planning a program of mine exploration that would be proposed to DMEA for additional loan. A "Report on Tungsten Occurrences - Brown's Lake, Montana" by J. W. Melrose, dated October 31, and supplemented by a letter Eichelberger to Melrose, November 1, describes the new exploration project as conceived at that time. In telephone conversation with Melrose December 8 it was indicated that the application would be mailed from Spokane about Monday, December 10.

On December 13 the subject was discussed on the telephone with Selfridge who will be on the look-out for the application. The principals are opening up a winter road to the point of approach to the proposed underground work and have some miners available who will extend the present 90 foot tunnel to and through the tactite orebody on the contact. In order to justify the principals in continuing the present roadwork, holding miners, and keeping the camp open it is hoped that the application for additional loan will be expedited if at all possible.

PART II - Lost Creek and Greenstone Prospects

Minerals Engineering Company of Grand Junction, Colorado, of which Blair Burwell is president and prime mover, has undertaken surface and subsurface exploration of these two prospects which lie on the same igneous sedimentary contact as the Brown's Lake property. The work that was completed prior to discontinuance before winter is described in Burwell's letters of November 24 and December 5 to Harlan and summarized in the latter. Accompanying the letter of December 5 were three sets of three maps each. Two maps which may be joined on coordinates show the work on the Lost Creek proppect, while the third map shows the work on Greenstone.

The following paragraph is quoted from the letter of November 24:

"I am preparing an application for Government Development loan to diamond drill this property to greater depth".

When the application appears the letters of November 24 and December 5 along with the maps will be very good supporting data.

The last page of the letter of December 5 recaps the results of prospecting as follows: Positive or measured ore to a depth of 50 feet, 404,000 tons weighted average assay 0.414 WO_3; possible or indicated ore to depth of 500 feet 2,845,000 tons.

Assuming a dilution in mining of about 15% with no WO_3 content the tonnage of positive or measured ore would be 465,000 with an average assay 0.36 WO_3. On this basis it should not be unreasonable to assume an overall mill and digestion recovery of 0.30 units WO_3 per ton, equivalent to 83 1/3 %. From what is known now of the Brown's Lake project to the north, it might also be reasonably considered on the same basis for the purpose of speculating on the future possibilities of the three prospects.

It is not expected that Minerals Engineering Company will do further work on the Lost Creek and Greenstone prospects this winter, but they are looking forward to resuming as early in the Spring as weather and road conditions will permit. Meanwhile, both Minerals Engineering and the Brown's Lake principals hope to have their negotiations with DMEA and DMPA completed.

PART III - A Program for Tungsten Production in Montana

Blair Burwell of Minerals Engineering Company and George W. Griswold, Jr., Domestic Manganese and Development Company, Butte, Montana, prepared a proposal as of October 14, 1951, two copies of which were forwarded to Mr. Young with the letter of November 14, from which the following is quoted:

"In order to lose no precious time in seeing their project through to production Burwell and George Griswold, Jr., metallurgist of Butte, have prepared a proposal two copies of which are enclosed. Here again I had expected to visit Weissenborn in Spokane before expressing my full thought about the Burwell project but following a day with Burwell and associates in Grand Junction (Nov. 12) it seems advisable to send on the proposal in present form with the note that without doubt several revisions will be proposed as exploration and further study proceed.

"Inasmuch as the proposal would involve a GSA plant which it appears has already been assigned to the manganese program it should be considered from that angle at the outset. Following a visit in Spokane next Monday, November 19, I have in mind to discuss the matter with the GSA office in Seattle in a preliminary way and then to write fully my ideas of the entire proposal. Meanwhile, if the Washington office of GSA feels that the use of the plant in Butte for milling of tungsten ores should be approached or determined without my discussing it in Seattle please advise me...."

A copy of the proposed program was given to M. E. Volin, Chief, Mining Division, Region II, Spokane, Washington, whose metallurgist, John D. Bardill, made an analysis and report to Volin October 30, a copy of which is in the files of the Branch of Ferro-Alloys. It is an important document in the analysis of the entire project in Beaverhead County and should be given careful study.

The program proposes the use of the Domestic Manganese Mill at Butte for the milling of Beaverhead County tungsten ores. Inasmuch as the mill has already been assigned to the treatment of manganese ores, provided sufficient ore can be stockpiled and an additional amount promised to justify operating the mill for manganese, George Griswold was consulted and stated his opinion in a letter to Harlan of November 15 with the conclusion as follows:

"Therefore, we feel that beneficiation of manganese ores will not be in question before Spring of 1953. So, no present conflict exists, as between manganese and tungsten programs. The plant yards of Domestic Manganese Company are amply large for the stockpiling of both manganese and tungsten ores, as well as for the proposed Tungsten Refining Plant."

A copy of Griswold's letter was provided the GSA Office in Seattle and the subject of using the mill for tungsten ores was discussed at considerable length with Messrs. Grabill, Ihlanfeldt and two others of the GSA group on December 4. It appeared that the question as between manganese and tungsten in the mill at Butte would rest largely with Mr. Griswold. On the other hand, the field inspector for the Seattle GSA Office stated that if the estimates of the manganese producers in the Phillipsburg region are worth anything the mill at Butte will soon be swamped with ore and there would not be any space for tungsten ores.

The capacity of the mill is estimated at 300 to 400 tons per day. Assuming say 350-360 days operation per year, the mill could treat 121,000 tons per year and on this basis could operate the full time of approximately four years on the estimated positive or measured ore of the Lost Creek or Greenstone prospects alone and would yield approximately 140,000 units WO_3 and probably between 20 and 10% of that amount in molybdenum. This basis would leave no space in the mill for ore from the Brown's Lake property which no doubt would be in position to produce about as early as would the Lost Creek and Greenstone prospects.

Obviously then, milling capacity for one or the other or both of these projects will need be provided. If additional exploration and subsequent development work prove up even a fair part of the possible or indicated ore it is apparent that a mill of at least a 1000 tons capacity per day would be required. There are excellent sites for such a mill within a few miles of trucking distance of each property. Consideration of such a mill would be the next step following exploration of all of the prospects at greater depth.

The proposal of a program for the use of the mill at Butte includes the prospect of providing pressure digestion plant for the chemical treatment of low-grade and complex tungsten concentrates from the tungsten milling operations. A digester will provide a completely integrated plant but at this stage it is not recommended that definite action be taken on the digestion proposal. It may come later, but in view of recommendations in the report of December 1 to Mr. Young that digestion plants be provided either in Utah or Nevada as soon as possible, the proposal for such a plant at Butte should be tabled for the present.

Since the program was proposed by Burwell and Griswold the above ideas about taking the Beaverhead County projects in definite steps have been discussed with Burwell and it is believed that he concurs. Just at present the status of the business as far as DMPA or GSA are concerned may be summed up with a recommendation that (a) the question of use of the manganese mill at Butte for tungsten ore be determined as soon as possible; (b) the terms of a purchase contract for concentrates from the mill be determined and proposed to the principals, Burwell, Griswold and Eichelberger. The schedules in the Burwell program and the Bardill report of October 30 should be considered and analyzed carefully in arriving at a schedule of purchase prices for concentrates. Also the latter should take into account a Government-operated or sponsored plant that would operate at cost with the maximum return to the producer.

JDH

J. D. Harlan

JDHarlan:amb
Typed: Dec. 19, 1951

Copies: Mr. Harlan
Mr. Holderer
Mr. Lyon
DMPA Files
C. O. Mittendorf

FILE COPY
SURNAME:

Moulds
Wallendorf

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

August 30, 1951

Memorandum

TO: Chief, Finance Section

FROM: C. O. Mittendorf, Director
Production Expansion Division

SUBJECT: Copy of assignment of Exploration Contract
Docket No. DMA-148X, Idm-E105
American Alloys Metals, Inc.
San Francisco, California

Please find herewith a copy of the assignment of Exploration Contract Idm-E105, Docket No. DMA-148X by Estey A. Julian, Frank Eichelberger and E. L. Cleveland, a partnership, to the American Alloy Metals, Inc.

This assignment has been approved by this office for the Government and the American Alloy Metals, Inc. thus assume all of the perogatives and obligations under the subject contract.

The copy herewith is to be attached to the contract in your possession and future correspondence made in the name of the American Alloys Metals, Inc., 1 Montgomery Street, San Francisco, California.

C. O. Mittendorf

Attachment

DEMoulds/jem
cc to: Adm. Reading File
Reports & Records
Mr. Mittendorf-Mr. Olund
Mr. Moulds
Docket

FILE COPY
SURNAME:
140

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

August 28, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Docket No. DMA 148
Browns Lake Tungsten
Contract No. Idm-E105

Amer. alloys metals, Inc. A.E.C.
E. L. Cleveland

We perceive no legal objection to the assignment of the subject exploration contract and it appears to be in order for you to execute consent to such action.

The papers transmitted with your memorandum of August 27 in this case are returned.

J. L. Hofflund

J. L. Hofflund
General Counsel

Attachment

CJKoontz/bjl

Copy to: J. L. Hofflund
C. J. Koontz
Chron.
Reports & Records

FILE COPY
SURNAME:

410

Moved
Mittendorf

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

August 27, 1951

a.t.e.

Memorandum

TO: Mr. J. L. Hoflund
General Counsel

FROM: Mr. C. O. Mittendorf, Director
Production Expansion Division

American Alloys Metals Inc.
E. L. Cleveland

SUBJECT: Docket No. DMA 148
Browns Lake Tungsten
Contract No. Idm-E105

The subject operator, a partnership composed of Estey A. Julian, Frank Eichelberger and E. L. Cleveland, has requested government approval of the assignment of the subject contract and the obligations imposed by the contract to the American Alloys Metals Inc., a corporation in which the partnership is now absorbed.

In the estimation of this office, the American Alloys Metals, Inc., who have an approved Exploration Contract, Idm-E127, on an adjacent tract, are competent and able to assume the obligations of the subject Exploration Contract.

The original documents assigning the leases held by the partnership to American Alloys Metals Inc., and agreement to assume obligations of the partnership by the American Alloys Metals Inc., upon approval of the assignment by the United States of America is attached hereto for your consideration and approval of signing by this office for the government.

C. O. Mittendorf
C. O. Mittendorf

Attachments-2

Moulds/meb
cc to: Admr's Reading File
Reports & Records
Messrs.Mittendorf/Olund
Moulds
Docket

FILE COPY
SURNAME:

Mittendorf

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

AUG 17 1951

Q.E.C.

Mr. A. E. Weissenborn
Executive Officer
Region II
Defense Minerals Administration
South 157 Howard Street
Spokane, Washington

Cleveland, E. L.

Re: Docket No. DMA 148X
Tungsten
Browns Lake Tungsten

Dear Mr. Weissenborn:

Please find herewith two copies of contract for the subject exploration project which have been signed by this office for the Government and by Mr. Frank Eichelberger with register number and effective date as shown. Kindly transmit the operator's copy of the contract to Mr. Eichelberger.

The following has been added to the opening paragraph of the contract signed and forwarded by the operator "; composed of E. A. Julian, E. L. Cleveland and Frank Eichelberger."

A copy of the contract required by the Regional Finance Office will be forwarded directly by the Washington Finance Section.

Sincerely yours,

C. O. Mittendorf (C.O.M.) 8/15

C. O. Mittendorf, Director
Production Expansion Division

Enclosures-2

APPROVED:

Tom Lyon
Chairman, Coordinating Committee

Lowell B. Moon
Member, Bureau of Mines

Olaf N. Rove
Member, Geological Survey

DEMoulds/bjs
8/14/51

cc to: Adm. Reading File
Reports and Records
Mr. Mittendorf, Mr. Olund
Mr. Moulds
Mr. Holderer
Mr. Thayer
Mr. Moon
Region II
Docket copy
Dhron. copy

400
FILE COPY
SURNAME:

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

AUG 16 1951

Mondt
Mittendorf (J.H.)

A.E.C.

Contract Service Section
General Accounting Office
Washington 25, D. C.

Re: Docket DMA 148x
Exploration Project Contract
Idm-E 105
Browns Lake Tungsten
Spokane, Washington

Gentlemen:

Enclosed for recording in your office is the original, signed copy of an Exploration Project Contract executed between the operator named in the above reference and the Government of the United States.

Sincerely yours,

C. O. Mittendorf (J.H.)

C. O. Mittendorf, Director
Production Expansion Division

J. F. 8/16

Enclosure-1

DEMoulds:mjs

Send copies to: Administrators R. F.
Field Team, Reg. II
Mr. Holderer
Mr. Thayer
Mr. Mittendorf, Mr. Olund
Mr. Moulds
Reports & Records
Chron. and Docket copies

FILE COPY
SURNAME:

Guthrie

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

August 3, 1951

delivered by hand

A. E. C.

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Brown Lake Tungsten exploration contract -- Docket No. DMA-148X - [illegible]

The redraft of the contract in the captioned case, submitted by your memo of July 31, 1951 is approved as to legal form and sufficiency subject to the following stipulations.

1. The Operator, Brown Lake Tungsten, does not appear to be a formal recorded partnership, therefore the names of all of the partners must be stated in the opening paragraph. This can be accomplished by adding the words, "composed of E. A. Julian, E. L. Cleveland and Frank Eichelberger.

2. The new subordination agreement is not attached but we understand from Mr. Clark's letter of July 29, 1951 to Mr. Warren that it will be available before delivery of the contract.

3. While the earlier objection to the payment arrangements in the drilling contract has been withdrawn, the letter of July 6, 1951 from R. S. McClintock, submitted with the file, is not a contract in itself, and the actual contract must be approved by the Government before it can be acted upon by the Operator in the execution of the project.

4. The contract should be dated as of the day of delivery to the Operator.

Your file is returned herewith.

J. L. Hofflund

J. L. Hofflund
General Counsel

Attachment
RRGuthrie/ema

Copy to: R.R.Guthrie } delivered by hand
J.L.Hofflund }
Reports & Records Unit
Chron.

FILE COPY
SURNAME:

SPManey
Mittendorf (for)

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

July 31, 1951

Memorandum

TO: J. L. Hofflund

FROM: C. O. Mittendorf E. L. Cleveland

SUBJECT: Brown Lake Tungsten DMA 148X
Frank Eichelberger
401 Symous Building, Spokane, Washington

In your memorandum of July 24, 1951 you called attention to several conditions you wished corrected about the Exploration contract with captioned applicant.

We have attached hereto a letter from Mr. Wellman Clark, who happened to be available for consultation at the time we received your letter of July 24.

Would you kindly review Mr. Clark's letter and the data he has forwarded with it and give us your comments?

Attachments

SPWarren/bjs
cc to: Hofflund
Mittendorf, Olund
Warren
Reports and Records
Docket copy
Chron. copy

LAW OFFICES
of
WELLMAN CLARK
711 HUTTON BLDG. - PHONE RI. 1195
SPOKANE 8, WASH.

July 29, 1951

AIRMAIL
SPECIAL DELIVERY

Mr. S. Power Warren
Defense Minerals Administration
Department of the Interior
Washington, D. C.

Re: Docket 148X, Browns Lake Tungsten, Application

Dear Mr. Warren:

I am enclosing herewith, seven newly prepared exploration project contracts, all of which have been revised in accordance with discussions with you and with Mr. J. L. Hoflund, General Counsel.

For your files, but not as part of the contract, I am enclosing the copy of the bond and lease which was formerly part of the first exploration contract, and copies of an agreement between Cleveland, Eichelberger and Julian, and copy of an assignment to the partnership by the above three.

I am having additional copies of the map prepared so that they can be inserted in the contracts, thus making seven completed contracts.

I am also returning documents handed to me in Washington to enable me to get this contract in shape.

As I informed you, I discussed with Mr. Hofflund, his memorandum of July 24th.

The Ivanhoe claim is not included in the new project contract.

The partnership name has been corrected and is now properly executed. Items 3 and 4 of his letter of July 24th have been corrected and the lease and bond mentioned has been removed as part of the contract, but left with you as part of your files.

The letter from McClintock concerning the diamond drill program is made a part of the contract without change. Mr. Hofflund, after discussing the matter with me, agreed to

withdraw his objection to that letter.

The map is physically attached and marked as Exhibit "A". You now have in your files assignments of the bond and lease to the partnership.

Mr. Hofflund's principal objection to the subordination agreement was the fact that it was dated. I agreed to get new subordination agreements undated, and he indicated that if these subordination agreements were delivered to Mr. Weissenborn's office in Spokane before the contracts were handed over and substituted, or included for copies in the contract, that he would not insist that they be on hand before approving the contract for execution.

I would appreciate it if you would wire me or call me collect if you have any further questions in regard to the contract, and would particularly, advise me by wire the date the same has been signed.

I wish to take this opportunity of thanking all members of Mr. Mittendorf's staff for the courtesies they extended to me on my recent business. I assure you it was a pleasure to do business with such men as he has on the staff, including yourself.

Sincerely yours,

Gillman Clark

WAC:gc
enc.

FILE COPY
SURNAME:

Sullivan

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

July 24, 1951

Memorandum

Committed

To: Chief, Production Expansion Division

From: General Counsel

Subject: Julian, Eichelberger and Cleveland - exploration contract -- Docket No. IMA-1461

We are unable to approve the contract in captioned case for the following reasons:

1. The contract should not be executed until the prospective operator has obtained appropriate rights in the Ivanhoe claim.

2. If the contract is to be signed in the partnership name, that name should be shown in the initial paragraph. The name in the opening paragraph and on the signature line should be identical.

3. Inasmuch as all of the land will be leased, paragraph 2(a) and the matter typed in the blanks should be stricken out.

4. If the lease and bond is to be mentioned in paragraph 2, it should be identified by date and parties.

5. The contract for drilling is subject to approval by the Government. The letter of July 6, 1951 from R. S. McClintock, attached to this file, does not constitute a contract without the accompaniment of an acceptance by the prospective operator. Moreover we do not believe that the approval of a contract in these terms is good policy since it necessitates cost accounting before final settlement can be made.

6. If map is to be attached it should be referenced in the contract, or physically attached to Exhibit A, as stated in the contract form.

7. The bond and lease run to Mr. Cleveland only. There should be an assignment from him to the partnership.

8. In the subordination agreement the date of the exploration contract should be left blank inasmuch as that contract has not yet been dated. The signature cannot be accepted as it is not in proper form. Moreover the seal does not appear to be that of the Fluorescent Mines Corporation. A new subordination instrument should be obtained in which the signature appears as follows:

Fluorescent Mines Corporation
By R. C. McLaughlin, President.

Your file is returned herewith.

J. L. Hofflund
J. L. Hofflund
General Counsel

Attachment

RRGuthrie/ema

Copy to: R. R. Guthrie
J. L. Hofflund
Chron.
Files

FILE COPY
SURNAME:

Warren
Mittendorf

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

July 20, 1951

Memorandum

TO: J. I. Hofflund

FROM: C. O. Mittendorf

SUBJECT: DMA 148X Tungsten
Julian, Eichelberger and Cleveland
401 Symous Building, Spokane 4, Washington

There will accompany this memorandum various data pertaining to the captioned application.

The Ivanhoe claim appears on the exploration contract but not on the lease and bond. This is because the Fluorescent mining company does not own this claim but has a lease and bond on it from a third party.

The mining company has agreed to lease this claim to captioned applicant and has agreed to furnish satisfactory evidence of such a lease as soon as the owner's subordination agreement can be obtained from the third party.

It is suggested that the following statement be placed below the data under Exhibit A, to quote:

"It is understood that no claim for participation, by the "Government", in the cost of exploration work done on the Ivanhoe claim will be presented for payment until applicant furnishes evidence of possession of a lease on this claim and also an Owner's subordination agreement covering this claim.

The data are:

6 - signed Exploration Project Contracts
6 - each of Exhibits A, B, C, D, E.
6 - Owner's Subordination agreements
6 - Claim maps showing position of work
2 - Copies of Mining Lease and Bond
Original and five copies of contract for drilling

May we have your comments?

Attachments-32

SPWarren/bjs
cc to : Hofflund
Mittendorf, Olund
Warren

Mr. Warren

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

Air Mail
Special Delivery

July 12, 1951

Memorandum

To: Chairman, Tungsten Commodity Branch

From: Field Team, Region II Through: L. F. Strobel

Subject: Brown's Lake Tungsten Property, Beaverhead County, Montana, Docket DMA-148 X

Enclosed herewith are six copies of a revised contract and six copies of Exhibits "A", "B", "C", "D", and "E" for the Brown's Lake Tungsten Property, Beaverhead County, Montana, DMA Docket 148X.

The contract has been revised in light of a bid of $7.75/ft. by a drilling contractor, also the applicants have increased the amount of bulldozing.

The applicant authorizes the moving of the two holes located outside the Fox claim side lines to a point within the claim. This change should be made on the maps in the original contract and attached to the new contract. The holes will actually be spotted on the ground where the terrain permits.

The subordination agreements required to complete the revised contract are attached to the old contracts in your office.

Sincerely yours,

Elton A. Youngberg

Elton A. Youngberg
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary

Enclosures

cc: U.S. Bureau of Mines, Spokane

July 6, 1951

Mr. Frank Richelberger
Doing business for: E. L. Cleveland
Estey A. Julian
Frank Richelberger
Suite 401 Symons Building
Spokane, Washington

Dear Mr. Richelberger:

With regard to a proposed diamond drill program at your Brown Lake property near Melrose, Montana.

We understand that you will drill a minimum of 3000 linear feet, holes ranging from 250 ft to 500 ft in depth, AX size, that you will furnish access road to the site including a bridge across Rock Creek and that you will furnish a tractor which will assist in mobilizing our equipment.

Based on the above, we quote you as follows:

0 to 500 ft per hole $ 7.75 per ft

The above quotation provides for our furnishing all material, labor, equipment, water line, pumping plants and diamond bits necessary to complete these holes.

In the event loose and caving material or water courses are encountered that will tend to make drilling impractical without the use of casing or cement, an additional charge of $3.50 per foot will be made for reaming and landing the casing or placing cement and redrilling the cemented section of the hole.

If, upon completion of the contract our cost figures reflect a net profit in excess of 10% of our expenses which include a 12½% overhead, we will refund the difference.

Our employees will be covered by Workman's Compensation to comply with the State Act and our operation will be covered by Public Liability in the amounts of $100,000 and $300,000 and Property Damage in the amount of $100,000.

Yours very truly,

R. S. MC CLINTOCK

RSM/is

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

148-X

June 29, 1951

Hon. Zales N. Ecton
United States Senate
Washington, D. C.

Dear Senator Ecton:

In reply to your letter of June 19 concerning a possible tungsten stockpile depot at Dillon, Montana:

Tungsten deposits that may prove of importance are present in the vicinity of Brown's Lake northwest of Dillon. A Field Team from Defense Minerals Administration examined the deposits during June and recommended that an exploration loan be granted to determine the size and grade of the deposits. It is expected that this exploration will start soon and will progress far enough by the end of summer to permit a decision whether a mining and milling operation is possible.

If enough ore is found to justify the costs of a concentrating plant, it is expected that this plant will accept ore from any other discoveries in the region. The known ores are of low grade and are not of sufficient value to warrant shipment long distances to concentrators now in operation.

Currently, the Government will buy, through General Services Administration, all concentrates offered at the high price of $63 per short ton unit, provided these concentrates contain 60% of tungsten trioxide and meet specifications. The Government will accept delivery at the mine or mill. The price has been guaranteed for a period of 5 years. General Services Administration does not buy low grade ore because this material would have no value to national defense unless a large enough quantity were abailable to warrant building a concentrator. The purchase of small quantities of unusable ore at central depots, such as Dillon, or at the mines is not contemplated for this reason.

Defense Minerals Administration is encouraging the search for tungsten ore bodies by exploration loan projects toward which the Government contributes 75 percent. Whenever enough ore is found in any district to justify a mining enterprise, and milling facilities are not available, DMA, GSA, and RFC are prepared to recommend loans for mill construction.

Sincerely yours,

Administrator

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

FOR Approval

Docket No. 148 x

Commodity Tungsten

Total Amount $26,300.

Govt. Participation $19,725.00

1. Name and Address of Applicant E. A. Julian, Frank Eichelberger, and E. L. Cleveland. 401 Symons Building, Spokane 4, Washington

2. Location of Property ~~Ivanhoe and Fox claims, Secs 3 and 4, T 4 S, R 10 W,~~ and the Garnet, Star Nos. 1, 2, and 3 and High Boy and Mammoth claims ~~in secs 32 and 33, T. 3 S., R. 10 W., Browns Lake, Beaverhead County,~~ Montana

3. Mineral or metal Tungsten--scheelite Is it listed in Section 9 of MO-5?

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good Very Good (field team recommendation)

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project? No
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes

   a) MF-201? No

   b) MF-202 Yes, attached

8. From the data presented, does the proposed project appear feasible from the point of view of:

   a) Available manpower Yes

   b) Equipment and supplies Yes
      (Question 14 plus general knowledge of availability)*

   c) Accessibility (question 12)* Yes

   d) Water (question 13)* Yes

   e) Power (question 13)* Yes

   Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

   Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

   a) Is the project adequately described? Yes

      If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

   b) Is there an adequate map or sketch of the proposed work? Yes

   c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

      If not, what part of it is? _____

Is this part a worthwhile exploration project? _____

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft. Attached

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? Exam made

11. Exhibit B (question 23-d)*

a) Is it applicable? No

b) If so, are sufficient data furnished? _____ If so, attach a draft.

c) Is a field check needed? _____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft. Attached

c) Are rents and charges reasonable? Yes

d) Is a field check needed? _____ No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? Yes

c) Reasonable? Yes

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Field examination has been made. The field team recommends approval of this application for the sum requested. The Tungsten Branch of DMA concurs in this recommendation for a project to cost $26,300.

Reviewed by: Dwight M. Lemmon
Dwight M. Lemmon
George B. Holderer
George B. Holderer

Date June 26, 1951

Approved
Tom Lyon

97692

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

June 20, 1951

Through: Coordinating Committee

Mr. P. R. Bradley Jr., Chairman
Tungsten Commodity Committee
Defense Minerals Administration
Department of Interior
Washington 25, D.C.

Dear Sir:

Forwarded herewith are the signed copies of an exploration project contract for the Brown's Lake tungsten property, DMA Docket-148-x, together with signed copies of MF-202, Landlord's Subordination Agreement. Also included is a report prepared by the DMA Examination Team, and the original docket material.

The DMA team examined and sampled the several claims as indicated in the report, and as a result of their work, strongly recommends this exploration project. Approximately 10,000 tons of tungsten ore reserves are now measureable or inferred, but it is believed that between 500,000 and 1,000,000 tons averaging slightly under 0.5 percent WO_3 may reasonably be expected to be developed as a result of the relatively small exploration program.

The accompanying maps are a part of Exhibit "A" but have been prepared or modified in part by the Examination Team from Bauer's report that accompanied the original application. The geology shown on Bauer's map has been checked and is reasonably accurate in general.

We believe that this is perhaps the most promising project on a geological basis that has been turned up so far. Furthermore, the operators are experienced and competent. We, therefore, recommend that it be given a high priority and urge its favorable consideration.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

cc: U.S. Bur. Mines
Spokane, Wash.

148 Ele
6/26/51

List of File to PED
DMA 148-X Tungsten
Julian, Eichelberger & Cleveland
401 Symons Bldg., Spokane 4, Wash.

1 - Review of Application for Exploration
1 - Letter Weissenborn to Bradley 6/20/51
1 - Original Report on Browns Lake by Weeks et al 6/18/51
1 - Copy " " " " " " " " "
1 - Letter Weissenborn to ~~Bradley~~ Strobel 6/20/51
6 - Exploration Contract with attachments
6 - Landlords Subordination Agreements
2 - Bond & lease Fluor. Mines - Cleveland 1/17/51
2 - MF-100 & MF-103 (only one set of Bauer's original report with sketches dated 4/5/49), 2 copies of report dated 6/25/48
1 - Copy Baur Supplement Report 4/5/49
1 - " " Report 7/28/48
1 - " Referral sheet
1 - Copy letter Julian to McLaughlin 4/14/51
1 - " " Eichelberger to DMA 4/18/51
1 - " " Holderer to Weissenborn 5/19/51
2 - " " Bradley to " 5/8/51
2 - " " Lyon " Eichelberger 5/8/51
1 - " File to field
1 - letter Eichelberger to DMA 4/18/51

UNITED STATES
DEPARTMENT OF INTERIOR
OSCAR L. CHAPMAN-SECRETARY

DEFENSE MINERALS ADMINISTRATION

Report by Examination Team
Region II

DMA-148-X--Brown's Lake Tungsten Property

Beaverhead County, Montana

Robert A. Weeks, Geologist
Montis R. Klepper, Geologist
U. S. Geological Survey
R. Neal Roby, Mining Engineer
U. S. Bureau of Mines

June 18, 1951

ON-SITE EXAM

Brown's Lake Tungsten

RECOMMENDATIONS

The field team recommends that an exploration loan in the amount of $26,300.00 be granted. Of this amount, $6,575.00 or 25 percent will be provided by the applicants and $19,725.00 or 75 percent will be provided by the DMA.

LOCATION

The Brown's Lake Tungsten deposits are in secs. 3 and 4, T. 45, R. 10 W. and secs. 32 and 33, T. 3 S., R. 10 W., Beaverhead County, Mont. Butte, Mont. is about 35 miles northeast of the deposit. The deposit is reached by 8 miles of Forest Service road from U. S. Highway 91, 8 miles south of Melrose, Montana.

OWNERSHIP

The property consists of 18 unpatented mining claims and a patented placer claim around Brown's Lake. The property is owned by the Fluorescent Mining Corp., Melrose, Montana. The applicants have a lease and option to purchase all the property. All the claims are held by location.

HISTORY

No tungsten ore has been shipped from the property except small amounts for ore dressing tests. A small gravity mill was erected in 1942 but it produced no commercial concentrate.

The U. S. Bureau of Mines excavated two bulldozer cuts on the Garnet claim in 1942. This work failed to indicate ore containing sufficient tungsten for profitable exploitation at that time. Two additional dozer cuts were made in May, 1951, by the applicants.

DESCRIPTION OF THE PROPOSAL

The applicants propose to explore the deposits by diamond drilling and by bulldozing. This work largely has been outlined for the deposits on the south side of the canyon (Ivanhoe and Fox claims), but the applicants plan to spend about 25 percent of the funds on the deposits north of the canyon.

It is reasonable to expect that this work will indicate from a half million to a million tons of ore.

TECHNICAL FEASIBILITY

The tungsten deposits are located in a contact zone of a quartz monzonite batholith that has intruded a sequence of sedimentary rocks of Mississippian and Pennyslvanian age. The broad structure of the sedimentary rocks is an anticlinal dome whose axis is followed by Rock Creek. The anticline plunges to the east. The beds in contact with the quartz monzonite are believed to include the Madison limestone, the Amsden formation, and the Quadrant quartzite, although the limited amount of field work has not established the exact stratigraphy of this area.

The tungsten deposits now known occur in contact-metamorphosed sediments of Madison and/or Amsden formations within a range of a few feet to a few hundreds of feet from known igneous contacts. The contact of sediments and intrusive rocks are broadly concordant, but in detail the contact crosses the bedding irregularly. The anticline is broken by a number of north-trending faults, with indicated vertical movement amounting to a few hundred feet. Intrusion of the quartz monzonite is believed to be later than the folding and faulting, in that somewhat linear tongues of igneous rock separate the fault blocks. Thin sills of quartz monzonite extend into the sediments from some of these tongues.

Mineralization and metamorphism of the sedimentary rocks has resulted in a scheelite-impregnated garnet-rich tactite interbedded with marblized limestones, and lesser amounts of argillite and hornfels. The scheelite is accompanied in many places with chalcopyrite and pyrite, and occurs primarily in a gangue of andradite, quartz, calcite, epidote and a little actinolite. The scheelite is in small to very fine grains and contains enough molybdenum to fluoresce a pale creamy yellow, although some bluish-white fluorescing material was noted.

The Ivanhoe and Fox claims contain the largest amount of exposed mineralized tactite. These adjacent claims are located on

separate roof pendants of sediments surrounded by quartz monzonite. A stratigraphic section at the Ivanhoe shows the following:

200'+	covered (Lake Agnes moraine and hillwash)	90-95% qtz. monz. 5 -10% quadrant and hornfels
40'	covered interval, slope wash consists of	50% meta sediments and 50% rounded qtz. monz.
40'	limestone-coarsely recrystallized forms bluffy outcrop	
6'	hanging wall tactite	
57'	sampled interval below hanging wall	
70'	interbedded limestone, argillite and hornfels quartz monzonite	

The minimum stratigraphic thickness of the sedimentary sequence of the Ivanhoe roof pendant is about 200 feet, and may be greater, since the slope wash from the Lake Agnes moraine quite effectively blankets the hillside. The Fox claim is in a roof pendant of similar to slightly greater thickness. The two pendants are separated by a tongue of quartz monzonite that is believed to occupy a fault. Quartz monzonite crops out in a few widely scattered places above the Fox claim, as well as between the two claims. The lateral extent of the pendants as shown on Bauer's map is exaggerated slightly, but the Ivanhoe pendant is at least 600 feet long and the Fox pendant is exposed for more than 300 feet. Exploration is needed to determine both the strike length and the down-dip extent of these pendants. Measured and inferred ore on the Ivanhoe claim in the hanging-wall bed amount to 5,250 tons of ore. The 57 feet of beds with a grade of 0.45 percent WO_3 would contain 57,000 tons for each 100 feet of strike length and 100 feet of down-dip extension of the beds. With the known strike length of 600 feet, and a minimum probable down-dip extension of 200 feet, 784,000 tons of geologically probable ore are estimated for the Ivanhoe. A similar tonnage may be expected on the Fox claim.

The Mammoth and High Boy claims contain the most developed ore of the several claims on the north side of Rock Creek. The claims are adjacent and are believed to be on the same tactite bed. The tactite bed is not continuous between the two claims, being intruded by a tongue of quartz monzonite; however, a limestone bed about 40 feet stratigraphically above the tactite is continuously exposed from the High Boy to the Mammoth. The mineralization is identical to that of the Ivanhoe and Fox, but is apparently limited to a single bed 6 to 8 feet thick. On the Mammoth the ore is exposed for about 30 feet along the southwest facing canyon wall, for over 50 feet in a north-trending adit, and for over 90 feet along the northeast facing wall of a side ravine.

Its base is 15 feet above the quartz monzonite at the ~~ore~~ one point where a measurement could be taken, but the contact is irregular and seems to dip more steeply than the bedding, so that the down-dip extent of the ore zone is unknown. About 4,500 tons of measured and inferred ore are present on the Mammoth claim. The grade of this ore is believed, on the basis of mineralite examination, to be equal to ore seen in the Ivanhoe, or about 0.5 percent WO_3.

At the east end of the Mammoth claims, a tactite bed of similar appearance crops out on a cliff face. Where seen, the tactite is five feet thick, and contains mineralization only slightly less intense than the best grade ore seen in the adit. The tactite here is directly in contact with the quartz monzonite, and is separated from the bed at the adit by a tongue of quartz monzonite.

The tactite does not crop out on the High Boy claim, but the discovery pit exposes four and one-half feet of garnet-tactite, the lower two and one-half feet of which are estimated to contain about 0.4 percent WO_3 and the upper two feet contain somewhat lower-grade material. Exploration to determine the extent of the tactite bed on these two claims by bulldozing the outcrop, and diamond-drilling to determine down-dip extent seems justified.

The Star claims, especially Star No. 2 have showings of scheelite-impregnated garnet-tactite up to 6 feet thick. All of the exposures are poor in the vicinity of these claims, so that continuity of tactite beds cannot be established without bulldozing. A tongue of quartz monzonite, apparently emplaced along a fault, cuts through the Star No. 3, and a sill from the tongue appears to extend into the Star No. 2. The detailed surface geology should be studied at the time of dozing in order to direct further exploration of these claims.

The Garnet claim is at present the most accessible of the several claims that contain appreciable showings of scheelite. Two separate small deposits are exposed, one near the old mill, and the second at the highest bulldozer cut. Both of these are believed to be in isolated roof pendants of fairly small extent, although the lower one might be in a landslide block. No exploration of these two showings is recommended at this time.

DESCRIPTION OF THE WORKINGS

The present mine workings consist only of four or five short adits at most a few hundred feet long. The principal workings which are on the Ivanhoe claim were driven to explore and mine a small deposit of copper sulfide ore occurring near the top of a garnet zone.

None of these workings would be used in future mining operations.

Reserves

Measured and inferred reserves are small, estimated to total approximately 9,750 tons with 5,250 tons on the Ivanhoe claim and 4,500 tons on the Mammoth claim. The weighted average of ten channel samples in the Ivanhoe adit give a grade of 0.65 WO_3 for 2,000 tons. The ore in the Mammoth claim may be considered to be about the same grade. Potentially, as much as a million tons of ore may be discovered by the proposed exploration.

Nine chip samples across a 57-foot thickness of tactite exposed in the Ivanhoe claim averaged 0.45 percent WO_3.

Mining Methods

The rock overlying and underlying the tactite zone is principally limestone intruded by quartz monzonite. Workings should stand with minimum support. The existing old adits are for the most part untimbered. Use of a low cost large scale underground mining method is indicated.

Milling Methods

Ore dressing tests are currently being made by the Metallurgical Division of the Bureau of Mines at Albany, Oregon. Appended is an ore dressing report by The Galligher Co. of Salt Lake City, Utah, on ore from the Garnet claim. This is similar to that which is to be expected as a result of the exploration program.

Equipment and Facilities

The only facilities on the property are eight cabins now used for fishing resort purposes at Brown's Lake, together with the remains of the gravity mill plant. The mill equipment includes a small jaw crusher, a small ball mill and a Wilfley table.

Power

The nearest power line is about eight miles distant. This is a 161-thousand volt line extending from Anaconda, Mont. southward through Dillon into Idaho.

Transportation

The deposit is eight miles from the Butte-Salt Lake City Branch of the Union Pacific Railroad, and the same distance from paved U. S. Highway 91.

Adequacy of the Funds Requested

The funds requested appear adequate; however, if sufficient reserves of ore are indicated before all the funds are spent, it would be well to grant a production loan so that the applicants could start on the construction of a milling plant and make preparations for mining.

Competence of the Applicants

The applicants are exceedingly competent. They are the instigators of several successful mining operations in the western part of the United States.

Discussion of Proposal

The exploration proposal appears feasible. The most extensive showing is on the south side of the canyon. An ore reserve can more quickly be indicated in this area. It is recommended that work be done on the south side first.

COPY

THE GALIGHER COMPANY

Salt Lake City, Utah
October 2, 1942

Mr. John T. Potts
228 South West Temple St.,
Salt Lake City, Utah

SUBJECT: ORE TESTING REPORT ON SAMPLES OF TUNGSTEN ORES RECEIVED FROM DILLON, MONTANA: SAMPLES MARKED 1, 2, 3 AND 4; 1 AND 2 BEING JOINED AND 3 AND 4 BEING JOINED AND RESPECTIVELY DESIGNATED AS OUR LOT NUMBERS 322 AND 323.

Dear Mr. Potts:

In accordance with the arrangements made with you, we are pleased to submit herewith our ore testing report on samples of tungsten ores received from Dillon, Montana, September 11th, 1942. Four samples were received marked 1, 2, 3 and 4. Samples 1 and 2 were joined as well as 3 and 4, per your request, and designated respectively Our Lot Numbers 322 and 323.

The ores as received were crushed through a jaw crusher and set of rolls to pass 20 mesh, thoroughly mixed as above noted and sampled by means of a Jones splitter. The head analyses of the two samples are as follows:

Heads Lot No. 322	0.45% WO_3
Heads Lot No. 323	0.55% WO_3

LOT NO. 322:

A total of nine tests was run on Lot No. 322, details of which may be found on the accompanying data sheets, these tests involving both gravity concentration and flotation. No success was obtained in the few preliminary attempts employing flotation, but the ore was found to be very amenable to gravity concentration. Test No. 8 shows what can be done when treating ore as represented by our Lot No. 322 by table concentration as far as recoveries are concerned. The grade of concentrate is low but subsequent tests show that high recoveries can be obtained with high grade concentrates. In Test No. 8 the ore was stage ground to pass 48 mesh and the ground ore tabled on a Laboratory Deister Table. A rougher table concentrate was made which was cleaned, but in both operations, recovery was emphasized in the manipulation of the test rather than grade. The results of this test are as follows:

	% WEIGHT	ASSAY % WO_3	%DISTRIBUTION WO_3
Table Conc.	1.73	22.45	86.0
Table Mid.	9.97	0.19	4.2
Table Tails	88.30	0.05	9.8
Heads	100.00	0.45	100.0

	% WEIGHT	ASSAY % WO_3	% DISTRIBUTION WO_3
Combined Mid and Concentrate or Rougher Conc.	11.7	3.47	90.2

In practice the above recovery of 86% could be expected with at the same time a concentrate assaying 60.0% WO_3, for the scheelite mineral is largely freed at the 48 mesh grinding, as indicated by the assay of the tailing.

LOT No. 323:

A total of seven tests was run on Lot No. 323, the details of which may be found on the accompanying data sheets. Both gravity concentration and flotation were tried on this ore and although this ore proved more amenable to flotation concentration than Lot No. 322, nevertheless gravity concentration produced very satisfactory results at 48 mesh grinding and this method of concentration is recommended for the treatment of such ore. Test No. 6 shows what can be done when treating ore as represented by Our Lot No. 323 by table concentration when grinding to 48 mesh as regards recovery, and as was stated for Lot No. 322, the recovery shown can be obtained in practice with 60.0% WO_3 concentrates, since the scheelite mineral is largely freed at the grinding employed for the test in question. The results of Test No. 6 are summarized as follows:

	%WEIGHT	ASSAY % WO_3	% DISTRIBUTION WO_3
Table Conc.	1.32	42.15	87.8
Table Mid	6.28	0.35	3.5
Table Tails	92.40	0.06	8.7
Heads	100.00	0.63	100.0
Combined Mid and Concentrate or Rougher Conc.	7.60	7.6	91.3

COMPOSITE LOT NUMBERS 322 AND 323:

From the preceding tests on the two different ores, table concentration at 48 mesh grinding proved to be the optimum procedure of treatment for the ores in question. To further confirm the results obtained on the two different samples of ores, a composite was made by mixing equal portions of the two lot numbers and treating as follows:

1. A representative portion of the composite -20 mesh sample was screened on 48 mesh and the oversize stage ground in a laboratory ball mill to pass 48 mesh.

2. The minus 48 mesh material was then tabled on a Deister Laboratory Table, products made from this operation being a rougher concentrate and final tailing.

3. The rougher concentrate from Step No. 2 was cleaned on the Deister Table, the products from this operation being designated as concentrate, Mid. No. 1, and Mid. No. 2.

The above procedure gave the following results:

PRODUCT	% WEIGHT	ASSAY % WO_3	% DISTRIBUTION WO_3
Table Concentrate	0.68	65.05	79.1
Table Mid. No. 1	1.90	3.24	11.1
Table Mid. No. 2	6.80	0.14	1.8
Table Tailing	90.62	0.05	8.0
Heads	100.00	0.56	100.0
Combined No. 2 Mid and Tailing	97.42	0.0565	9.8

From the above table it will be noticed that the Table Mid. No. 1 amounts to 1.9% by weight of the total ore, assays 3.24% WO_3 and carries 11.1% of the total tungsten. It is reasonable to assume that at least 75% of the tungsten in this product will be recovered in the final high grade concentrate by recirculating this product either to the ball mill or to the head of the rougher table circuit. It will be further noticed that the Mid. No. 2 or table cleaner tailing can be rejected as a final tailing, this product raising the assay of the rougher table tails from 0.05% to 0.0565% WO_3.

With this report is attached a flowsheet showing our recommendations for the treatment of ore as represented by our Lot Numbers 322, 323 and a composite of the two ores. When treating an ore such as the composite in question according to the enclosed flowsheet, Test No. 1 on the composite shows that when treating 100 tons of ore per 24 hours there would be produced —

0.68 tons of table concentrates assaying

WO_3	S	P	As	Mo
65.05%	0.55%	0.02%	None	0.24%

accounting for 79.1% of the total tungsten in the ore.

1.9 tons of cleaner table middling assaying 3.24% WO_3 and accounting for 11.1% of the total tungsten in the ore, and

97.42 tons of final tailing (Rougher Tailing and Cleaner Table Tailing combined) assaying 0.0565% WO_3 and accounting for a loss of 9.8% of the total tungsten in the ore.

By circulating the above middling product, which accounts for 11.1% of the total tungsten, according to the enclosed flowsheet, it is safe to assume that over 85% total recovery of the tungsten will be obtained in the final high grade concentrate.

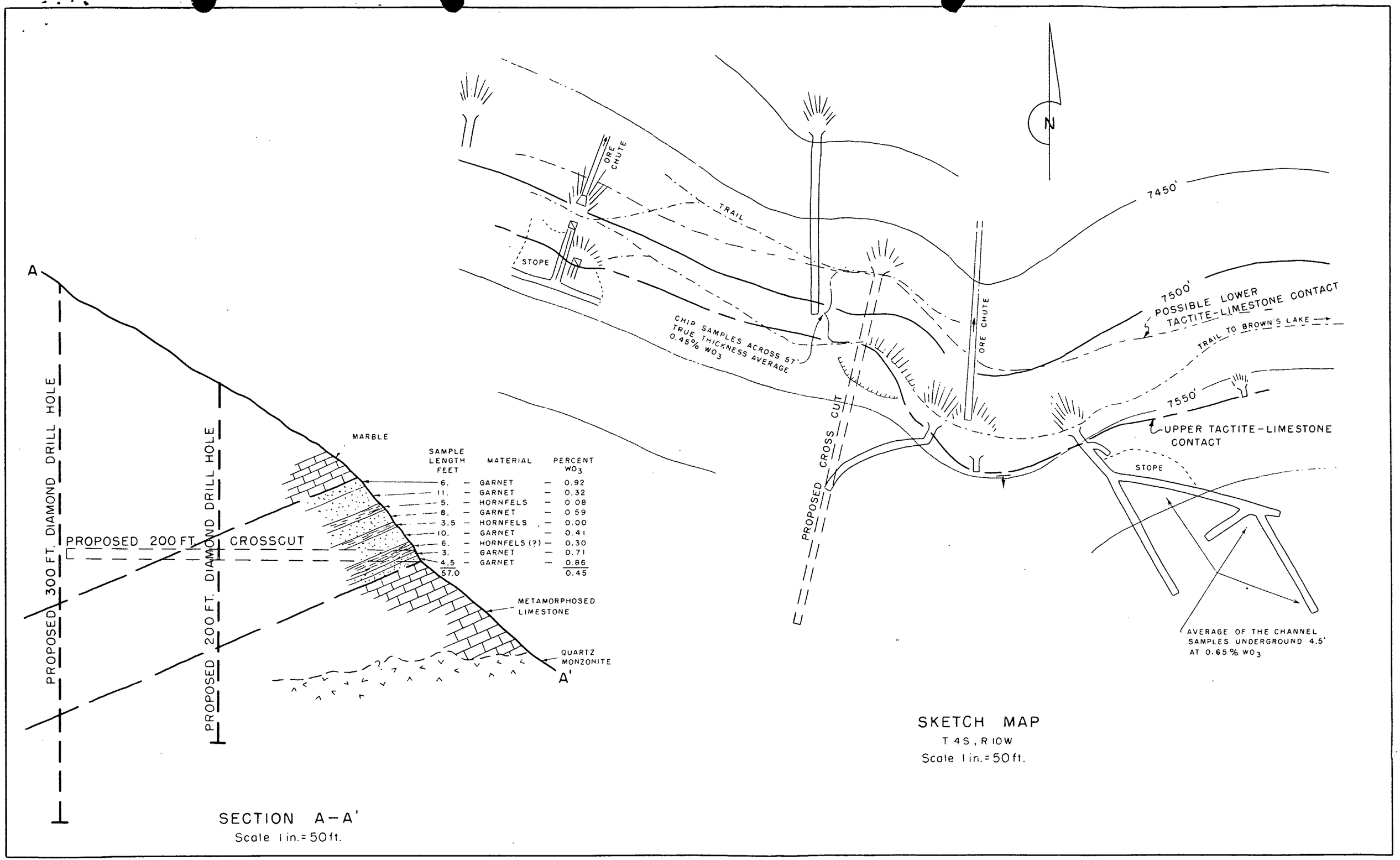
We wish to thank you for the opportunity of cooperating with you on the problem of concentrating tungsten ores from the district around Dillon, Montana, and assure you of our best interests on your behalf at all times.

Yours very truly,

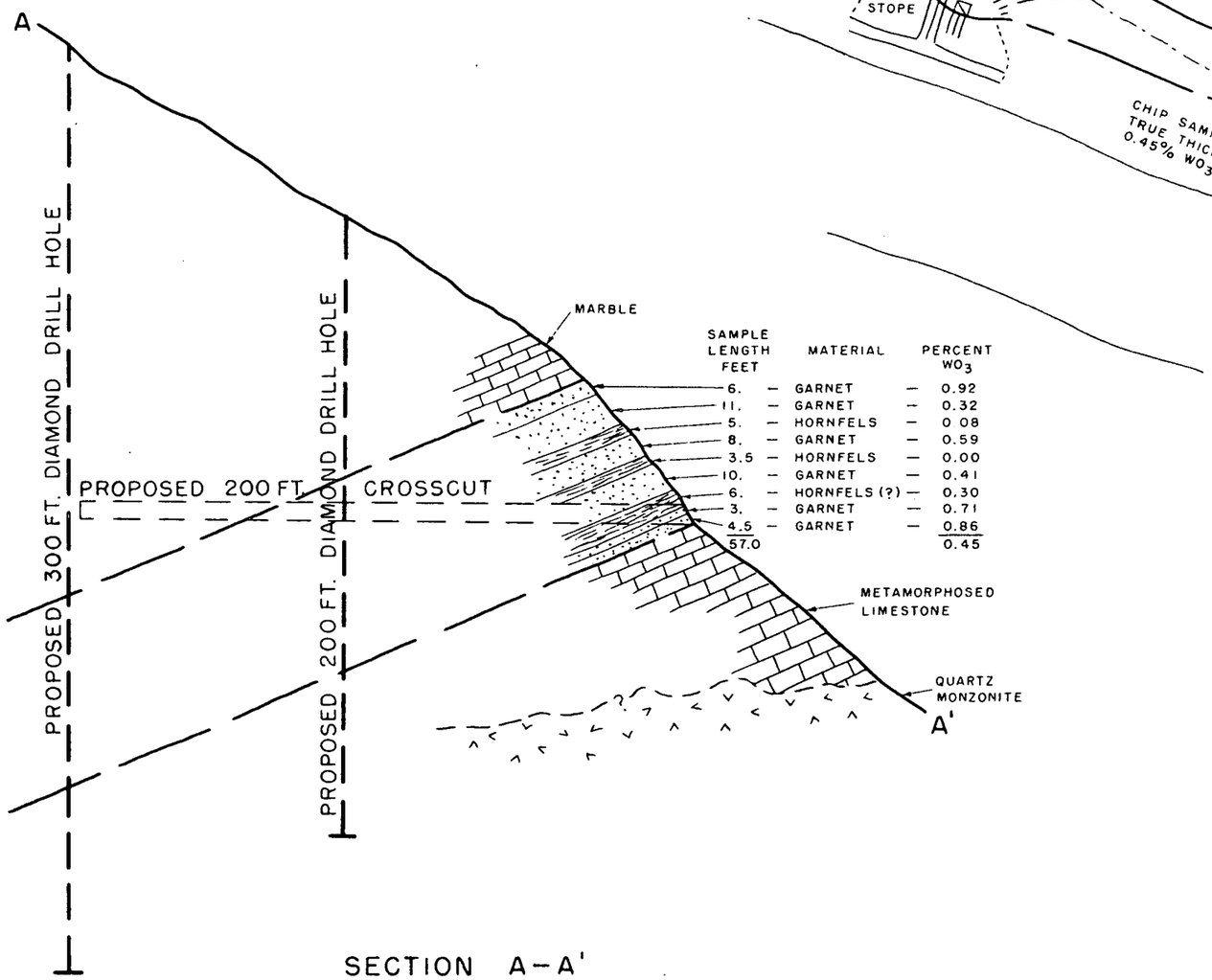
THE GALIGHER COMPANY

(S) L. H. Lange
Metallurgist

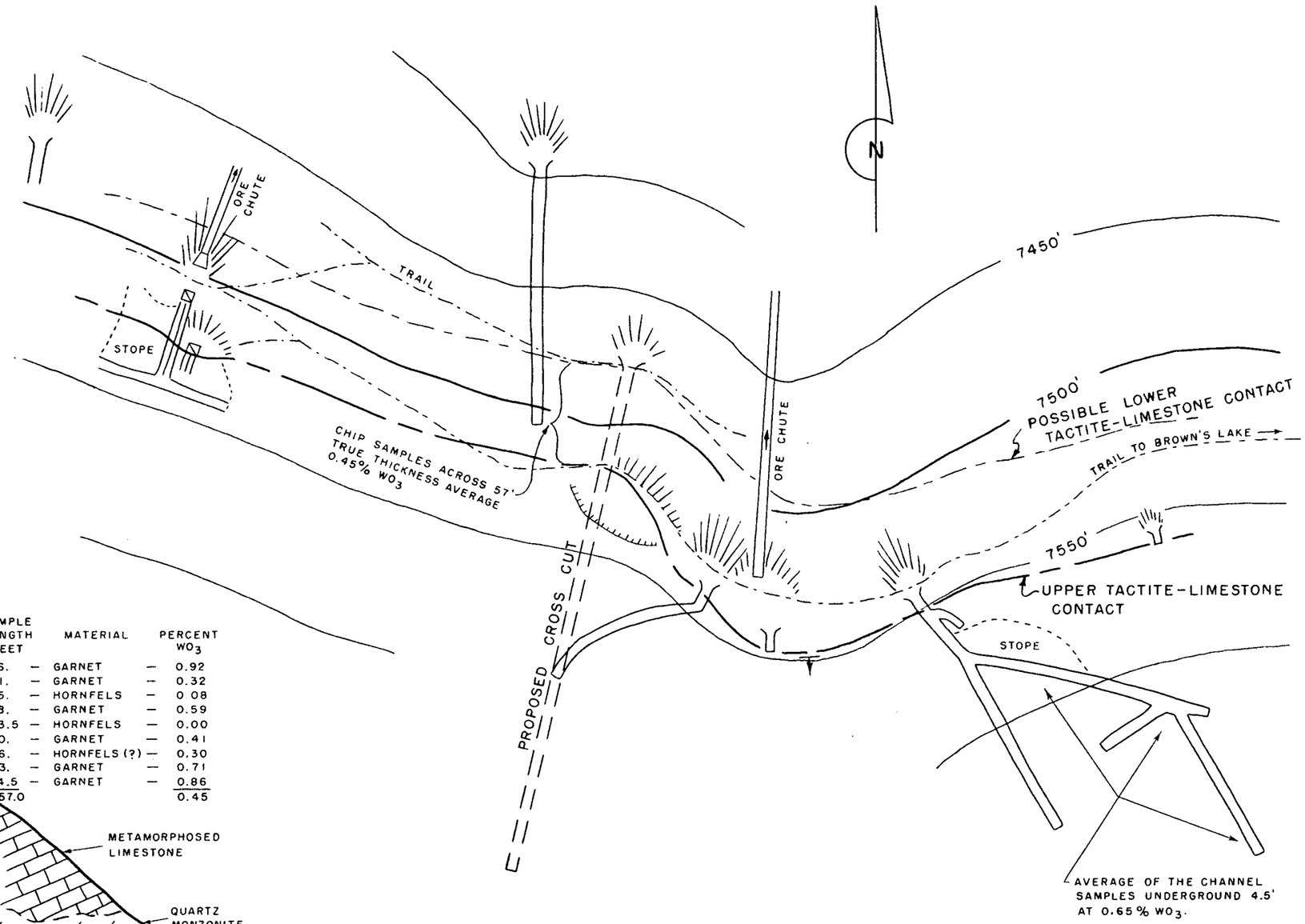
LHL/OH



Sketch map and cross section, Brown's Lake tungsten deposit, Beaverhead County, Mont.



SECTION A–A'
Scale 1 in. = 50 ft.



SKETCH MAP
T. 4 S., R. 10 W.
Scale 1 in. = 50 ft.

Sketch map and cross section, Brown's Lake tungsten deposit, Beaverhead County, Mont.

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

May 21, 1951

Air Mail

Mr. Frank Eichelberger
Frank Eichelberger & Associates
Symons Building
Spokane 8, Washington

Dear Frank:

This will acknowledge your air mail letter of the 16th which reached me last Friday. I have already contacted Mr. Hofflund; he had not as yet received the letter you mailed to him the same day.

I will check with Mr. Mittendorf today and you should hear further from us during the week. We will do our best to speed up this matter. With kindest personal regards, I remain

Faithfully,

JULIAN W. FEISS

JULIAN W. FEISS
Assistant to the Administrator

JWFeiss:mme

Copy to: Mr. Mittendorf
Mr. P. R. Bradley
Mr. Hofflund
Mr. Feiss
Files

Dma-148

856

FILE COPY
SURNAME:

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

May 19, 1951

AIR MAIL

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

In reply refer to DMA-148

Dear Mr. Weissenborn:

I am sorry that I was not able to transfer you to Mr. Herres last night. We were cut off and I couldn't even get the operator back.

As to Docket No. 148, this left my office on May 8 for approval for a Field Team examination. It was signed by the Coordinating Committee on May 16, and a letter advising the applicant of this action was sent on May 16, so that you will probably have been advised by the time this reaches you.

Very truly yours,

Enc. Reber gave [illegible]
Fluorescent Mining Co.

148

George B. Holderer

George B. Holderer
Acting Chief, Tungsten Branch

GBHolderer:mem

cc: Adm. Reading File
Mr. Strobel
Mr. Bradley
Files

Enc. [illegible]
[illegible]

FILE COPY
SURNAME:

Lemmon
Bradley
Gilbert

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

Tele Sent To

May 8, 1951

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

In reply please refer to
DMA - 148

Through: Coordinating Committee
Director Supply Division

Dear Mr. Weissenborn:

Mr. Frank Eichelberger of Spokane has applied for a loan to finance a $20,000 exploration project on the tungsten property of the Fluorescent Mining Corporation at Brown's Lake, Beaverhead County, Montana. Mr. Eichelberger and E. A. Julian are in partnership with E. L. Cleveland, who has a lease on the property.

Please review this application in the light of what you know about the property, and advise us whether the loan is warranted. If the exploration is undertaken and is successful, the owners will doubtless ask for funds to develop and equip the property, and therefore it is important that any exploratory program should give concrete results. If you feel that the property has some merit (as tentatively indicated in a memorandum by S. W. Hobbs in 1944), you may wish to go over the proposal with Mr. Eichelberger in an attempt to outline the project in more specific terms as to location, amount, and kind of work to be done.

It is reported that Mr. Eichelberger left Washington, D. C. on April 21 by car, enroute to Spokane.

We are enclosing a copy of the application, accompanied by geologic reports by Walter E. Bauer dated June 25, 1948 and April 5, 1949, which please return with your report.

Very truly yours,

P. R. Bradley, Jr.
Chief, Tungsten Branch

Enclosure

DMLemmon:ec

Approved:
Tom Lyon

Chairman, Coordinating Committee

CC: Adm. Reading File
Mr. Lyon
Mr. Strobel
Mr. Bradley

Howell B. Moon
Bureau of Mines

I Lyon for
Geological Survey

Mr. Lemmon
Field Team Region II

Files

DMA 148

FILE COPY
SURNAME:

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

Bradley
Lyon
Thayer

May 8, 1951

Mr. Frank Eichelberger
401 Symons Building
Spokane 8, Washington

In reply please refer to
DMA - 148

Dear Frank:

We are today forwarding to Mr. A. M. Weissenborn, Executive Officer, DMA Field Team, Region II, Spokane, a request that he review your application for an exploration loan upon the Brown's Lake tungsten property.

We have notified him that you may be reached in Spokane in case it is necessary.

As soon as we receive his report, our final action will be taken on your application.

Very truly yours,

Tom Lyon
a.p.

Tom Lyon
Director, Supply Division

PRBradley:ec

CC: Adm. Reading File
Mr. Strobel
Mr. Lyon
Mr. Bradley
Field Team Region II
Files

1870 Wyoming Avenue, N.W.
Washington, D. C.
April 18, 1951

Defense Minerals Administration
South Interior Building
Washington 25, D. C.

Re: Docket No. 148
Fluorescent Mines Corp.

Dear Mr. Strobel:

Herewith are four copies of Forms MF-100 and MF-103 on the Fluorescent Mines Corporation's properties near Brown's Lake, Beaverhead County, Montana.

On December 12, 1950, Mr. R. C. McLaughlin, President of the Fluorescent Mines Corporation applied for an exploration loan and was given Docket Number 148.

On January 17, 1951, the Fluorescent Mines Corporation entered into a lease with E. L. Cleveland of Reno, Nevada for a period of ten years.

Subsequently, Estey A. Julian and myself entered into partnership with E. L. Cleveland to the extent shown, that is, 40% to Cleveland and 30% each to Julian and Eichelberger.

As partners we now come to you for aid in carrying out an exploration program and we trust that this application can be acted upon promptly.

Very truly yours,

Frank Eichelberger

Frank Eichelberger
Acting for E. L. Cleveland
and Estey A. Julian

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 9 1951
LANDON F. STROBEL
Executive Secretary

Enclosures

C O P Y

Letterhead of: Estey A. Julian
San Francisco

April 14, 1951

Mr. R. C. McLaughlin
Fluorescent Mines
Dillon, Montana

Dear Sir:

Please find enclosed check for $100 to Fluorescent Mines, being payment for the March 18-April 17 period in accordance with paragraph 9 of the "Bond and Lease For Mining Property" of January 17, 1951, between Fluorescent Mines, lessor, and E. L. Cleveland, Lessee.

Very truly yours,

Original signed by)
Estey A. Julian) (Stamp)
Estey A. Julian

EAJ/m
encl

cc Mr. E. L. Cleveland
P. O. Box 2267
Reno, Nevada

Mr. Frank Eichelberger
Washington, D. C.

R. H. Ridgway

DEFENSE MINERALS ADMINISTRATION

Referral of Applications for Government Aid

Docket No. DMA - 148

Commodity: tungsten

Name of Applicant: R. C. McLaughlin

Address of Applicant: Dillon, Montana

Name of Property: Brown's Lake Tungsten Property

Location of Property: Near Melrose, Beaverhead County, Montana

Nature of Application: Loan to operate mine. $50,000

Action Dates

Application: 12/ 9/50

Received: 12/14/50

Acknowledged:

Referred to FERROUS METALS Committee: 12/15/50

FILE COPY
SURNAME:

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

January 11, 1950

Mr. R. C. McLaughlin

Dillon, Montana

DMA-148

Dear Mr. McLaughlin:

In reply to your letter of December 9 requesting a loan of $50,000 for operation of a tungsten property near Brown's Lake, Beaverhead County, Montana:

Evidence that you submit, in conjunction with that from an older examination of the property by a geologist of the Department of Interior, does not indicate the presence of a commercial ore body eligible under the present policies of the DMA for the loan requested, and your request must be denied.

Yours truly,

P. E. Bradley, Jr.
Chief, Tungsten Division

DMA 148

8.56

DIRECTOR

DMA-148

Dillon, Montana
Dec-9-50

Mr James Boyd
Interior Department;
Washington, D.C.

Dear Mr. Boyd:-

Returned to Immigration Branch

I am sending you a report made on our mining property near Browns Lake Mont. We have been trying for several years to get this property on a paying basis, but havent been very succesful in raising the required capital.

We would like very much to get Government assistance if possible; will you please let us know how to go about getting it. I think it will take at the least $50,000 for milling, mining equipment, labor ect.

Respectfully Yours
R.C. McLaughlin.

BUREAU OF MINES
WASHINGTON, D.C.
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OFFICE OF DIRECTOR

DMA-148

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REPORT ON THE BROWN'S LAKE TUNGSTEN PROPERTY NEAR MELROSE, BEAVERHEAD COUNTY, MONTANA

Introduction:

The examination of the Brown's Lake Tungsten Property was made at the request of Mr. R. C. McLaughlin, President of the Fluorescent Mining Corporation. It was undertaken primarily for the purpose of determining the extent and geologic conditions under which the tungsten tactite zones were occurring. The field study was made on June 2, 3, 4, and 12, 1948.

Location:

The property is located 15 miles southwest of Melrose, Montana in T4S, R 10 W, Sec. 3 and 4: T3S, R 10 W, Sec. 32, 33, and 34.

Ownership:

Seventeen unpatented lode claims comprise the present holdings. These claims were incorporated in April 1943 as the Fluorescent Mining Corporation. Present owners are R. C. McLaughlin 51%, Vernon W. McLaughlin 20%, Mrs. R. C. McLaughlin 15%, W. H. Perkins 8%, Amos L. Wright 5% and A. E. Contway 1%.

Physical Features:

A good Forestry Service road extends from Highway 91 (8 miles away) through the center of the claims. Abundant timber and water for mining and milling are available on or near the claims. The claims lie on the sides of a large glacial valley and all proposed mining would be either from open cuts made available by bulldozer roads to the outcroppings, or by tunneling to the lodes from just above the Forestry Road. Winter operations need not be curtailed for any large operation. Snowfall is moderate for this section of the country.

Geology:

The country rocks in the area are Paleozoic sediments intruded by a late Cretaceous-early Tertiary granitic stock. The scheelite-powellite areas are contact-metamorphic tactite zones formed at intervals around the northern edge of the granitic intrusion. A noteworthy exception is the Ivanhoe-Fox lode which was formed in a roof pendant of Madison linestone. This lode was the largest observed during the examination.

Large scale faulting is evident and is shown on the geologic map (Fig. 1). Smaller faults are to be expected and were noted in the Mammoth Tunnel.

Tactite Occurrences:

Where actual tactite outcrops were noted, they occurred within the limestones (Fig. 2) ten or twenty feet from the granite and paralleling the bedding planes. These zones are in both the Madison linestone and the Amsdem formation. Of the two the Madison limestone is the more favorable as a host rock.

Excluding the Fox-Ivanhoe lode, which will be considered separately, nine other tactite outcrops were ovserved. They are strong, persistent and quite massive bodies averaging 100 feet in strike length and 10 feet in width. (The exposure at the Mammoth Tunnel is 19 feet thick). They have an average dip of 30 - 58° north, on the north side of the property, and 12 - 54° south, on the southern side.

The Fox-Ivanhoe exposure includes a large tactite zone 1700 feet long having an average width of 50 feet. This tactite dips from 12 to 54° to the south with the steeper dip being observed on the Fox claim. Afault with a horizontal displacement of 350 to 400 feet cuts through the roof pendant near the Fox-Ivanhoe end line. The Fox outcropping lies 380 feet above the road; The Ivanhoe section 250 feet.

Ore Minerals:

All economic values appear to lie within the tactite zones, although it is quite possible that veins exist within the granite and will be found by later mining operations.

The scheelite-powellite combination in the tactite fluoresces a light cream color and suggest a 2-3% molybdenum impurity. An interesting occurrance of pure scheelite was noted at the Garnet mill-site, as well as some molybdenite. The WO_3 values vary from ½% to 1% or more, with the better values being confined to the tactite within the Madison linestone. The copper content of the tactite (occurring as chalcopyrite) should be investigated to see if it should be saved by flotation methods.

Gangue Minerals:

A preponderance of quartz was noted (up to50%) within the tactite zones, as well as garnets, epidote, actinolite, magnetite, specular hematite, and hedenbergite(?). The magnetite and epidote were observed occurring outside of the ore limits of the tactite, or in barren tactite. Only one specimen of actinolite was noted.

Samples and Tonnage Estimates:

Chip samples have been taken at various places in the tactite and reveal WO_3 values from ½ to 3%. However I don't believe this is the proper precedure for sampling such a large exposure. Anyone interested in obtaining an overal estimate of the grade of the tactite ores should lamp all exposures in order to visually obtain a quantitative concept of the WO_3 content of the tactite zones. This usually requires an experienced tungsten man, preferably one who has lamped similar tungsten ores before. The only accurate method of sampling such a deposit is by a representative sample of several hundred tons of mill feed. I would expect a large tonnage mill feed to run 0.6% to 0.7%. A higher grade could be obtained by lamp sorting or selective mining.

At present the only large ore reserve is on the Mammoth claim which has 25,600 tons of proven ore and 11,370 tons of probable ore. In addition to the Mammoth lode, a total of 90,000sq. ft. of outcrop was examined which when given a depth of 100 feet would develop 1,000,000 tons. I do not suggest that the ore-bodies will only extend 100 feet, but that for each 100 feet of development down the dip of all tactite zones and additional 1,000,000 tons may be expected.

It is difficult to predict the depth that one may expect from an ore body of this type. As long as the ore occurrs along bedding planes it will gradually leave the influence of the granite, and I would expect the ore to lens out within a few hundred feet of this point. However another strong possibility is that several different layers of tactite may occurr one over the other but separated by limestone gangue.

The actual depth of these tactite zones can only be determined by mining or diamond drilling.. However I would suggest planning on 500 feet untill proven otherwise.

Conclusion:

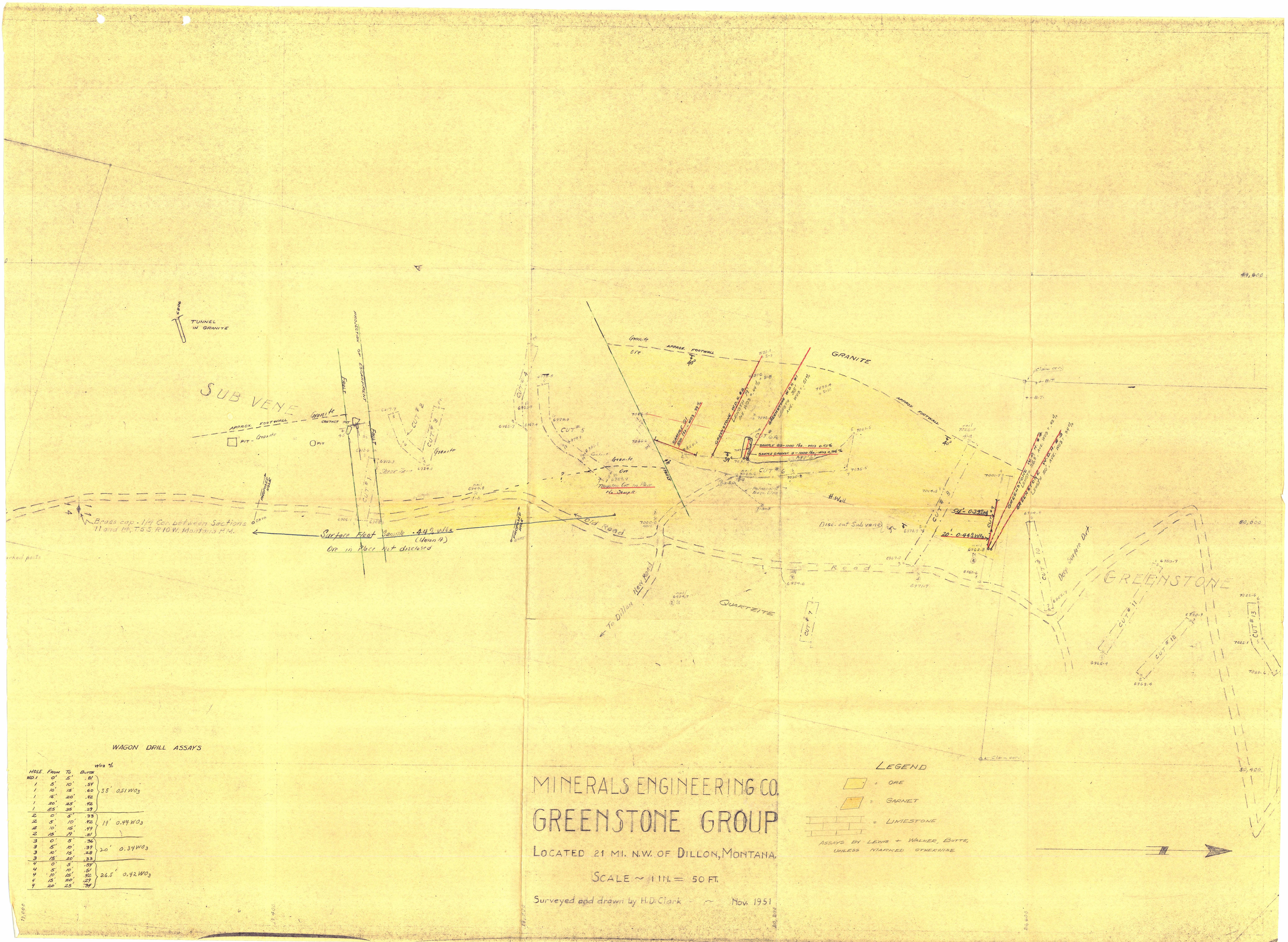
It is quite evident, Mr. McLaughlin, that you have a large low-gradetungsten property. It's future will depend upon the marketability of the tungsten concentrates and upon the amount of capital available for development. In this respect it may require some one with sufficient determination and means to carry the project through to completion. This type of deposit is well known in Nevada and California but so far as I know yours is the only oneoccurring in Montana.

Respectfully submitted,

Walter E. Bauer
Mining Geologist

Keetley, Utah
July 28, 1948

WEB/vwm



WAGON DRILL ASSAYS

HOLE	FROM	TO	BUTTE WO3 %		
WD.1	0'	5'	.81	35'	0.51 WO3
1	5'	10'	.54		
1	10'	15'	.60		
1	15'	20'	.42		
1	20'	25'	.42		
1	25'	35	.29		
2	0'	5'	.23	19'	0.44 WO3
2	5'	10'	.42		
2	10'	15'	.49		
2	15'	19'	.51		
3	0'	5'	.36	20'	0.34 WO3
3	5'	10'	.39		
3	10'	15'	.28		
3	15'	20'	.33		
4	0'	5'	.59	26.5'	0.42 WO3
4	5'	10'	.51		
4	10'	15'	.42		
4	15'	20'	.29		
4	20'	25	.34		

MINERALS ENGINEERING CO.

GREENSTONE GROUP

LOCATED 21 MI. N.W. OF DILLON, MONTANA.

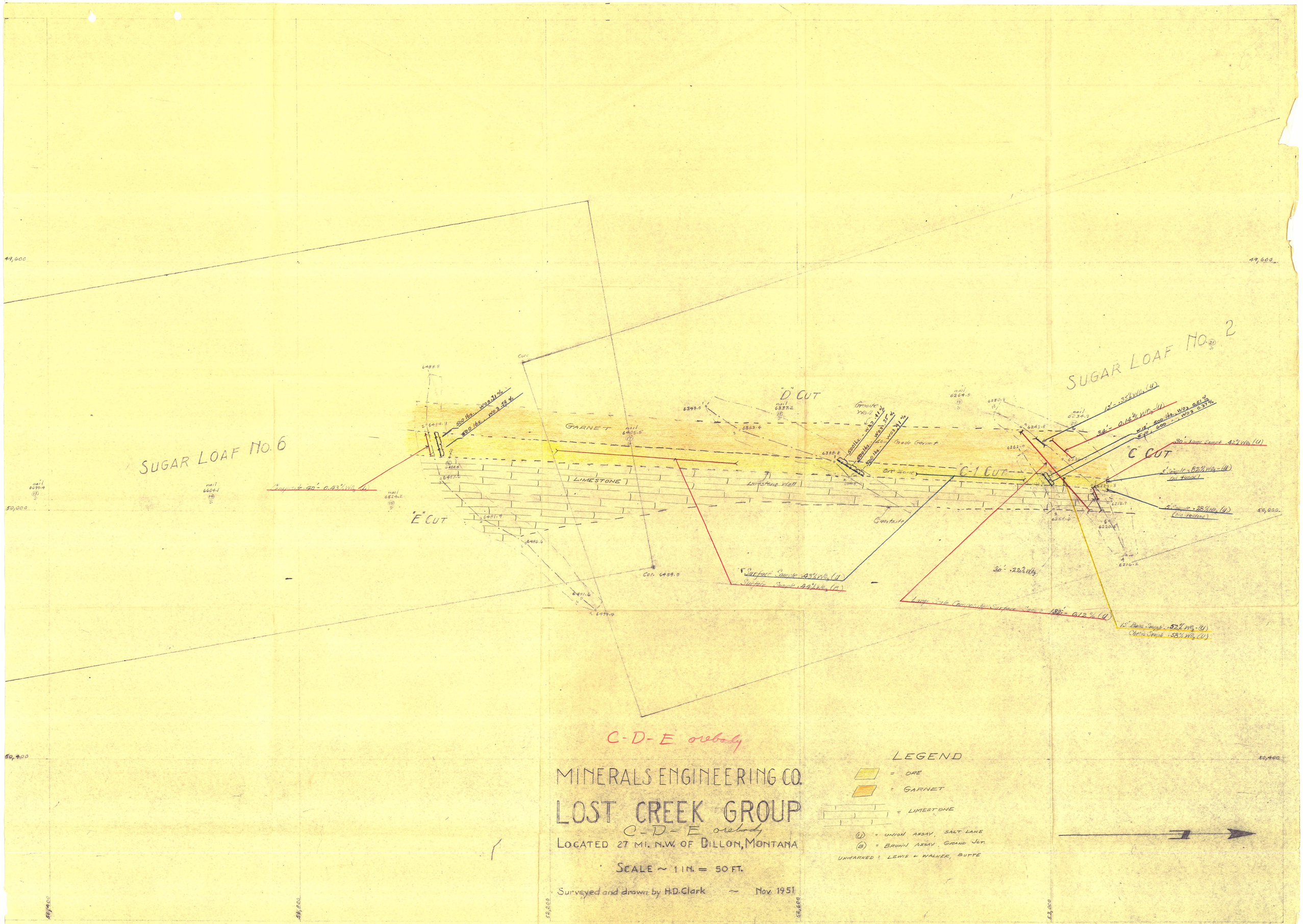
SCALE ~ 1 IN. = 50 FT.

Surveyed and drawn by H.D. Clark ~ Nov. 1951

LEGEND

- = ORE
- = GARNET
- = LIMESTONE

ASSAYS BY LEWIS + WALKER, BUTTE, UNLESS MARKED OTHERWISE



C-D-E orebody

MINERALS ENGINEERING CO.

LOST CREEK GROUP

C-D-E orebody

LOCATED 27 MI. N.W. OF DILLON, MONTANA

SCALE ~ 1 IN. = 50 FT.

Surveyed and drawn by H.D. Clark ~ Nov. 1951

LEGEND

= ORE

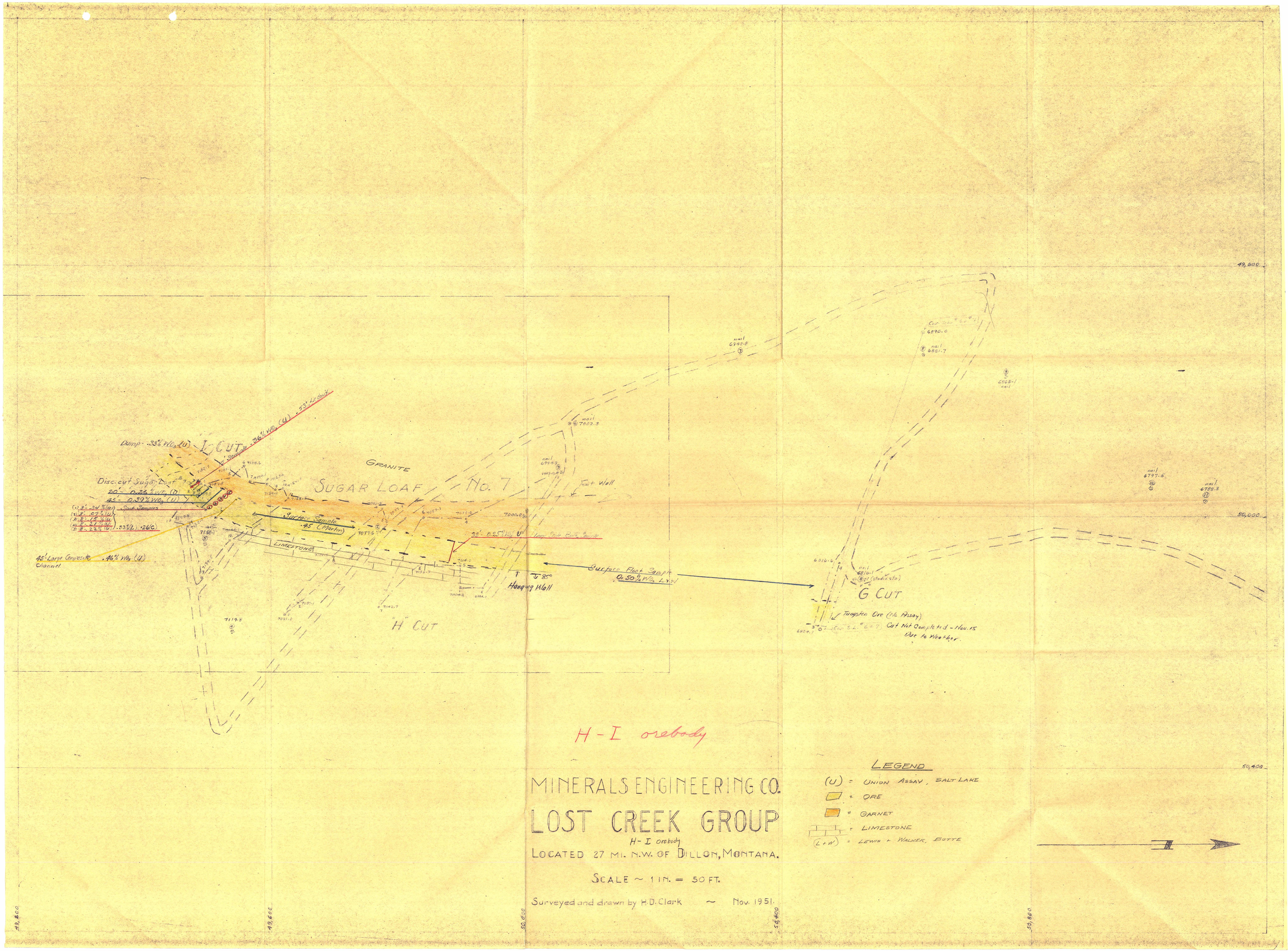
= GARNET

= LIMESTONE

(U) = UNION ASSAY, SALT LAKE

(B) = BROWN ASSAY, GRAND JCT.

UNMARKED: LEWIS & WALKER, BUTTE


49,600
50,000
50,400
49,800
50,200
50,600
50,800
Dump - .38% WO3 (U)
I CUT
Sample .36% WO3 (U) .53% L+W
Disc. cut Sugar Loaf #7
20' - 0.36% WO3 (U)
45' - 0.39% WO3 (U)
Spot Samples
45' Large Composite Channel .46% WO3 (U)
GRANITE
SUGAR LOAF No. 7
Foot Wall
Surface Sample .45 (Martin)
LIMESTONE
20' - 0.25% WO3 U
Surface Float Sample 0.50% WO3 L+W
Hanging Wall
"H" CUT
G CUT
Tungsten Ore (No Assay)
Cut Not Completed - Nov. 15 Due to Weather
nail 6942.8
nail 7002.3
nail 6890.0
nail 6881.7
nail 6868.1
nail 6797.5
nail 6785.3
H - I orebody
MINERALS ENGINEERING CO.
LOST CREEK GROUP
H - I Orebody
LOCATED 27 MI. N.W. OF DILLON, MONTANA.
SCALE ~ 1 IN. = 50 FT.
Surveyed and drawn by H.D. Clark ~ Nov. 1951.
LEGEND
(U) = UNION ASSAY, SALT LAKE
= ORE
= GARNET
= LIMESTONE
(L+W) = LEWIS + WALKER, BUTTE