Docket Copy

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMEA-2468

AMENDMENT NO. 1

It is agreed this 20th day of August, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Western Mines Company, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Exploration Project Contract Idm-E414 (Docket No. DMEA-2468), dated October 6, 1952, between the parties hereto, is amended, effective October 6, 1952, as follows:

In Exhibit "A", under the heading "Estimated Costs of the Project," delete everything following the subheading "Stage II (Alternate)," and substitute the following:

Stage II (Alternate)

1. Independent Contracts		
Bulldozer (includes operator, operating supplies, upkeep, and all other costs) for road building and improvement, 80 hours* @ $15.00/hr.*	$1,200.00*	
400 feet* of drifting and crosscutting @ $20.00/ft.* (includes all costs of direct labor at the face; all equipment, except trucks and chain saw; and all supplies necessary for drifting and crosscutting, except timber, ties, rail, and pipe)	8,000.00*	$9,200.00*
2. Labor, Supervision, and Consultants		
1 Supervisor-Geologist @ $600.00/mo.*, 5 months	3,000.00*	
1 Roustabout 60 days @ $14.00/da. (including overtime)	840.00	3,840.

3. Operating Materials and Supplies

Timber and ties	$200.00	
2-ton, 12# rail (includes spikes, fish plates, and bolts)	350.00	
Pipe, small tools, and miscellaneous supplies	250.00	
Fuel and oil for chain saw and truck	316.00	$1,116.00

4. Operating Equipment

To be purchased - None

To be rented - None

To be furnished by Operator

1 Chain saw, value	$420.00		
1 Truck, value	1,500.00		
Depreciation at $32.00/mo.*, 5 months		160.00*	160.00*

5. Rehabilitation and Repairs

None

6. New Buildings, Improvements, Installations

Tool shed and fuel rack		125.00*

7. Miscellaneous

Assaying, 50 samples @ $4.00/ea.	200.00	
Office and engineering supplies	50.00	
Accounting	125.00	
Workmen's compensation, employer's liability insurance, and payroll taxes	384.00	759.00

Total Estimated Cost of Stage I	$4,930.00*	
Total Estimated Cost of Stage II (Alternate)	15,200.00*	
Total Estimated Cost of Project		$20,130.00*
Government Participation at 75%		$15,097.50*

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C D Mutterdorf
Administrator, Defense
Minerals Exploration
Administration

Rubin
Hoffman
Chandler

WESTERN MINES COMPANY

By E. T. Sholen

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
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DOCKET NO. DMEA [illegible]

COMMODITY [illegible]

Docket Copy
IDM-E 414

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 6th 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[2] [illegible] Mining Company, a [illegible] Township, as [illegible] in [illegible] I, [illegible]ville, Montana

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Gull, described as follows:[3] 7 lode mining claims described in Exhibit II, attached hereto and made a part hereof

the Operator represents and undertakes:[4]

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

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

ARTICLE 3. *Exploration project.*—The Operator, within 206 days from the date of this contract shall commence work on a project of exploration for[5] tungsten

in or upon the described land; and shall bring the project to completion within a period of 13 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $16,200.00, which is 75 percent of $21,600.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.* See Annex III.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

[illegible] Mine Company
(Operator)

By Pat T. Shahan (partner)
By [illegible] (partner)
By Frank [illegible] (partner)
By [illegible] Talbot (partner) Milton Embry
By (partner) Zella Embry
By John W Phelan (partner)

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

[CORPORATE SEAL]

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMEA-2468

ANNEX I

Co-partners and percentage of ownership in mining claims of Western Mines Company are as follows:

Pat T. Phalen, Manager, Spokane, Washington	70%
John B. Hopkins, Grand Junction, Colorado	17%
Frank C. Culver, Seattle, Washington	5%
Milton T. Emley, Spokane, Washington	2%
Zilla Emley, Reardon, Washington	1%
John W. Phalen, Spokane, Washington	5%

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMEA-2468

ANNEX II

The claims of Western Mines Company are in Sections 22 and 23, t. 13 N., R. 10 W., Powell County, Montana.

Name of Claim	Date of Location	Recorded in Book of Records	
		Book No.	Page No.
New Progress No. 1	Sept. 12, 1948	8	409
New Progress No. 2	Sept. 12, 1948	8	411
Old Timer No. 1	Sept. 12, 1948	8	405
Old Timer No. 2	Sept. 12, 1948	8	407

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMEA-2468

ANNEX III

If the work in Stage II (alternate) is done, that part of Article 8(a) which precedes the proviso will read as follows:

The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $15,097.50, which is 75 percent of $20,130.00, the agreed, estimated total cost of the project in which the Government will participate;

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMEA-2468

EXHIBIT "A"

Description of the Work

Stage I

Time Schedule: 0 - 1½ months

Construct an access road, and cut cross-trenches with a bulldozer to locate a vein or veins in the subject area. There shall be a minimum of 5 trenches and a maximum of 11 trenches, each of which shall be not less than 100 feet and not more than 200 feet in length, and of a depth sufficient to expose the underlying rocks so that they can be studied, mapped and sampled where necessary. Figure I attached hereto shows the proposed locations of the trenches.

When the first 5 trenches are completed, the supervising geologist1/, with the approval of the Government, shall determine whether the balance of the 11 trenches or any part thereof shall be completed.

One of the two alternative items of work specified under Stage II shall be undertaken after the completion of Stage I, if the Government indicates the result of the work under Stage I warrants undertaking work under Stage II.

Stage II

Time Schedule: 1½ - 5 months

Construct more access road and drill approximately 1,500 feet of diamond drill holes. The number, location, attitude and length of the diamond drill holes shall be determined by the supervising-geologist with the approval of the Government.

Stage II (Alternate)

Time Schedule: 1½ to 6½ months

As an alternative to the work described in the previous

1/ The supervising-geologist of the project shall meet with the approval of the Government.

paragraph, with the approval of the Government, construct more access road and drive one or two crosscut adits and drift on the vein if it is found in the crosscuts. The crosscutting and drifting shall not exceed an aggregate of 400 feet.

Estimated Costs of the Project
(* Indicates allowable maximum)

(1) **Independent Contracts**

Stage I

Bulldozer[2] (for access roads) 33* hours @ $15.00*/hr. [2]	$ 495.00*	
Bulldozer[2] (for trenching) 150* hours @ $15.00*/hr. [2]	2,250.00*	$ 2,745.00*

Stage II

Bulldozer[2] (for access roads and leveling drill sites) 80* hours @ $15.00*/hr.	1,200.00*	
1,500 feet of diamond drill holes at $7.50* per foot (includes water, pipe, casing and accessories to be furnished by the contractor)	11,250.00*	12,450.00*

(2) **Labor, Supervision and Consultants**

Stage I

1 - Supervising-geologist[3] @ $600.00* per month, 1½* months	900.00*	
1 - Laborer, 30 days @ $14.00/day (includes overtime)	420.00	1,320.00

2/ Estimate is for working hour, and includes operator, operating supplies, upkeep, and all other costs.

3/ The supervising-geologist shall be responsible for all sampling and for making geological maps of the area.

Stage II

1 - Supervising geologist[4] @ $600.00* per month, 3½* months	$2,100.00*	
1 - Laborer, 40 days @ $14.00/day (includes overtime)	560.00	$ 2,660.00

(3) Operating Materials and Supplies

Stage I

Tools, fuel, oil, sample sacks and miscellaneous supplies	100.00

Stage II

Tools, fuel, oil, sample sacks and miscellaneous supplies	200.00

(4) Operating Equipment

Stage I

To be purchased

None

To be rented

None

To be furnished by the Operator

1 - Truck estimated value $1,500.00; depreciation, $25*/mo., 1½ months	40.00*

Stage II

To be purchased

None

To be rented

None

4/ See footnote 3.

To be furnished by Operator

1 - Truck estimated value $1,500.00; depreciation, $25*/mo., 3½ months		$ 85.00*

(5) **Rehabilitation and Repairs**

Stages I and II

None

(6) **New Buildings, Improvements, Installations**

Stages I and II

Tool and core shed, and fuel rack		250.00*

(7) **Miscellaneous**

Stage I

Assaying, 50 samples @ $4.00 each	$ 200.00	
Office and engineering supplies	25.00	
Accounting	45.00	
Workmen's Compensation and Employers' Liability Insurance and payroll taxes	130.00	400.00

Stage II

Core boxes	125.00	
Assaying, 50 samples @ $4.00 each	200.00	
Office and engineering supplies	50.00	
Accounting	105.00	
Workmen's Compensation and Employers' Liability Insurance and payroll taxes	270.00	750.00

(8) **Contingencies**

Stage I	200.00
Stage II	400.00

Total Estimated Cost for Stage I	$ 4,930.00	
Total Estimated Cost for Stage II	16,670.00	
Total Estimated Cost of Project		$21,600.00*
Government Participation @ 75%		$16,200.00*

* * * * * * * * * *

Stage II (Alternate)

(1) Independent Contracts

Bulldozer (includes operator, operating supplies, upkeep, and all other costs) for road building and improvement, 80* hours @ $15.00*/hr.		1,200.00*

(2) Labor, Supervision and Consultants

1 - Supervisor-geologist @ $600.00* per month, 5* months	3,000.00*	
1 - Miner 125 days @ $17.00/day (including overtime)	2,125.00	
1 - Mucker 125 days @ $16.00/day (including overtime)	2,000.00	
1 - Roustabout 60 days @ $14.00/day (including overtime)	840.00	7,965.00

(3) Operating Materials and Supplies

Fuel, oil, powder, caps, fuse, hose, tools, steel, bits and miscellaneous	2,000.00	
Timber, ties	200.00	
2-ton, 12# rail (includes spikes, fish plates and bolts) at $175.00/ton	350.00	
400 feet 1½" pipe @ $0.35/ft.	140.00	2,690.00

(4) Operating Equipment

To be purchased

None

To be rented

1 - Compressor, 110 cubic feet, @ $212.00/mo., 5 months	1,060.00	
1 - Jackhammer and jackleg @ $50.00/mo., 5 months	250.00	
1 - Mine car @ $10.00/mo., 5 months	50.00	1,360.00

To be furnished by the Operator

1 - Chain saw, value	420.00	
1 - Truck, value	1,500.00	
	1,920.00	
Depreciation @ $32.00*/mo., 5* months		160.00*

(6) New Buildings, Improvements, Installations

Tool shed and fuel rack		125.00*

(7) Miscellaneous

Assaying, 50 samples @ $4.00 each	200.00	
Office and engineering supplies	50.00	
Accounting	125.00	
Workmen's Compensation and Employer' Liability Insurance and payroll taxes	835.00	1,210.00

(8) Contingencies 490.00

Total Estimated Cost of Stage I	$ 4,930.00	
Total Estimated Cost of Stage II (Alternate)	15,200.00	
Total Estimated Cost of Project		$20,130.00*
Government Participation @ 75%		$15,097.50*

DMA . Rm 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMX~~ Docket No. 2468

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION PROJECT

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

Copies to USBM, USGS, Region II.

To: Code 400, Rm. 3538 Date 4-4-52

To: _____ Date _____

To: _____ Date _____

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To: _____ Date _____

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CONTROLLED DOCUMENT

400

DOCKET
Surname:

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Chambers
Selfridge
K Johnson

INTERIOR DEPT.
SEP 14 1954
SOLICITOR

SEP 22 1954

Mr. Pat T. Phalen, Manager
Western Mines Company
3914 East Third Avenue
Spokane, Washington

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
Hopkins Mine
Powell County, Montana
Contract No. Idm-E414

FROM SOLICITOR
SEP 16 1954
FOR SIGNATURE

Dear Mr. Phalen:

We are pleased to advise you that your performance of exploration work under the subject contract has been satisfactory to the Government and the account relating thereto has been closed. The final audited and settled account shows:

Total allowable costs incurred . . .$15,962.13

Total Government contribution
at 75 percent $11,971.60

Your attention is called to Article 7(d) of the contract which requires the Operator to "keep and preserve said records and accounts for at least three years after the completion of the project or the termination of this contract."

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the exploration contract. In the absence of such certification, the Government retains no claims or lien against the property or any production therefrom.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: DOCKET
CODE 400
ADM. READ. FILE
FIELD TEAM, REG. II
OPER. COMMITTEE
CODE 800-MR. CHAMBERS
R. W. GEEHAN, USBM
THOR KIILSGAARD, USGS

JHopkins/ls
9-10-54

R.C.B.

DOCKET
Surname:
Hopkins
Western
Chromite

September 10, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: General Summary of Contract and Results Obtained
Docket No. DMEA 2468 - Tungsten
Western Mines Company
Hopkins Mine
Powell County, Montana
Contract No. Idm-E414

OPERATOR: Western Mines Company
Helmville, Montana

OPERATOR'S PROPERTY RIGHTS:
Owner of 4 unpatented mining claims: New Progress No. 1, New Progress No. 2, Old Timer No. 1, and Old Timer No. 2.

CONTRACT: Dated October 6, 1952
(1) Work authorized:

Stage I

Construct access road
Cut 5 to 11 cross trenches 100' to 200' in length, with bulldozer

Total estimated cost - Stage I $4,930.00

Stage II

Construct additional access roads
Diamond drill 1500' of holes at locations approved by Government

or

Stage II (alternate)

Construct additional access roads
Drive one or two crosscuts to vein
Drift on vein if found in crosscuts
Drift and crosscuts not to exceed an aggregate of 400 feet

Total estimated cost - Stage II $15,200.00

Total estimated cost - Stages I & II $20,130.00

Government participation - 75% $15,097.50

R.C.

AMENDMENTS:-

No. 1 - Provides a simplified work program for Stage II (alternate) of the project at no increase in cost.

WORK COMPLETED:

Stage I

Access roads	
Bulldozing 33 hrs. @ $15.00/hr.	$ 495.00
Trenching	
Bulldozing 700 lineal ft. @ $3.615/ft.	2,530.87
Total	$3,025.87

Stage II

Drifting and crosscutting	
377.2 ft. @ $34.295/ft.	$12,936.26
Total, Stage II	$12,936.26
Total - Stages I and II	$15,962.13
Government participation @ 75% . . .	$11,971.60

Work was completed in November 1953.

AUDIT: Report of Review dated December 18, 1953.

CERTIFICATION: The project was not certified. No ore was disclosed by the project.

COMMENTS:

The project was established to explore for a tungsten vein, the existence of which was assumed from the presence of scheelite-bearing quartz on dumps of caved adits that had been mined for gold and silver.

Stage I of the contract provided for exposing the vein by bulldozing trenches and by opening caved adits.

Stage II provided for additional exploration by either diamond drilling or drifting if justified by the results of the work in Stage I.

The work in Stage I consisted of five trenches that exposed a bedding-plane quartz vein in limestone of pre-Cambrian age that ranges in width from 4 inches in the trenches to 1½ feet in the adit. Assay results of samples showed encouraging amounts of tungsten and exploration under Stage II was authorized.

The work in Stage II consisted of 377.2 feet of drift and crosscut which exposed a bedding-plane fault correlating with the vein found on the surface and in the adits but the drifting disclosed no ore. The alternate diamond drilling program provided for in Stage II was not used.

The DMEA adit was started on a 4-inch quartz vein in a bedding-plane fault found in Trench No. 4, and found a small, 15-foot section of the vein containing weak tungsten mineralization. This mineralized occurrence is too weak to warrant further exploration.

An upper adit exposes a quartz vein, which, in places, has a fairly high tungsten content. A section of this vein 40 feet in length is estimated to have a mean width of 1 foot. A composite sample of this length of vein assays 0.70 % WO_3.

If the 40-foot oreshoot in the upper adit were to extend to the outcrop, it would be possible to infer an ore reserve of 316 tons; however, owing to the spotty nature of scheelite mineralization in the vein, such projection is not justified.

Although the completed exploration is along a small area near the granite-limestone contact, information was obtained to indicate that tungsten mineralization is extremely erratic and unlikely to occur as a deposit of commercial grade and size.

The work was completely and efficiently done and the contract was easy to administer.

No ore was disclosed by the project; therefore, no certification was made by the Government.

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

cc: DOCKET
ADM. READ. FILE
CODE 400
OPER. COMM.

JHopkins/ls
9-10-54

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

September 10, 1954

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: General Summary of Contract and Results Obtained
Docket No. DMEA 2468 - Tungsten
Western Mines Company
Hopkins Mine
Powell County, Montana
Contract No. Idm-E414

OPERATOR: Western Mines Company
Helmville, Montana

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Owner of 4 unpatented mining claims: New Progress No. 1, New Progress No. 2, Old Timer No. 1, and Old Timer No. 2.

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Stage I of the contract provided for exposing the vein by bulldozing trenches and by opening caved adits.

Stage II provided for additional exploration by either diamond drilling or drifting if justified by the results of the work in Stage I.

The work in Stage I consisted of five trenches that exposed a bedding-plane quartz vein in limestone of pre-Cambrian age that ranges in width from 4 inches in the trenches to $1\frac{1}{2}$ feet in the adit. Assay results of samples showed encouraging amounts of tungsten and exploration under Stage II was authorized.

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The work was completely and efficiently done and the contract was easy to administer.

No ore was disclosed by the project; therefore, no certification was made by the Government.

W S Martin

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

IN REPLY REFER TO:

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

September 2, 1954

Memorandum

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

From: T. H. Kiilsgaard, U. S. Geological Survey

Subject: DMEA Docket 2468 (tungsten), Contract Idm E414, Western Mines Company, Powell County, Montana -- Review of Field Team Final Report.

I have reviewed the Field Team Final Report written by John D. Bardill and Howard B. Nickelson.

The report notes that DMEA work was done in a competent manner but that, although, the initial bulldozing disclosed a vein containing sporatic occurrences of scheelite, subsequent drifting on the vein failed to find any noteworthy amounts of scheelite.

The field reporters recommend that project work not be certified as a discovery and I concur with this recommendation.

Thor H. Kiilsgaard

Thor H. Kiilsgaard

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

August 26, 1954

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

Re: Docket No. DMEA-2468 (tungsten)
Western Mines Company
Powell County, Montana
Contract No. Idm-E414 (terminated)

Dear Mr. Selfridge:

Enclosed are four copies of the Field Team's final report on the cited contract, prepared by John D. Bardill, Bureau of Mines, and Howard B. Nickelson, Geological Survey.

The field examiners recommend that no Certification of Discovery or Development be issued because the drifting completed under the contract failed to disclose ore, suggesting that the surface indications of scheelite do not persist to sufficient depth to be of economic importance. The Field Team concurs with this recommendation.

By Field Team, Region II

A. E. Weissenborn

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

Wing G. Agnew

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

Enclosure (in quad.)

cc: USBM (2)
Nickelson

Reviewed by
DMEA OPERATING COMMITTEE

9-3-54
(date)

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION II

FINAL REPORT

Contract Idm-E414

by

John D. Bardill
Metallurgist
U. S. Bureau of Mines

Howard B. Nickelson
Geologist
U. S. Geological Survey

WESTERN MINES COMPANY,
A partnership
Helmville, Montana

Docket No.:	DMEA-2468
Commodity:	Tungsten
Effective date:	October 6, 1952
Termination date:	November 19, 1953

NEW PROGRESS CLAIMS NO. 1 & 2 & OLD TIMER CLAIMS NO. 1 & 2
Ogden Mountain Mining District
Powell County, Montana

Spokane, Washington

August 1954

Department of the Interior
Defense Minerals Administration
RECEIVED
AUG 30 1954

Reviewed by
DMEA OPERATING COMMITTEE
9-3-54
(date)

FINAL REPORT

WESTERN MINES COMPANY, A partnership
NEW PROGRESS CLAIMS NO. 1 & 2 & OLD TIMER CLAIMS NO. 1 & 2
Ogden Mountain Mining District
Powell County, Montana

Contract Idm-E414

* * * *

INTRODUCTION

This report describes a project conducted jointly by the Western Mines Company, a partnership, and the Defense Minerals Exploration Administration to explore for tungsten in the Ogden Mountain mining district, Powell County, Montana.

Summary

The purpose of the project was to explore for a tungsten vein, the existence of which was assumed from the presence of scheelite-bearing quartz on dumps of caved adits that had been mined for gold and silver. Stage I of the contract provided for exposing the vein by bulldozing trenches and by opening caved adits. If the results of this work justified continuation of the project, additional exploration by either diamond drilling or drifting was authorized in Stage II of the contract.

Under Stage I five trenches were dug to open the adits and expose the veins on the surface. Four of these trenches exposed a bedding-plane quartz vein which ranges in width from 4 inches in the trenches to 1½ feet in the adit. The attached Western Mines Company map shows the locations of the trenches and of samples taken from the vein. Assay results of these samples showed encouraging amounts of tungsten, and exploration under Stage II was authorized. This stage consisted of 377.2 feet of drift and crosscut which exposed a bedding plane fault correlating with the vein found on the surface and in the adits, but the drifting disclosed no ore. The alternate diamond drilling program provided for in Stage II was not used.

The contract in the amount of $20,130 was terminated by mutual consent before completion of the work. Actual cost of the work was $15,962.13, of which the Government participated in 75 percent of the expense or $11,971.60.

Recommendations

It is recommended no Certification of Discovery or Development be made. The drifting completed under the contract failed to disclose ore, suggesting that the surface indications of scheelite do not persist to sufficient depth to be of economic importance.

Government participation in further exploration is not warranted.

LOCATION AND ACCESSIBILITY

The mine is about 9 miles east of Helmville, Montana, in secs. 22 and 23, T. 13 N., R. 10 W., M.P.M., Ogden Mountain mining district, Powell County, Montana. It is accessible from Helmville by 1 mile of graveled road and 8 miles of fair dirt road.

The mine is at an altitude of 6,500 feet in a mountainous country generally covered with fir and lodgepole pine. Four to 6 feet of snow can be expected in the mine area during the late winter months, but favorable weather prevails from June through October.

PROPERTY

The property is composed of four claims, all in secs. 22 and 23, T. 13 N., R. 10 W., M.P.M., Ogden Mountain mining district, Powell County, Montana, which are as follows:

Name of Claim	Date of Location	Recorded in Book of Records	
		Book No.	Page No.
New Progress No. 1	Sept. 12, 1948	8	409
New Progress No. 2	do.	8	411
Old Timer No. 1	do.	8	405
Old Timer No. 2	do	8	407

They are owned by the Western Mines Company, a partnership, composed of the following people:

Name	Address	Percent of Company Ownership
Pat T. Phalen	Spokane, Washington	70
John B. Hopkins	Grand Junction, Colorado	17
Frank C. Culver	Seattle, Washington	5
Milton T. Emley	Spokane, Washington	2
Zilla Emley	Reardan, Washington	1
John W. Phalen	Spokane, Washington	5

The attached maps show the locations and extent of adits. The old adits probably will remain open for some time, but the untimbered DMEA drift may cave soon, as it was driven in portions of soft, altered limestone.

There are no permanent buildings at the mine, but housing is available at a camp site about 1 mile from the mine.

History

Short adits, reportedly driven by David Hunter around 1880, prospected the property for gold and silver. Production from the underground workings was probably of little consequence. The valley just north of the mine was tested, and some gravels were placer mined for gold. The present operators report that scheelite occurs in these placer gravels.

GEOLOGY

The geology of the Ogden Mountain mining district is described in Kohler Stout's thesis "Geology and Mines of Ogden Mountain Mining District, Powell County, Montana," M.S. Thesis, Montana School of Mines, 1948, available at the library of the Montana School of Mines.

Mr. Stout describes the area as principally underlain by argillites, quartzites, and limestones belonging to the Belt series of pre-Cambrian age. A small quartz monzonite stock, approximately 5 square miles in area, occupies the central portion of the district.

Mr. Stout's thesis states that veins of the district are narrow, ranging in width from a few inches up to 36 inches, averaging near 18 inches. The veins are found both in sediments and in quartz monzonite with a few veins being continuous from the quartz monzonite into the sediments. The veins have been exploited for their gold and silver values. Mr. Stout reports minor amounts of scheelite in several veins of the district; however, he makes no mention of any scheelite in the vicinity of the applicant's claim.

Mr. Stout's map shows the sediments along the east margin of the stock to be of Spokane formation, but the calcareous nature of the sediments indicates that the rocks are of the Newland formation.

The sediments adjoining the quartz monzonite stock have been affected by contact metamorphism. In places the change in the rocks by metamorphism has been slight; elsewhere, as in the DMEA drift, a zone of garnet-rich tactite has been formed which indicates more intense metamorphism.

The quartz vein which was explored by the project appears to lie within a bedding-plane fault and has been mineralized by white quartz and minor amounts of tetrahedrite, galena, and scheelite. The ore minerals are not continuous along the vein but occur as irregular bunches and pods within the quartz. The scheelite is scattered, occurring in places as pods up to 2 inches in length, and also as grains disseminated throughout limited sections of the vein.

There is evidence in both the bulldozer trenches and in the DMEA drift of considerable faulting. In places the quartz vein has been crushed and sheared by fault movement. There also is evidence in the DMEA drift that the vein has been offset by post-mineral faulting.

THE PROJECT

Piles of scheelite-bearing quartz found on the adit dumps indicated the existence of a vein that warranted exploration for its tungsten content. A picked sample from the dump assayed 0.01 ounce gold, 0.8 ounce silver, and 3.66 percent WO_3. Little was known of the size, extent, or location of the vein to be explored, but it appeared to strike S. 30° to 40° W. and to be in limestone near the quartz monzonite contact. The available evidence justified a small exploration program to locate and test the vein on the surface and in the old adits. If preliminary work was favorable, other exploration either by drilling or drifting would be justified.

The original program submitted by the applicant consisted of the following work phases:

	Item	Estimated Cost
1.	Construct 2 miles of access road	$ 2,007.37
2.	Construct temporary facilities	250.00
3.	Trenching by bulldozer	7,926.25
4.	Sampling	240.00
5.	Crosscutting	5,000.00
6.	Technical & administrative help	3,200.00
	Total	$18,623.62

The contract, dated October 6, 1952, that was granted the applicant authorized project work to be done in two stages. Stage I

authorized 33 hours of bulldozing to construct an access road from the camp site to the mine and 150 hours of bulldozing to expose the vein and to open the old adit portals. A total of eleven trenches was authorized. Upon completion of five trenches the supervising geologist was to determine if any of the remaining trenches should be completed.

Stage II, to be initiated only after Government approval, was to consist of two alternate programs--either 400 feet of drifting and crosscutting or 1,500 feet of diamond drilling.

The costs estimated and allowed under Stage I were $4,930. Total estimated cost of the diamond drilling program was $16,670 and of the drifting and crosscutting $15,200.

The operator began building an access road about May 20, 1953. Unfavorable weather, granite outcrops, and dense timber hindered the work during a large part of June. Five trenches were bulldozed, including those dug for the purpose of opening the caved adits. A vein was exposed which justified the continuation of the exploration by drifting. Amendment No. 1, dated August 20, 1953, was entered into authorizing a labor contract for driving 400 feet of drift or crosscut at $20 per foot.

The drift was started on a 4-inch quartz vein in a bedding-plane fault found in Trench No. 4. The quartz pinched out about 45 feet from the portal leaving only a trace of the fault which was followed for 200 feet where it was lost in the west wall of the drift. The drift was continued another 150 feet without again encountering the structure. As further drifting seemed pointless, the Field Team proposed crosscutting to the southwest from the drift for a distance of at least 65 feet. The Field Team also suggested that if this crosscut did not find the vein, the contract should be terminated. Mr. Stanley Fairweather, engineer for the operator, agreed to this suggestion. The crosscut was driven 65 feet without finding the vein, and the contract was, therefore, terminated by mutual agreement on November 19, 1953. Drifting and crosscutting under contract terms, totaled 377.2 feet.

Exploitation Possibilities

The DMEA adit found a small, 15-foot section of the vein containing weak tungsten mineralization (see attached map). This mineralized occurrence is too weak to warrant further exploration.

The upper adit, at an altitude of 6,590 feet, exposes a quartz vein, which, in places, has a fairly high tungsten content. A section of this vein 40 feet in length is estimated to have a mean width of 1 foot. A composite sample of this length of vein assays 0.70 percent WO_3, although there are samples within the section where the tungsten content is higher. It is believed this vein crops out in

the No. 1 cut, as indicated on the attached map. A grab sample from this trench assayed 3.20 percent WO_3, but little is known of physical characteristics of the vein in this area.

If the 40-foot oreshoot in the upper adit were to extend to the outcrop, it would be possible to infer an ore reserve of 316 tons; however, owing to the spotty nature of scheelite mineralization in the vein, such projection is not justified.

Summary of Factual Data

Work

Approximately 1 mile of access road was constructed, requiring 103 hours of actual dozer operation. Only 33 hours was allowed under the contract in which the Government participated. The difference was at the operator's expense.

Five trenches were cut by bulldozer with approximate lengths of 170, 130, 200, and 200 feet each, for a total cost of $3,025.87 including $495 for access road to the trench sites, or approximately $4.32 per lineal foot of trench.

A total of 377.2 feet of drift and crosscut was driven, of which 309.1 feet was for the main adit at a cost of $12,936.26, equivalent to $34.30 per foot.

The contract was approved for $20,130 and was terminated by mutual consent before completion of the work. Actual cost of the work performed under the contract was $15,962.13, of which the Government participated in 75 percent of the expense or $11,971.60.

No ore was disclosed by the project.

Equipment

A small quantity of pipe costing $154.78 and track costing $383.61 was used at the project. The cost of removing this material was estimated to exceed the salvage value, and the Government waived its equity in these two items.

Discussion of Conclusions

No unusual operating difficulties were encountered in performing the contract work. The work was competently done and the contract was easy to administer. Although the completed exploration is along a small area near the granite-limestone contact, information was obtained to indicate that tungsten mineralization is extremely erratic and unlikely to occur as a deposit of commercial grade and size.

Attachments(2)
Distribution:
DMEA(4); USBM(5); USGS(SRO);
Docket; Nickelson

ANNEX

The following actual expenditures were for two stages of exploration at this project. Stage I consisted of a minor amount of access road and five trenches at the prospect site. Stage II consisted of approximately 1 mile of access road from the camp site to the portal of the new adit and 377.2 feet of drift and crosscut.

Stage I

Item	Cost
(1) Independent Contracts	
Bulldozing - access roads	$ 495.00
Bulldozing - trenching	1,252.50
(2) Labor and Supervision	
Labor	364.00
Supervision	675.00
(3) Operating Materials and Supplies	
Explosives	18.55
Small tools and supplies	11.18
(4) Operating Equipment	
Depreciation	40.00
(7) Miscellaneous	
Sampling and analysis	42.88
Payroll taxes	43.64
Liability insurance	83.12
Total - Stage I	$3,025.87

Stage II Alternate
(377.2 feet of drift and crosscut)

Item	Total cost		Cost per foot	
(1) Independent Contracts				
Bulldozing roads	$1,200.00		$ 3.18	
Drifting and crosscutting (377.2 feet)	7,544.00		20.00	
		$ 8,744.00		$23.18
(2) Labor and Supervision				
Labor	840.00		2.23	
Supervision	2,000.00		5.30	
		2,840.00		7.53
(3) Operating Materials & Supplies				
Timber	60.00		0.16	
Pipe	154.78		0.41	
Track	383.61		1.02	
Gas and oil	91.14		0.24	
Small tools and supplies	25.29		0.07	
		714.82		1.90
(4) Operating Equipment				
Depreciation		106.70		0.28
(7) Miscellaneous				
Repairs	88.70		0.24	
Sampling and analysis	26.25		0.07	
Payroll taxes	84.00		0.22	
Liability insurance	227.20		0.60	
Bookkeeping	83.25		0.22	
Office	21.34		0.06	
		530.74		1.41
Total - Stage II Alternate		$12,936.26		$34.30
Total - Stage I and II Alternate		$15,962.13		

DOCKET
SURNAME
Rutledge
Martin
Hedges
Larrabee

MAY 3 - 1954

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
Rose Progress & Old Timer Claims
Powell County, Montana
Contract No. IdM-8414

Dear Mr. Weissenborn:

Reference is made to our letter of February 15, 1954, and the subject docket.

Please advise when we may expect the Field Team's final report on the referenced contract.

Sincerely yours,

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

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

D. M. Larrabee (JHB)
Member, Geological Survey

FARutledge:foc 4-28-54
cc to: Docket
Code 400
Admr. Reading File
Operating Comm.
FT. Reg. 2
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.G.

400

Docket
Surname
Rutledge
Martin
Selfridge
Johnson
Whitaker

APR 26 1954

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress & Old Timer claims
Powell County, Montana
Contract No. Idm-8114

Dear Mr. Weissenborn:

Reference is made to the subject docket and our letter of February 25, 1954, inquiring when we may expect the Field Team's final report. To date, we have not received this information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

D. M. Larrabee (JHB)
Member, Geological Survey

FARutledge:fcc
4-22-54
cc to: Docket
Code 400
FT. Reg. II
Adm. Reading File
Oper. Comm
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.A.

DOCKET
SURNAME
Martin
Selfridge
Hathaway

FEB 15 1954

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress & Old Timer claims
Powell County, Montana
Contract No. Ida-2411

Dear Mr. Weissenborn:

Reference is made to the above-dockeated exploration contract. Work under this contract was completed prior to November 6, 1953, the Operator's final report has been submitted, and a final audit of the contract expenditures has been completed.

It would, therefore, be appreciated if you would advise us when we may expect to receive the Field Team's final report.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

J. H. Hedges

Director, Bureau of Mines (GCS)

Philip W. Guild

Director, Geological Survey (GCS)

FARutledge:foc 2-15-54
cc to: Docket
Code 400
FT. Reg. 2
Adm. Reading File
Operating Comm.
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.J. 2-16-54

FILE COPY
SURNAME:

800

Chambers

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

DEC 22 1953

Mr. Charles A. Turner
DMA Auditor
1201 N. Division Street
Spokane 2, Washington

Re: Idn-F414, DMA-2468
Western Mines Company

Dear Mr. Turner:

Reference is made to your letter of December 18, 1953, transmitting your Audit Report and Certificate for the above cited project. The report appears to be in order and, therefore, distribution may be made in the usual manner.

There was a slight error, however, in the second line on page 4 where you calculated the time at 1 and 15/40's of a month which should be 1 and 18/30's. The calculated sum, however, was correct and, therefore, no exception is being taken to the audit.

I have changed the figures on the office copies to read 1 and 18/30's. You may wish to make the same changes on your copies.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

JLChambers/ama
December 22, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C. 12-23-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
No. 157 Howard Street
Spokane 8, Washington

December 2, [illegible]

Mr. [illegible], Contracting Officer
[illegible], Section [illegible]
1201 No. Division Street
Spokane 2, Washington

Re: Contract No. [illegible] (Tungsten)
Western Lime Company
Cowell Co., Montana
Contract Mine [illegible] (Cowell)

Dear Mr. [illegible]:

This is to advise you that work under the subject contract has been completed to the satisfaction of this Government. The total footage of [illegible] shafts [illegible] of the contract, all but 22.[illegible] feet has been [illegible], and this [illegible] footage was not deemed necessary by [illegible] representatives of the Government.

The operator has submitted a final report which has been accepted by the Resident Officer. Final [illegible] have also been submitted by the operator for payment.

The [illegible] has not been [illegible] by any equipment used on the project and hereby waives the right to any unused supplies or materials [illegible] the operation.

[illegible] requirements [illegible], it is requested that a final audit of the Government's account be made. The final invoice should be mailed to [illegible], and the account closed out as quickly as possible.

Very truly yours,

[illegible]
Resident Officer,
[illegible]

cc: [illegible]
[illegible]
[illegible]
[illegible]

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

December 1, 1953

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

Re: Docket No. DMEA-2468 (tungsten)
Western Mines Company
Powell County, Montana
Contract Idm-E414 (Completed)

Dear Mr. Selfridge:

Enclosed are the original and two copies of a report by Mr. Pat T. Phelan, manager of the Western Mines Company.

This report, although rather brief, appears to adequately describe the work done and the findings thereof and is acceptable as a final report. The Field Team report on the same project will be prepared as soon as possible.

By DMEA Field Team, Region II

FOR: Oliver H. Kulsgaard
A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

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

Enclosures
cc: USBM(2)
Nickelson

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO. DTM--2460

SUBJECT: FINAL REPORT

Construction of considerably more than a mile of access road was completed through heavily timbered and at times quite swampy terrain. This work was performed at by far the greater expense of the company. The road gave access to the portal of the development tunnel.

Five trenches of varying sizes were cut by dozer in 83½ hours of operation. This operation was for the purpose of determining the location and continuity of the vein structure. A Brunton survey map accompanied Stage One Completion Report, showing with reasonable accuracy, location of cuts and assay results of vein disclosed. Disclosures made in Stage One operation indicated that Stage Two (Alternate) might be employed with possibly satisfactory results.

A study of the labor and equipment situation in the district indicated the definite advantage of contracting further development work. It was therefore necessary to amend the Exploration Project Contract to provide for a contract arrangement with suitable operators. Under AMENDMENT NO. 1, Stage Two (Alternate) a contract was let for 400 feet of development work at $20.00 per foot. A distance of 307.4' was driven on a vein structure of varying width and which showed some small mineralization for a portion of the distance. At one point for a distance of about 15', a bulge in the vein was encountered, but which only proved to be a pocket. The vein was from three to four feet in width and samples taken at two points gave the following results:

Width	Au.	Ag.	WO3	Pb.
3.3'	0.130	0.36	0.016	0.20
4.0'	0.065	0.52	0.000	0.32

This disclosure was by far the best in the entire development. Nothing of value having been found in the drift, it was decided to crosscut the shear zone in which the vein was located. A distance of 67.8' was driven and aside from showing the presence of numerous faults which for the most part were disclosed in the main drift, nothing of importance was discovered.

In consultation with engineers from the Bureau of Mines and the U. S. Geological Survey, it was decided that results of present development did not warrant further expenditures on the part of either party to the Exploration Project, and even tho the project lacked 22.8' of the distance authorized, it was decided to discontinue further work.

Since Mr. Nickelson of the U. S. Geological Survey is submitting in connection with his report a detail map one 20 foot scale with geology, I am therefore attaching hereto my progress sketch only showing monthly advances to date of termination of contract.

Respectfully submitted,

WESTERN MINES COMPANY

By Pat. T. Walker

Manager.

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO. DMEA--2468

SUBJECT: FINAL REPORT

Construction of considerably more than a mile of access road was completed through heavily timbered and at times quite swampy terrain. This work was performed at by far the greater expense of the company. The road gave access to the portal of the development tunnel.

Five trenches of varying sizes were cut by dozer in 83½ hours of operation. This operation was for the purpose of determining the location and continuity of the vein structure. A Brunton survey map accompanied Stage One Completion Report, showing with reasonable accuracy, location of cuts and assay results of vein disclosed. Disclosures made in Stage One operation indicated that Stage Two (Alternate) might be employed with possibly satisfactory results.

A study of the labor and equipment situation in the district indicated the definite advantage of contracting further development work. It was therefore necessary to amend the Exploration Project Contract to provide for a contract arrangement with suitable operators. Under AMENDMENT NO. 1, Stage Two (Alternate) a contract was let for 400 feet of development work at $20.00 per foot. A distance of 309.4' was driven on a vein structure of varying width and which showed some small mineralization for a portion of the distance. At one point for a distance of about 15', a bulge in the vein was encountered, but which only proved to be a pocket. The vein was from three to four feet in width and samples taken at two points gave the following results:

Width	Au.	Ag.	WO3	Pb.
3.3'	0.180	0.36	0.016	0.20
4.0'	0.065	0.52	0.008	0.82

This disclosure was by far the best in the entire development. Nothing of value having been found in the drift, itwas decided to crosscut the shear zone in which the vein was located. A distance of 67.8' was driven and aside from showing the presence of numerous faults which for the most part were disclosed in the main drift, nothing of importance was discovered.

In consultation with engineers from the Bureau of Mines and the U. S. Geological Survey, it was decided that results of present development did not warrant further expenditures on the part of either party to the Exploration Project, and even tho the project lacked 22.8' of the distance authorized, it was decided to discontinue further work.

Since Mr. Nickelson of the U. S. Geological Survey is submitting in connection with his report a detail map on a 20 foot scale with geology, I am therefore attaching hereto my progress sketch only showing monthly advances to date of termination of contract.

Respectfully Submitted,

WESTERN MINES COMPANY

By [signature]
Manager.

FILE COPY
SURNAME:

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

5285

Chapman
Jones 3538
Chamberlin
Ruby
Martin
Tuthill
Hedges
Williams

14 X 3923.970 - Working Fund - DMEA
November 20, 1953
23

A. E. Weissenborn, DMEA Executive Officer, Region 2, Spokane, Washington

Retel November 17, Docket DMEA 2468, Western Mines, Contract Idm-E114. Termination agreement not necessary as for all practical purposes project is completed. You are authorized to advise the Operator of termination and to close out contract in usual manner.

W. S. Martin
ACTING Chairman, Operating Committee

TLChapman:foc
11-20-53
cc: Docket
Code 400
FT. Reg. 2 - CONFIRMATION
Admr. Reading File
Operating Comm.
Audits Div. - USBM
R. W. Geehan, USBM
T. P. Thayer, USGS

11-23-53

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

1201 N. Division St.
Spokane 2, Washington
November 20, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Final inspection, Western Mines Company, Powell County, Montana, Contract No. Idm-E414, Docket No. DMEA 2468 (tungsten)

A routine inspection of this project was made on October 28, accompanied by Mr. Stanley Fairweather, engineer for the Operator.

The main drift had been advanced 82.6 feet during the period since the last inspection, for a total distance of 294.1 feet from Sta. BM 355 at the portal. Fifteen feet had been allowed at the portal to excavate for the first set of timber; therefore, total allowable footage for the drift is 309.1 feet.

A crosscut was driven to the southwest 19 feet back from the face of the drift and had been advanced 14 feet at the time of the inspection. Later, on November 6, 1953, when the Operator had stopped the project work, Howard B. Nickelson, Geological Survey, determined the length of the crosscut to be 67.8 feet. This footage is accepted as final for the contract.

Total footage completed under the contract was:

Main drift	309.1 feet
Crosscut	68.1 "
	377.2 "

The brunton and tape survey for the completed work is:

USBM 355 (center of portal)- USBM 356	S 38° E	139.5 feet
USBM 356 to drift face	S 52° E	154.6 feet
USBM 356 + 136 to crosscut face	S 31° W	68.1 feet

Amendment No. 1, Stage II (Alternate), allowed 400 feet maximum of drifting and crosscutting. The completed work lacked 22.8 feet of the maximum.

The only tungsten mineralization observed in the new drift and crosscut was an occasional fleck of scheelite.

Mr. Pat Phalen, Operator, and Mr. Stanley Fairweather called at the Spokane office November 10, 1953 with final report and vouchers. Mr. Phalen had submitted a written request to A. E. Weissenborn, Executive Officer, Field Team, Region II, to terminate the contract by mutual consent before completion of the work. The Field Team concurs that the contract should be terminated.

John D. Bardill

John D. Bardill

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

400

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

November 19, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination by mutual agreement
Contract No. Idm-E414
Western Mines Company
Docket No. DMEA 2468 - Tungsten

The work on this contract was scheduled to be carried out in two stages, with an alternate second stage. In the second stage, whether to use the original (diamond drilling) or the alternate (crosscutting and drifting) plan was to be determined by the results obtained in Stage I. The cost of the project using the original for Stage II was set at $21,600.00, and using the alternate for Stage II was $20,130.00.

On the completion of Stage I, it was decided to use the alternate plan for Stage II. The maximum allowed for this work was 400 feet of drifting or crosscutting.

A wire from A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, dated October 17, 1953, is as follows:

> "Request telegraphic approval to terminate by agreement Contract Idm-E414, Western Mines Company, Docket No. DMEA 2468, Tungsten. Project lacks 22.8 feet of the allowable 400 feet of drifting for completion. This remaining advance not needed. Operator requests termination and field team agrees. No discovery should be certified."
>
> T. H. Kiilsgaard for A. E. Weissenborn."

Field Team reports of September 14 and October 12 indicate that the work along a fault zone shows minor amounts of quartz with minor amounts of scheelite. These reports, in conjunction with the above wire, indicate little or no possibility of finding any pay ore bodies.

The costs of the project are not yet available.

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

400

FILE COPY
SURNAME:

Chapman
Martin
Chandler
Martin

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

November 19, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination by mutual agreement
Contract No. Idm-E414
Western Mines Company
Docket No. DMEA 2468 - Tungsten

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>
> T. H. Kiilsgaard for A. E. Weissenborn."

Field Team reports of September 14 and October 12 indicate that the work along a fault zone shows minor amounts of quartz with minor amounts of scheelite. These reports, in conjunction with the above wire, indicate little or no possibility of finding any pay ore bodies.

The costs of the project are not yet available.

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

cc: Docket
Adm. Read. File
Code 400
FT, Reg. 2
Oper. Comm.
R. W. Geehan, USBM
T. P. Thayer, USGS

TLChapman/ls

R.C. 11-23-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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NOV 18 1953

RECEIVED
Nov 18 7 49 AM '53
GENER - SERVICES ADMIN.
PUBLIC BLDGS. SERVICE
BMD - COMMUNICATIONS

498 WA SP /I-GS-C/

SPOKANE 11-17-53 300P

GEORGE C. SELFRIDGE CHAIRMAN OPERATING COMMITTEE

DMEA, WA

REQUEST TELEGRAPHIC APPROVAL TO TERMINATE BY AGREEMENT CONTRACT IDM-E 414, WESTERN MINES COMPANY, DOCKET NO. DMEA-2468 /TUNGSTEN/. PROJECT LACKS 22.8 FEET OF THE ALLOWABLE 400 FEET OF DRIFTING FOR COMPLETION. THIS REMAINING ADVANCE NOT NEEDED. OPERATOR REQUESTS TERMINATION AND FIELD TEAM AGREES. NO DISCOVERY SHOULD BE CERTIFIED.

T. H. KIILSGAARD

FOR..- A E WEISSENBORN

IDM-E 414 DMEA-2468 22.8 400

VA 301P

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

November 10, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Final inspection, Docket No. DMEA-2468 (tungsten)
Western Mines Company, Powell County, Montana
Contract Idm-E414

A final inspection of the Western Mines Company mine was made November 6, 1953. Messrs. John and Pat Phalen and Mr. Fairweather, engineer, were at the property.

The mine was mapped and measured and termination of contract was discussed with the Operator.

The total crosscutting and drifting amounts to 377.2 feet with no economic ore found. The drifting and crosscutting has failed to encounter the quartz-scheelite vein exposed by the upper adits and the bulldozer trenches except for short 1- to 2-inch stringers of quartz and scheelite in the bedding plane structure followed in the drift, and one small stringer of galena-silver-gold ore a few inches wide exposed in the back of the drift. A fault intersected at 238 feet from the portal, and later found in the crosscut, apparently displaced the bedding plane structure, although this structure was lost in the southwest wall about 20 feet before the fault was intersected. No scheelite or quartz was in the bedding plane structure when it was lost in the southwest wall.

A 40- to 60-foot southwest crosscut was proposed after an inspection trip on October 15, 1953. At that time, the upper level adit and DMEA drift were mapped. Projection of the vein from the upper level adit and dozer cut above to the elevation of the DMEA drift indicated that the vein might be in the southwest drift wall. A crosscut to test this possibility was driven 67 feet into the southwest drift Wall. This work failed to disclose the vein structure. Present drifting has exhausted any possibilities for finding the vein so it was suggested to the Operator to terminate the contract with 228 feet of drifting remaining to complete the 400 feet allowed in the contract.

The operator was contacted by telephone November 9, 1953, and he was asked if he would submit a letter to terminate the contract by mutual agreement. He stated he would do so. Mr. Fairweather will submit the final report within a few days.

Enclosure - 1

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Nickelson

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

RECEIVED
NOV 2 1953

1201 N. Division St.
Spokane 2, Washington
October 12, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, Western Mines Company, Powell County, Montana, Contract No. Idm-E414, Docket No. DMEA 2468 (tungsten)

A routine inspection of this property was made on October 2, 1953, accompanied by Mr. Stanley Fairweather, engineer on the project.

The new drift had been advanced 211.5 feet from the portal since the drifting was started August 26. Fifteen feet was allowed at the portal, excavating for the first set of timber. Three contract miners have been working long hours each day and advance two 9-ft. rounds each three days. The long rounds break an oversize drift.

The drift is following a bedding plane fault in limestone with some quartz. Negligible amounts of scheelite are present in the fault zone.

A Brunton and tape survey was made of the drift and two survey points were located.

USBM 355 (center of portal) - USBM 356	S. 38° E.	139.5 feet
USBM 356 to face	S. 52° E.	72.0 feet

The scheelite showing is disappointing.

John D. Bardill

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

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

September 14, 1953

Memorandum

To: Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Routine inspection, Docket No. DMEA 2468 (tungsten)
Western Mines Company, Contract No. Idm-E414

The Western Mines property was visited on September 2, 1953 with Mr. Pat Phelan and Mr. Fairweather.

The drift has been advanced 45 feet from the first set of timber at the portal. The operators are including 15 feet outside of the portal for the material which was blasted and removed before the adit was underground. This amount seems reasonable for the quantity of material removed to start the portal.

The structure followed is a bedding plane fault in limestone with minor amounts of quartz in the fault zone.

The three contract miners have had drill troubles, but have secured a new jack hammer-jack leg machine. The miners drilled an 8 foot round the day before the visit and pulled about 8½ feet.

The ground will need no (or very little) timber.

The work seems satisfactory.

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

September 9, 1953

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

Re: Docket No. DMEA-2468(Tungsten)
Western Mines Company
Powell County, Montana
Contract Idm-E414

Dear Mr. Ellis:

Enclosed are the original and two copies of Amendment No. 1 signed by the Administrator and by the Operator. One copy of the amendment has been retained by the Operator, one for the files of this office, and one for the Certifying Officer.

In the letter from the Operating Committee forwarding this amendment to the field for signature, it was requested that copies of maps showing location and extent of the proposed work approved under Stage II be submitted to the Washington office. The requested map is attached to a routine inspection report prepared by John D. Bardill, U. S. Bureau of Mines, copies of which are enclosed.

It will be noted that the adit portals at the site where Sample No. 4 was taken and that it will extend in a S. 35° E. direction for about 400 feet.

Sincerely yours,

Thor H. Kiilsgaard

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

cor
9-14

Enclosures
cc: USBM(2)

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

1201 N. Division St.
Spokane 2, Washington
August 31, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Metallurgist, Bureau of Mines

Subject: Routine inspection, Western Mines Company, Powell County, Montana, Contract Idm-E414, Docket No. DMEA 2468 (tungsten)

The subject property was visited August 12, 1953, accompanied by Messrs. John Phelan and Stanley Fairweather, to confirm the work performed for Stage I under the terms of the contract.

Approximately one mile of access road was constructed to within a short distance of the site of the bulldozer cuts. The five cuts are approximately 170, 130, 200, 200, and 200 feet each. The banks of the cuts have sloughed in the meantime so that bedrock is not now exposed. This work fulfills the requirements of Stage I satisfactorily. See attached Brunton survey map by Mr. Fairweather.

Cut No. 1 crosscut a tunnel at an assumed altitude of about 6625 feet. Several inches of scheelite-bearing vein are exposed in the face of the tunnel on the south side and in the bank cut on the north side. Cut No. 2 crosscut three adits (only one is shown on the map), two of which are caved. The third tunnel is accessible for about 100 feet and exposes a vein dipping about 30 degrees to the east. This vein varies in width from several inches to about one foot, and shows occasional scheelite occurrences with a mineralight. The vein is reported to have been exposed in Cuts 3 and 4 before the banks sloughed.

The Geological Survey approved Stage II of the contract so the Operator had completed the access road to the proposed adit site which is to be located at the point where Sample 4 on the map is shown. The drift adit on the vein will bear about S. 35° E.

The Operator has requested an amendment to the contract to drive the drift and/or crosscut on a unit cost subcontract. The Operator had a tentative agreement with two miners to contract the work for $20 per foot. The contractors are to supply everything except rails, pipe, ties and timber, which the Operator shall furnish at the portal of the adit. If the contractors can fulfill their agreement as they state, it will definitely be to the advantage of the Operator and the Government.

The exposures of the scheelite-bearing vein were not very impressive.

John D. Bardill

John D. Bardill

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

Docket
DMEA

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

1201 N. Division St.
Spokane 2, Washington
August 27, 1953

Mr. Pat T. Phalen, Manager
Western Mines Company
Helmville, Montana

Subject: Docket No. DMEA 2468 (tungsten)
Contract No. Idm-E414

Dear Mr. Phalen:

Enclosed are six copies of Amendment No. 1 to your Exploration Project Contract Idm-E414 which have been signed by C. O. Mittendorf, Administrator, DMEA.

If the terms and conditions of this amendment meet with your approval please sign all copies, retain the copy marked for the Operator and return the remaining copies to this office.

Sincerely yours,

Thomas E. Howard
Acting Member
DMEA Field Team, Region II

Enclosure

Copy retained 400

cc: DMEA, Wash. (2)
USGS (2)

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	
DAY LETTER	
NIGHT LETTER	

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S
E

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206 10-51

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHIP RADIOGRAM	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

TELETYPE

August 26, 1953

MR. GEORGE C. SELFRIDGE
CHAIRMAN, OPERATING COMMITTEE, DMEA
DEPARTMENT OF INTERIOR
WASHINGTON 25, D. C.

RE FIELD TEAM LETTER OF AUGUST 11, DMEA DOCKET 2468 (TUNGSTEN) WESTERN MINES COMPANY, POWELL COUNTY, MONTANA. PLEASE ADVISE BY TELETYPE IF REQUESTED AMENDMENT HAS BEEN APPROVED. INFORMATION NEEDED TO MAKE PAYMENT TO OPERATOR.

THOR H. KIILSGAARD
FOR: A. E. WEISSENBORN

cc: Confirmation
USBM
Kiilsgaard
Chron.

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	
DAY LETTER	
NIGHT LETTER	

$
S
E

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206 10-51

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHIP RADIOGRAM	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

TELETYPE

August 26, 1953

MR. GEORGE C. SELFRIDGE
CHAIRMAN, OPERATING COMMITTEE, DMEA
DEPARTMENT OF INTERIOR
WASHINGTON 25, D. C.

PLEASE DISREGARD OUR TELETYPE 267 WASHINGTON, SPOKANE, THIS DATE REGARDING POWELL COUNTY, MONTANA DOCKET DMEA 2468 (TUNGSTEN), WESTERN MINES COMPANY./ AMENDMENT RECEIVED.

THOR H. KIILSGAARD
FOR: A. E. WEISSENBORN

cc: Confirmation
USBM
Kiilsgaard
Chron.

M

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 27 1953

RECEIVED
AUG 27 6 54 AM '53
GENERAL SERVICES ADMIN.
PUBLIC BLDGS. SERVICE
BMD - COMMUNICATIONS

299 WA SP /I-GS-G/

SPOKANE 8-26-53 445P

MR. GEORGE C. SELFRIDGE

CHAIRMAN OPERATING COMMITTEE DMEA DEPT INTERIOR

WA

PLEASE DISREGARD OUR TT 279 WA SP 8-26-5E REGARDING DOCKET DMEA 2468 /TUNGSTEN/ WESTERN MINING COMPANY POWELL COUNTY MONT. AMENDMENT RECEIVED.

THOR H KILLSGAARD

FOR- A E WEISSENBORN, US GS, SP

VA 446P

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 27 1953

RECEIVED
AUG 27 6 54 AM '53
GENERAL SERVICES ADMIN.
PUBLIC BLDGS. SERVICE
RMD — COMMUNICATIONS

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SPOKANE WASH 8-26-53 2546

MR GEORGE C SELFRIDGE

CHAIRMAN OPERATING COMMITTEE DMEA DEPT INTERIOR WA

RE FIELD TEAM LETTER OF AUGUST 11 DMEA DOCKET 2468, /TUNGSTEN/ WESTERN MINES COMPANY, POWELL COUNTY, MONT. PLEASE ADVISE BY TELETYPE IF REQUESTED AMENDMENT HAS BEEN APPROVED. INFORMATION NEEDED TO MAKE PAYMENT TO OPERATOR.

THOR H KILLSGAARD FOR A E WEISSENBOR USGS SP

11 2468

AC 247

XXXXXXXXXXXXXXXXXXX
1201 N Division St.
Spokane 2, Washington
August 20, 1953

Mr. Pat T. Phalen, Manager
Western Mines Company
Helmville, Montana

Subject: Docket No. DMEA 2468 (tungsten)
Contract Idm-Eh14

Dear Mr. Phelan:

This is in reply to your letter of August 18, 1953 regarding payment of the subcontractor for drifting performed under the terms of the subject contract.

As stated in our recent telephone conversation, it is necessary that an amendment to the contract providing for drifting by subcontract be approved by Washington before the Government can participate in the costs thereof, and any drifting done by the independent contractor before such approval is at your own risk. Such an amendment has been prepared and forwarded to the Administrator, and we should receive word on it in the near future.

Regarding bimonthly payments to the independent contractor, the Government's contribution to these costs, as well as the other allowable costs of the project, can be made only on a monthly basis upon submission of a properly supported voucher at the end of each calendar month. If you are unable to carry on under this arrangement, I can only suggest that you try to persuade the contractor to accept payment monthly.

In regard to payment for the Government's share of the cost of Stage I of the project, our records indicate that your June invoice was processed and sent to the Disbursing Officer for payment on July 27. If you have not received this payment, please let us know and we will attempt to trace it. Your July invoice also has been processed and will be sent in for payment today. You should receive a check within a week.

Sincerely yours,

Thomas E. Howard, Acting Member
DMEA Field Team, Region II

cc: Wash. 2
USGS 2
DMEA
AD
DF
Engr.

FILE COPY
140 SURNAME:

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

Rewritten by Ch.Counsel

Rutledge
Martin
Rubin
Hoffland
Rutledge
Martin
Griffith
Selbridge

AUG. 20, 1953

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

Re: Docket No. DMEA 2468 (Tungsten)
Western Mines Company
New Progress & Old Timer Claims
Powell County, Montana
Contract No. Idm-E414

Dear Mr. Weissenborn:

Reference is made to the subject docket and the proposed amendment to the referenced contract transmitted with your letter of August 11, 1953.

We are enclosing the original and five copies of Amendment No. 1 signed by the Administrator for the Government.

If the terms and conditions of this amendment are satisfactory to the Operator, all six copies should be signed and the usual distribution made.

If any part of this contract does not have the approval of the Operator and cannot be amended within your delegated authority, the original and all copies of the contract are to be returned to this office, together with the proposed changes for consideration.

In reviewing the original contract, it was noted that the location and extent of the work to be done under Stage II were left flexible. Stage I has now been completed with a resulting increase in available information about the project, and Field Team approval has been given for Stage II. It would therefore be appreciated if we could be furnished copies of maps showing the location and extent of the proposed work approved under Stage II.

Sincerely yours,

W. S. Martin 857
ACTING Chairman, Operating Committee

Enclosures 6

Approved:

C. H. Johnson 857
Member, Bureau of Mines

Dwh Lovedee By 857
Member, Geological Survey

FARutledge:HCR:ep 8-18-53

Copy to: Mails & Files
Code 400 (2)
Admr. R. File
Oper. Comm.
Mr. R. W. Geehan, USBM
Mary Miller, USGS
Mr. Hofflund
Mr. Rubin
Chron.
Pending

cal 8-21-53

8-20-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington
August 11, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1953

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

Subject: Docket No. DMEA 2468
Western Mines Company
Powell County, Montana
Contract Idm-E414 (tungsten)

Dear Mr. Selfridge:

Enclosed for the approval and signature of the Administrator are 6 copies of a proposed amendment to the subject contract to allow the drifting and crosscutting in Stage II of the project to be done by an independent contractor.

The Operator has informed the Field Team that he can obtain a contractor to do the work for $20.00 per foot, with the contractor furnishing all equipment except a truck and all supplies except pipe, rail, and timber. As it is difficult to obtain competent labor in the area the proposed arrangement will be for the benefit of both the Operator and the Government.

In order to prevent delay with subsequent loss of part of the short working season, we have advised the Operator to proceed with negotiation of the subcontract. Your prompt action will be appreciated.

By Field Team

Thor Kiilsgaard
Thor Kiilsgaard
Acting Executive Officer
DMEA Field Team, Region II

Thomas E. Howard
Thomas E. Howard
Acting Member, DMEA
Field Team, Region II

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

xxxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

August 5, 1953

Mr. Pat T. Phalen
Western Mines Company
Helmville, Montana

Re: Docket No. DMEA-2468 (Tungsten)
Western Mines Company
Powell County, Montana
Contract No. Idm-E414

Dear Mr. Phalen:

This letter will confirm your telephone conversation of August 4, 1953, with Mr. Thor N. Kiilsgaard of the Geological Survey, in which continued exploration under Stage II of your contract was discussed.

DMEA Executive Officer, Region II, hereby authorizes you to commence work on Stage II (alternate) of the subject contract. This work will entail the driving of an adit, whose total length of drift and crosscut shall not exceed an aggregate of 400 feet. The adit shall portal at a point on the vein near cut No. 4 as shown on the Western Mines Company surface map recently submitted to this office. In this respect, I wish to call your attention to the fact that if the adit is portaled below cut No. 4 it will expend the 400 feet of drifting allowed by the time it has reached a point under cut No. 1 and will not have any footage remaining for crosscutting, if such crosscutting should become desirable. It is therefore suggested that the adit portal at a point between cuts 4 and 3 which site will leave some of the adit available for crosscutting, should such crosscutting be desired. Final selection of the adit portal site will, however, depend upon surface conditions and the judgment of your engineer, Mr. Fairweather, in selecting this site will be accepted by this office.

Sincerely yours,

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

cc: DMEA (2)
USBM (2)
Nickelson

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

August 5, 1953

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

Re: Docket No. DMEA-2468 (Tungsten)
Western Mines Co.
Powell County, Montana
Contract No. Idm-E414

Dear Mr. Selfridge:

Enclosed are the original and three copies of a report from Pat T. Phalen, Manager of Western Mines, which evaluates the results of work completed under Stage I of the subject contract.

This report has been found satisfactory to the Field Team.

Sincerely yours,

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

Enclosure

cc: USBM (2)
Nickelson

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO.DMEA-2468

SUBJECT: Stage One Completion Report.

Construction of more than one mile of access road was rather a major project as it required 103 hours of actual dozer operation,only 33 hours of which were allowed for government participation under Stage 1.

Five trenches as outlined in Stage 1 plans,were cut in a total of 83½ hours of dozing. A Brunton survey map of the property accompanies this report,showing with reasonable accuracy the location of cuts,caved and inaccessible tunnels,together with vein exposures and location and assay results of samples.

CUT NO.1: At an assumed elevation of 6625' is located the highest known tunnel on the property. This tunnel was caved and the cut was made through the center of its approximate length of 60'. A strong quartz vein of from 6" to 8" in width was cut showing an exceptionally high scheelite content. This showing is typical of about 1 ton of very good grade tungsten ore piled on the dump and which when placed under the black light by your Mr.Quinlan showed or indicated high tungsten values. The vein strikes approximately S.35 E. and dips about 25 easterly. Sample No.10 is a grab sample taken in the cut as it was opened by the dozer and shows Au. trace, Ag. 0.3 oz. WO3. 3.20%.

CUT NO.2: Vertically 35' below Cut No.1, in trying to pick up the vein we cut into the back of a caved tunnel and made a Brunton survey of its accessible distance. The vein,while at a very shallow depth, is clearly defined and exposed for approximately 100' in this tunnel,and under the light shows considerable scheelite in it and also in the accompanying dike. The vein as shown averages 12" in width and conforms to the strike and dip of that in Cut No.1. Three samples taken across 12" gave the following results.

Sample	No.1.	Au. none	Ag. 0.27 oz.	WO3. 0.70 %	Location on sketch.	
"	No.8.	Au. tr.	Ag. 0.4 oz.	WO3. 2.81 %	"	"
"	No.9.	Au. tr.	Ag. 0.5 oz.	WO3. 2.36 %	"	"

CUT NO.3: The vein was uncovered in this cut about 40' vertically below Cut No.2 and while only about 3" in width, still conforms to the strike and dip as shown in the above cut and tunnel. The vein shown is badly broken and is surface showing only. Sample No.7 was taken to determine silver values if any in what appeared to be a silver bearing seam in the shear zone. Values were negligible. Sample No.6 was cut across the 3" vein and showed Au. tr. Ag. 0.3 oz. WO3. 0.60%. Sample No.5 was taken across 36" of mixed quartz also in the shear zone and 30' westerly from Sample No.6. Testing for gold and silver values but showed almost total blank.

CUT NO.4: The vein with same strike and dip as above and about 6" wide was shown in this cut about 25' vertically below Cut No.3. Sample No.4, taken across this 6" of surface cut showed the following results: Au. 0.050 oz. Ag. 0.4 oz. WO3. 2.28 %. Sample No.3 taken across 18" of mixed quartz and 20' westerly of Sample No.4 also in shear zone, again showed virtually a total blank. This Cut No.4 is made a short distance south of the granite-lime contact and is the last point at which the vein is disclosed northerly.

CUT NO.5: This cut was made in an unsuccessful attempt to uncover the vein at a lower horizon and on its northerly extension. Evidently the vein does not extend beyond the contact. The cut was continued for several hundred feet to the east to determine whether or not the vein might have been thrown to the east, and at a point 150' vertically below Cut No.4 and 600' northeasterly, several stringers of quartz of undetermined strike and dip were uncovered near two lower caved tunnels. Evidently in the early days these tunnels were driven on some small surface showings as specimens of quartz are piled on the dump. I believe this to be a distinctly different zone of mineralization as it is definitely a gold ore and no tungsten showing. Sample No.2 is a general grab sample taken of quartz as dug by the dozer in making the cut. The results of this assay are as follows: Au. 3.000 oz. Ag. 1.2 oz. WO3. none.

CONCLUSION and RECOMMENDATION: The disclosures so far made by trenching indicate a rather strong and wide shear zone. Definite strike and dip as so far disclosed, are difficult of determination, but generally seem to follow that of the enclosed vein. The vein to all appearances is very closely associated with a dike of varying thickness and of igneous origin. This dike as exposed in the tunnel, when subjected to the black light, shows considerable scheelite and may very well be greatly responsible for the scheelite carried in the vein structure.

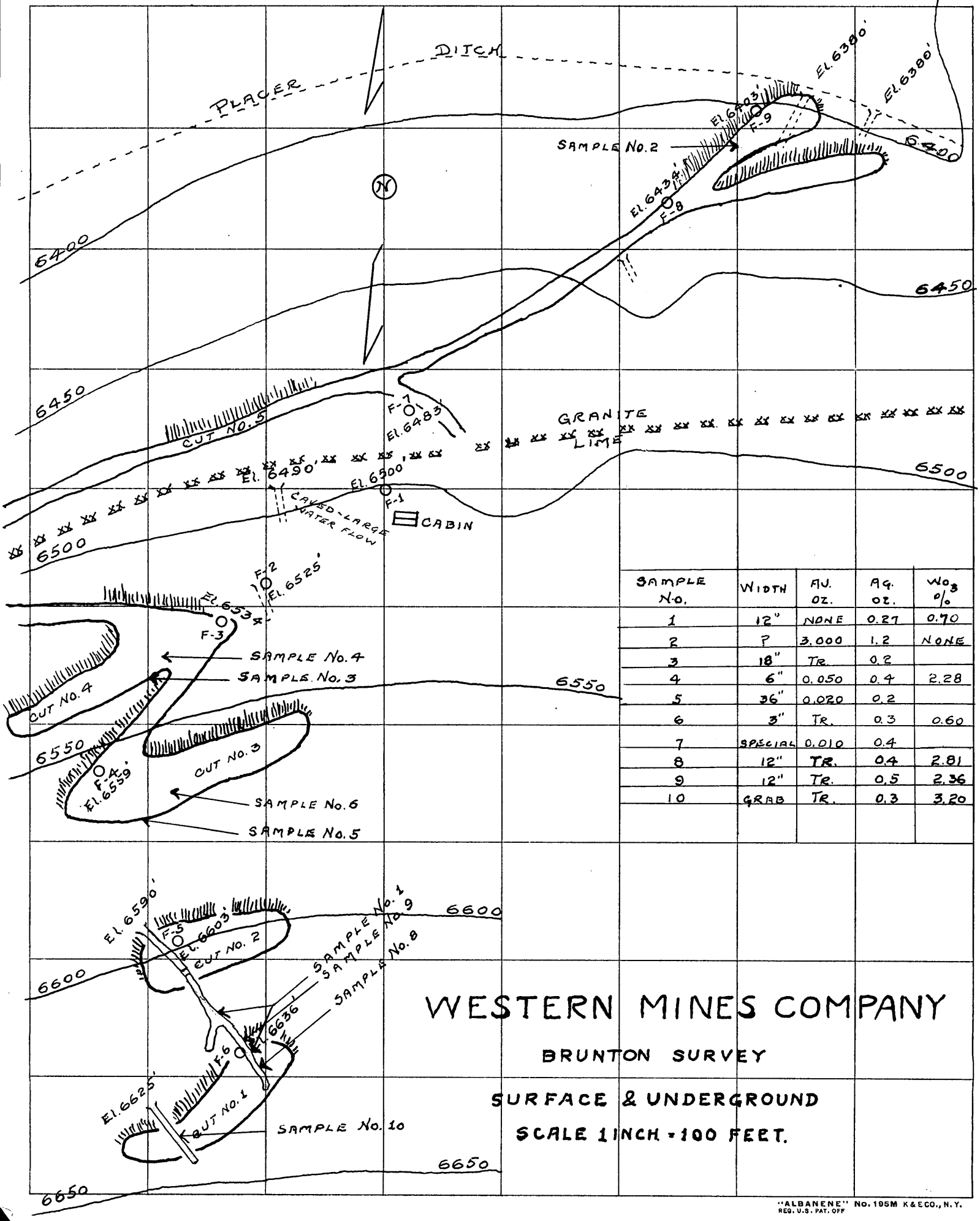
The width, strike and dip of this vein is typical of the productive veins of adjoining properties and of the district with the exception of the tungsten content, which seems to be appreciably greater in this vein with but one exception. This exception is the Plutarc Mine and it is the only other property whose vein occurs in the upper Newland formation. The Plutarc vein shows considerable scheelite in both the quartz vein and the light colored sill bordering it. Our vein shows continuity, having been exposed for more than 400' and beyond doubt extends through the argillites of the upper Newland formation to the south and through Ogden Mountain. Values as indicated by samples are for surface showings only and not in excess of 20' of depth in the tunnel.

While values and disclosures to date do not indicate a bonanza, yet the apparent high tungsten content, even though in a narrow vein, is of sufficient promise to warrant further development of the vein at some depth.

I therefore most sincerely propose that your office authorize the employment of Stage Two (Alternate). Drifting to be started on the vein at, or slightly below the point of exposure in Cut No.4, and to be continued to a point approximately under Cut No.1 at which point a depth of about 100' will be attained. Any deviation from this plan, such as crosscutting at any point in the drift, might be later decided upon in consultation with the government engineer.

Respectfully Submitted,
WESTERN MINES COMPANY

By Geo. T. Baker
Manager.



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WESTERN MINES COMPANY

BRUNTON SURVEY

SURFACE & UNDERGROUND

SCALE 1 INCH = 100 FEET.

"ALBANENE" No. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF

EXPLORATION PROJECT

WESTERN STATES TO TUCK

DOCKET NO. [illegible]-2468

SUBJECT: Stage One Completion Report.

Construction of more than one mile of access road was [illegible] a [illegible] project [illegible] required 103 hours of actual dozer operation, only 33 hours of which were allowed for government participation under Stage 1.

The [illegible] as outlined in Stage 1 [illegible] a total of [illegible] hours of [illegible]. A [illegible] survey [illegible] of the property [illegible] the [illegible] showing the location of [illegible] and [illegible] [illegible] and location of [illegible] samples of samples.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] the [illegible] point at which the vein is disclosed [illegible].

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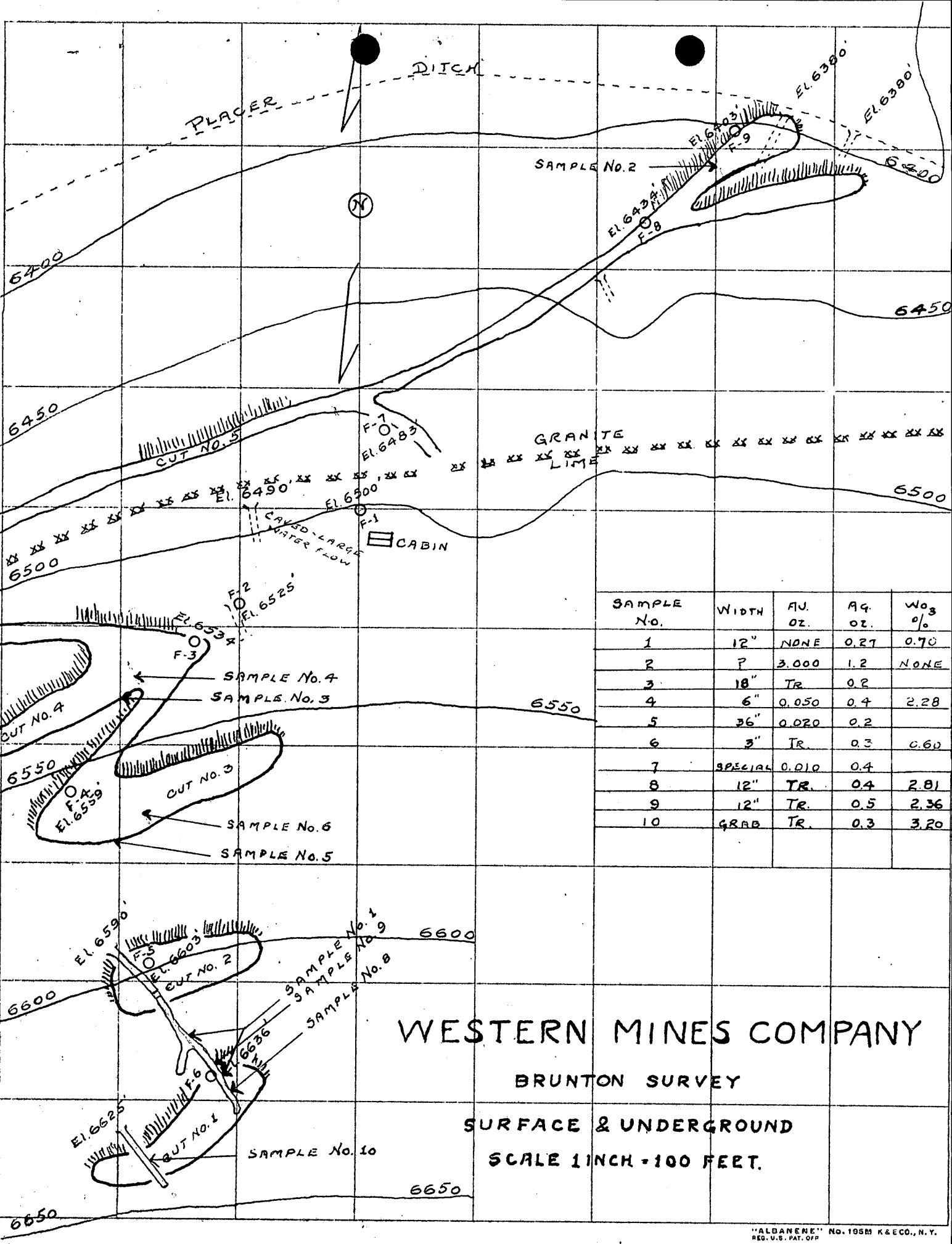
[illegible] bonanza [illegible] sufficient [illegible]

[illegible]

[illegible]



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WESTERN MINES COMPANY

BRUNTON SURVEY

SURFACE & UNDERGROUND

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"ALBANENE" No. 195M K&E CO., N.Y.
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EXPLORATION PROJECT

WESTERN MINES COMPANY

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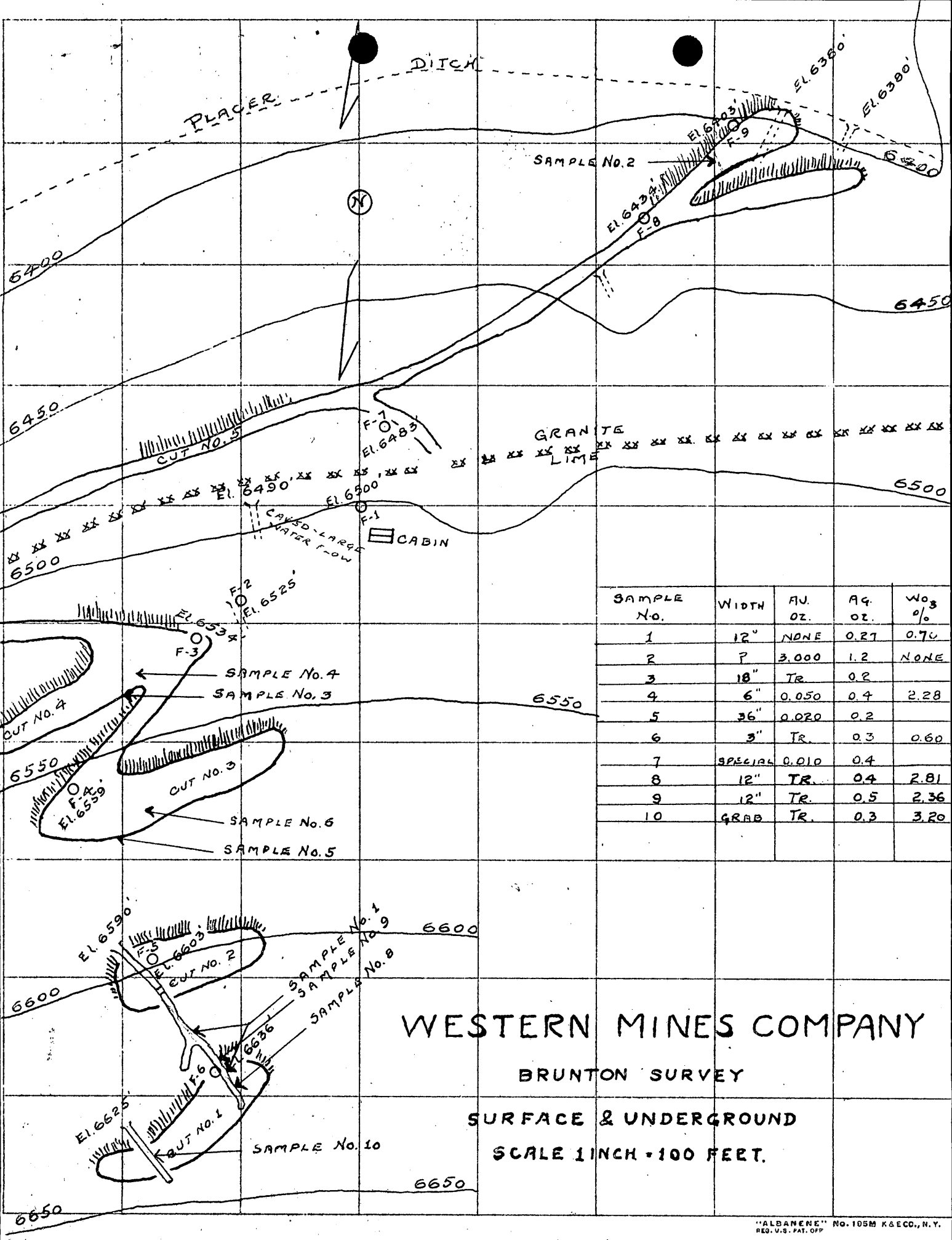
Respectfully Submitted,
WESTERN MINES COMPANY

By. [signature]
Manager.



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WESTERN MINES COMPANY

BRUNTON SURVEY

SURFACE & UNDERGROUND

SCALE 1 INCH = 100 FEET.

"ALBANENE" No. 105M K&E CO., N.Y.
REG. U.S. PAT. OFF.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

July 17, 1953

Memorandum

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Docket No. 2468 (Tungsten), Routine Inspection Report, Western Mines Company, New Progress and Old Timer Claims, Powell County, Montana, Contract Idm-E-414

The writer visited the property on July 13, 1953, and was accompanied by Mr. Fairweather, engineer, and Mr. Phalen, manager.

Bulldozing in Stage I of the contract has been completed. The trenches and the old tunnels were examined. The Operators and the field examiner discussed Stage II of the contract, and the diamond drilling program of Stage II was eliminated for future proposed exploration because the exposed vein is narrow and diamond drilling does not seem to be practical.

The Operators were advised to submit maps of the tunnels, trenches, assays, and general geology, and submit their proposed recommendation for Stage II. The Operators were advised to make the report in some detail so it would serve as a final report in case Stage II wasn't recommended.

Mr. Fairweather stated the report would take about a week to 10 days before it would reach the Spokane office.

The writer advises early action either for continuing or discontinuing the contract because bad weather will probably close the roads in early November.

The quartz vein varies in width from a few inches up to 2 feet, and strikes about S. 35° E., dipping about 35° northeast.

Assays and geological maps will give a much clearer picture of any more proposed work, and until this data is submitted and examined no decision will be made for continuing into Stage II of the contract.

A very good job of locating the trenches has been done, and the trenches have exposed the information desired. Bedrock was exposed in all the trenches.

Sample No. 436 was taken on the 6-inch quartz vein in the first trench above the road and it lamps scheelite. This sample assayed 0.57% WO_3.

The Operators cut a composite sample in the east twin tunnel which assayed 0.7% WO_3 across about 1 to $1\frac{1}{2}$ feet of quartz vein.

To hold their bulldozer and operator, the Operators are improving the road to the mine and will probably use the bulldozer operator for surveying and cleaning up some of the trenches for better exposures, until Stage II is decided upon by the Government.

Distribution:

DMEA - Orig. & 3
USBM (2)
Docket
Nickelson

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

June 11, 1953

Memorandum

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-2468 (Tungsten), Western Mines Company, New Progress and Old Timber Claims, Powell County, Montana, Contract Idm-E414, Routine inspection report

The writer visited the property on June 5, 1953. Mr. Phalen, Manager, and Mr. Fairweather, Engineer selected by the Company, were working on the bulldozer road to the mine. About 1200 to 1400 feet of road remained to be built and about 10 days will be required to finish the road.

Rain and snow have hindered the road work up to the time of the visit.

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Nickelson

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

May 21, 1953

Memorandum

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-2468 (Tungsten), Interim Report, Western Mines Company, New Progress and Old Timer Claims, Helmville, Montana, Contract Idm-E414

An attempt was made to visit the property on May 7, 1953. Mr. Phalen, Manager, was visited at Helmville, Montana, and he informed me considerable snow remained on the property. No attempt had been made to start any work as yet.

Mr. Phalen will inform us in the near future when an examination can be made.

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Nickelson

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

224 New Customhouse
Denver 2, Colorado

May 13, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 18 1953

Memorandum

To: C.O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA-2463, Contract Idm-E390 (Lead-Zinc), Arizona Metals Company, Mojave County, Arizona

In compliance with the last paragraph of the letter from the Chairman, Operating Committee, dated April 16, 1953, we are enclosing the following matter concerning the starting and completion dates of work under the subject contract:

1. The original and five copies of Amendment No. 2 which we have prepared for your consideration and execution.

2. Three sets of copies of correspondence pertaining to and in support of the amendment.

With reference to Amendment No. 2 which extends the starting and completion time for work under the contract, we are of the opinion that if the operator does not start work within the stipulated time that the necessary action should be initiated by your office to terminate the contract.

W.H. King
W.H. King

Enclosures

cae
5/18

COPY

224 New Customhouse
Denver 2, Colorado

May 7, 1953

Mr. Ralph R. Langley
Arizona Metals Company
1156 South Highland Avenue
Los Angeles 19, California

Dear Mr. Langley:

This will acknowledge receipt of your letter dated May 6, 1953, regarding amendments to Contract Idm-E390.

We believe that the airmail letter dated April 16, 1953, from C.O. Mittendorf, Administrator, DMEA, explains the position of the Defense Minerals Exploration Administration regarding amendments to Contract Idm-E390.

We will prepare a formal amendment authorizing you to recess operations under Contract Idm-E390 until July 6, 1953, sixty days from the date of your letter.

Very truly yours,

W.H. King
Executive Officer, DMEA
Field Team, Region IV

JFS:jp
cc COMittendorf 2
WRStorms 2
JWTownsend
AHKoschmann
Contract
Chron

C O P Y

P.O.Box 1266
Kingman

ARIZONA METALS COMPANY
SUMMIT ALPHA MINES
KINGMAN, ARIZONA

1156 S. Highland Ave.
Los Angeles 19, Calif.

May 6, 1953

Mr. W.H. King, Executive Officer
Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA 2463
Contract No. Idm-E390

Dear Mr. King:

In reply to your letter of April 24, we will resume operations under the DMEA contract at the Summit as soon as we can obtain and install the additional equipment necessary for ventilating and tramming. The greater distances attained preclude hand tramming and further use of the ventilating equipment which has served for the shorter distances. These items of additional equipment required are listed in the application for amendment.

I am advised that delivery of a suitable blower cannot be expected short of thirty days and of a battery trammer short of sixty days but we will get them as soon as available. We can and will do the necessary preparatory work in advance of those items of equipment, but such preparatory work will not be applicable as DMEA work.

We will resume work as soon as possible but under the equipment delivery circumstances it will not be safe to fix a definite time for resumption in less than sixty days.

I suggest that you prepare and forward to us a new contract including the additional 600 feet of work on the Silver Legion claim for our signature - with the knowledge that we intend to ask Washington for a reconsideration of our request to include the Fortunatus claim as indicated in the attached copy of a letter to Mr. Mittendorf. What about including the winz in this contract? Nothing was said either way about the winz in Mr. Mittendorf's letter of April 16th.

The Fortunatus claim is especially important to us for in addition to its high potential, the actual cost per unit of work by drifting in both directions from the crosscut intersection at the same time, is several dollars less per foot of drift than by drifting only one way. However, we will resume work under the contract and take our chances on getting the contract amended to include the Fortunatus.

Very truly yours,
ARIZONA METALS COMPANY
By /s/ Ralph R. Langley
Ralph R. Langley

RRL:jca
cc: C.O.Mittendorf

Arizona Metals Company
1156 S.Highland Ave.
Los Angeles, Calif.

COPY

May 6, 1953

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

Re: Docket No. DMEA-2463
Arizona Metals Company
Contract No. Idm-E390

Dear Mr. Mittendorf:

Since writing you on April 21, I have discussed the above referred to matter with your Denver office and with your Field Engineer, Mr. Franham at Tucson, who made the examination and report on our application for an amendment to our contract.

Frankly, when I received your letter dated April 16, I jumped to the conclusion that the Washington office was responsible for eliminating the Fortunatus claim for consideration. I was amazed to find, a few days later, that Mr. Farnham's report was adverse to the Fortunatus. He and the others who were present during the examination had clearly indicated to me that they appreciated the potential of the Fortunatus. They could not very well think otherwise for the Fortunatus is an outstanding claim.

The elimination or denial of the Fortunatus claim from our DMEA project was a serious and nonunderstandable error on the part of Mr. Farnham and a great injustice to the applicant and to our district. It is certainly contrary to the purpose and interest of the DMEA function and program. It is contrary to the interest of production and National defense for there is not a more potential, undeveloped base metal mining claim in Arizona than the Fortunatus.

Mr. Farnham's theories as stated to me are (a) that there is not as much high grade lead ore lying on the Fortunatus location, prospecting and assessment work dumps as there is on the more extensive Summit outcrop location, prospecting and assessment work dumps, (b) that there has been no actual production from the Fortunatus claim as there has been from the end lining Summit claim, (c) that driving a drift on the Fortunatus

fissure would be "prospecting" rather than "exploration" work and (d) that he did not detect gold and silver values in the Fortunatus outcrops as he assumed were present in the Summit outcrops.

I readily agree that every individual and engineer is entitled to his own judgment even though it be based upon a wrong conception or upon a whim or theory, but when a serious injury results, I believe a reconsideration is in order.

The matter is so important to the applicant, to our district and to the concept of the DMEA authority that I must seek an effective method or a route of reconsideration, which is the purpose of this communication.

No one, including Mr. Franham, can deny that the Summit fissure, extending through the Fortunatus claim, is more bold, wider and more continuous across the Fortunatus claim than on the Summit nor that the character of the fissure or its filling is different in grade and character, except perhaps higher in lead content, than on the Summit claim.

These facts can be readily proven by photographs, measurements and by assays of samples taken by a disinterested, competent individual — which thought leads me to suggest that you might ask the Department of Mineral Resources of Arizona to have their District Field Engineer photograph, measure and sample the fissure and report to you. That would be done as a function of the Department without expense to DMEA or to me.

Or, you might employ one or more other engineers, at my expense if necessary, to re-examine the project, in which case I would suggest that you designate an engineer of long realistic experience, one who might be recommended by Howard I. Young, such as, George W. Roddewig, one of Mr. Young's engineers, if he is available.

I will greatly appreciate advice from you as to acceptable procedure for obtaining a reconsideration with respect to the Fortunatus claim, perhaps as an amendment to the new contract which, I understand, your Denver office will write, meantime we are asking the Denver office to prepare and forward a new contract for our signature as per copy of letter attached. I hope we can get the Fortunatus claim exploration work included in the contract or in an amendment thereto without much delay for there will be a saving of several dollars per foot of drift by drifting both ways on the figsure at the same time over drifting one way.

Very truly yours,
ARIZONA METALS COMPANY
By: _____
Ralph R. Langley

RRL:jca

COPY

224 New Customhouse
Denver 2, Colorado

April 24, 1953

Mr. Ralph R. Langley
Arizona Metals Company
1156 S. Highland Avenue
Los Angeles 19, California

Re: Docket No. DMEA 2463 (Lead-Zinc)
Arizona Metals Company
Summit Mine
Mojave County, Arizona
Contract Idm-E390

Dear Mr. Langley:

During our conversation at the time of your visit to this office on April 22, we requested you to inform us of the date you intend to resume operations under Contract E390, Docket No. DMEA 2463, Summit Mine, Mojave County, Arizona.

We would appreciate a letter from you setting forth the definite date that operations will be resumed.

Very truly yours,

W.H. King
Executive Officer
Field Team, Region IV

WHK:es

cc: Mittendorf
Contract
Storms
Chron.
Koschmann (2)

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

COPY

April 16, 1953

Mr. W.H.King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2463 (Lead-Zinc)
Arizona Metals Company
Summit Mine
Mojave County, Arizona
Contract No. Idm-E390

Dear Mr. King:

This refers to your memorandum of March 30, 1953, and enclosed application of Arizona Metals Company for an amendment to undertake additional work and to increase the cost of the original work under the subject contract.

We note from your memorandum that your office executed an amendment extending the starting time to November 25, 1952, and that your Tucson office advised on March 23, 1953 that no work had been accomplished up to that date, except for a drilled, but not blasted, round in the drift heading. No claim for reimbursement has been submitted by the Operator. It also appears that it is not possible to undertake the additional work requested by the Operator until the work authorized under the existing contract is completed.

The Operator certainly is in default, having not complied with the terms of the contract since work was not started within the time scheduled, and also because the property is not now being operated under the contract. However, we feel that the Operator should be given an opportunity, within a reasonable time, to raise necessary financing, but a definite date should be established as to when he would be prepared to start the operations.

We have recently received a letter from the operator concerning this matter, and for your information a copy of this letter is enclosed together with a copy of our reply. We concur with your recommendations with respect to his application for an amendment to the contract. Your attention is called, however, to the fact that your recommendations do not indicate the unit cost that should be allowed for the additional 600 feet of drifting in the Silver Monster Claim as a Stage II of the contract. We will appreciate your advising us regarding this.

It is suggested that you communicate with the Operator and if agreeable, draft an appropriate amendment and forward it to this office for preparation by our Legal Division.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

APPROVED:

/s/ J.H. Hedges
Member, Bureau of Mines

/s/ A.R. Kinkel, Jr.
Member, Geological Survey

Rutledge
Martin
Rumbell
Hedges
Selfridge
Johnson
Weissenborn

Defense Minerals Exploration
Administration

W. S. Martin
5285 3538

April 24, 1953

A. J. Weissenborn, DMEA Executive Officer, Region 2, South 157 Howard St.
Spokane, Washington
Docket DMA 2868 - Western Mines Company - Contract Idm-R-414

Reurtel April 21. We will prepare amendment extending starting date by 45 days. Please advise Operator.

George C. Selfridge
G. C. Selfridge, Chairman
Operating Committee

WSMartin/ls
4/24/53

cc: Docket
Code 400
Adm. Reading File
Operating Committee
D. M. Lemmon, USGS
R. W. Geehan, USBM
Audits Division, Bur. Mines
Confirmation - FT, Region 2

S.H.
4/24/53
(Carried in R.R. at 4:00 p.m.)

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	
DAY LETTER	
NIGHT LETTER	

$
S
E

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206 10-51

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHIP RADIOGRAM	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

CONFIRMATION

TELETYPE

4-21-53

TO: MR. GEORGE C. SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 23 1953

RE: DOCKET NO. 2468 (TUNGSTEN) CONTRACT IDM-E414, WESTERN MINES COMPANY.

PROPERTY INACCESSIBLE BECAUSE OF LATE SPRING SNOW STORMS. WEATHER WILL NOT PERMIT WORK TO START MUCH BEFORE JUNE 1 OR 15. REQUEST AUTHORIZATION TO PREPARE AMENDMENT TO EXTEND STARTING DATE BY 45 DAYS.

A. E. WEISSENBORN
EXECUTIVE OFFICER, DMEA
FIELD TEAM, REGION II

cc: USBM
Confirmation
Chrono.

BV

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, this is an unrepeated message and paid for as such, in consideration whereof it is agreed between the sender of the message and the Telegraph Company as follows:

1. The Telegraph Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the unrepeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines.

2. In any event the Telegraph Company shall not be liable for damages for mistakes or delays in the transmission or delivery, or for the non-delivery, of any message, whether caused by the negligence of its servants or otherwise, beyond the actual loss, not exceeding in any event the sum of five thousand dollars, at which amount the sender of each message represents that the message is valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated-message rate is paid or agreed to be paid and an additional charge equal to one-tenth of one per cent of the amount by which such valuation shall exceed five thousand dollars.

3. The Telegraph Company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination.

4. Except as otherwise indicated in connection with the listing of individual places in the filed tariffs of the Telegraph Company, the amount paid for the transmission of a domestic telegram or an incoming cable or radio message covers its delivery within the following limits: In cities or towns of 5,000 or more inhabitants where the Telegraph Company has an office which, as shown by the filed tariffs of the Telegraph Company, is not operated through the agency of a railroad company, within two miles of any open main or branch office of the Telegraph Company; in cities or towns of 5,000 or more inhabitants where, as shown by the filed tariffs of the Telegraph Company, the telegraph service is performed through the agency of a railroad company, within one mile of the telegraph office; in cities or towns of less than 5,000 inhabitants in which an office of the Telegraph Company is located, within one-half mile of the telegraph office. Beyond the limits above specified the Telegraph Company does not undertake to make delivery but will endeavor to arrange for delivery as the agent of the sender, with the understanding that the sender authorizes the collection of any additional charge from the addressee and agrees to pay such additional charge if it is not collected from the addressee. There will be no additional charge for deliveries made by telephone within the corporate limits of any city or town in which an office of the Telegraph Company is located.

5. No responsibility attaches to the Telegraph Company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the Telegraph Company's messengers, he acts for that purpose as the agent of the sender.

6. The Telegraph Company will not be liable for damages or statutory penalties when the claim is not presented in writing to the Telegraph Company, (a) within ninety days after the message is filed with the Telegraph Company for transmission in the case of a message between points within the United States (except in the case of an intrastate message in Texas) or between a point in the United States on the one hand and a point in Alaska, Canada, Mexico, or St. Pierre-Miquelon Islands on the other hand, or between a point in the United States and a ship at sea or in the air, (b) within 95 days after the cause of action, if any, shall have accrued in the case of an intrastate message in Texas, and (c) within 180 days after the message is filed with the Telegraph Company for transmission in the case of a message between a point in the United States and a foreign or overseas point other than the points specified above in this paragraph; provided, however, that this condition shall not apply to claims for damages or overcharges within the purview of Section 415 of the Communications Act of 1934, as amended.

7. It is agreed that in any action by the Telegraph Company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

8. Special terms governing the transmission of messages according to their classes, as enumerated below, shall apply to messages in each of such respective classes in addition to all the foregoing terms.

9. No employee of the Telegraph Company is authorized to vary the foregoing.

5-52

CLASSES OF SERVICE

DOMESTIC SERVICES

FULL RATE TELEGRAM

A full rate expedited service.

DAY LETTER (DL)

A deferred service at lower than the full rate

NIGHT LETTER (NL)

Accepted up to 2 A. M. for delivery not earlier than the following morning at rates substantially lower than the full rate telegram or day letter rates.

INTERNATIONAL SERVICES

FULL RATE (FR)

The standard fast service at full rates. May be written in any language that can be expressed in Roman letters, or in secret language. A minimum charge for 5 words applies.

LETTER TELEGRAM (LT)

Overnight plain language messages. Minimum charge for 22 words applies

SHIP RADIOGRAM

A service to and from ships at sea. Plain or secret language may be used. Minimum charge for 5 words applies.

02

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 22 1953

292 WA SP /I-GS-G/

SPOKANE WASH. 4-21-53 150P

GEORGE C. SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE, DMEA

WA/25/

RE DOCKET NUMBER 2468 /TUNGSTEN/ CONTRACT IDM-E414 WESTERN MINES COMPANY. PROPERTY INACCESSIBLE BECAUSE OF LATE SPRING SNOW STORMS. WEATHER WILL NOT PERMIT WORK TO START MUCH BEFORE JUNE 1 OR 15. REQUEST AUTHORIZATION TO PREPARE AMENDMENT TO EXTEND STARTING DATE BY 45 DAYS.

A E WEISSENBORN, EXEC OFFICER DMEA

FIELD TEAM, REGION II, SP

2468 IDM-E414 1 15 45

EC 155P

APR 22 9 07 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

2468

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

[illegible]

[illegible]

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 6 1953

[illegible]

[illegible] supervising geologist [illegible]

In our opinion, what is obviously [illegible] supervising [illegible] property. [illegible] competent geologist [illegible]

[illegible]

cc: USGS (2)
DMA (2)
[illegible]

FILE COPY
SURNAME:

Selfridge.

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

DEC 1 1952

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress & Old Timer claims
Powell County, Montana
Contract No. Idm-E414

Dear Mr. Weissenborn:

We are enclosing an extra copy of the referenced contract for use of your field representatives in making their examinations and reports.

12-1-52

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

GCSelfridge:ls
11/25/52

Approved:

J. R. Hedges

Member, Bureau of Mines

A. R. Kinch, Jr.

Member, Geological Survey

CC: Docket
Adm. Read. File
Field Team, Reg. 2
Oper. Comm.
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM

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

Aso

November 21, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 24 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2468 (Tungsten)
Western Mines Company
Powell County, Montana
Contract Idm-E414

Dear Mr. Johnson:

Enclosed are the original and two signed copies of the subject contract.

A copy of the contract has been retained by the Operator, a copy is being retained for the files of this office, and by a carbon copy of this letter, we are distributing the Finance Officer's copy.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer
DMEA Field Team, Region II

Enclosure

cc: USBM (2)
Finance Officer w/encl.
Quinlan

cac
11-25

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

[illegible]
[illegible] Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
[illegible]

NOV 2[illegible] 1952

November 21 [illegible]

Mr. Frank [illegible] Johnson, Chairman
Operating Committee, DMA
Department of the Interior
Washington 25, D. C.

Re: Docket DMA-[illegible] (Tungsten)
Western Mines Company
Powell County, Montana
Contract [illegible]-2414

Dear Mr. Johnson:

Enclosed are the original and two signed copies of the subject contract.

A copy of the contract has been returned by the operator, a copy is being retained for the files of this office, and by a carbon copy of this letter we are distributing the Finance Officer's copy.

Sincerely yours

Thor H. Kalsgaard
For: M. [illegible] Volin
Acting Executive Officer
DMA Field Team, Region [illegible]

Enclosure

cc: DMEM (2)
Finance Officer w/encl.
Quinlan

FILE COPY
SURNAME:

Chapman
Selfridge
Martin

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

OCT 6 1952

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress and Old Timer Claims
Powell County, Montana

Dear Mr. Weissenborn:

We are enclosing the original and five copies of the above referenced exploration contract signed by this office for the Government, together with Exhibit "A" (6 pages), Annex I, Annex II, Annex III and Figure 1.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies shall be signed by each member of the partnership. The usual distribution shall be made of the copies.

If any part of the contract does not have either your approval or that of the Operator and cannot be amended within your delegated authority, the original and all copies of the contract are to be returned to this office, together with the proposed changes for consideration.

The contract as written has followed closely the field team recommendation with no major changes.

The date of contract already inserted and time of starting and ending of contract shall be filled in when contract is signed.

Sincerely yours,

(signed) FRANK E. JOHNSON (B. H.)

Chairman, Operating Committee

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
Operating Committee

cc: G. C. Selfridge
T. L. Chapman

Approved:

J. H. Hedges (B. H.)
Member, Bureau of Mines

Q. R. Kinkel, Jr. (B. H.)
Member, Geological Survey

J.H. 10-6-52

TLChapman'lm
10/3/52

FILE COPY
SURNAME:

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

September 23, 1952

Memorandum

To: Administrator

Through: G. C. Selfridge

From: Chief Counsel

Subject: Western Mines Company, Docket No. DMEA-2468

There is attached, in satisfactory legal form for execution, a contract covering the subject project, provided that the ownership of the property as stated on the contract form, which is in question (see letter dated August 22 from Field Team II to Selfridge), is verified; provided that the completion date is inserted in the contract form; and provided that all the maps are identified as "Figure No. 1," and attached to the contract.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

HCRubin/mef
cc to: Mails and Files
Mr. Selfridge
Mr. Hofflund
Mr. Rubin
Chron.

W. E. KEELEY
JOSEPH A. McELWAIN
OF COUNSEL
E. M. KEELEY
J. M. DIETRICH, JR.

LAW OFFICES OF
KEELEY & McELWAIN
U. S. NATIONAL BANK BUILDING
DEER LODGE, MONTANA

TELEPHONES
OFFICE: 15
RESIDENCE: 50 AND 226

September 29th, 1952

Mr. W.S. Martin,
Acting Chief,
Iron and Ferro-Alloy Division,
United States Department of the Interior,
Defense Minerals Exploration Administration,
Washington 25, D.C.

Dear Mr. Martin:

In re: Docket No. DMEA 2468 -
Tungsten
Western Mines Company
Powell County, Montana

I herewith enclose a certified copy of filed articles of mining co-partnership of Western Mines Company for your files. Also, enclosed herewith in triplicate signed MF-103 forms, which are supplemental to the previous MF-103 forms heretofore executed in the corporate name. According to your directions or the directions of Mr. Hoffland, Chief Counsel, only No. 1 and No. 3, need to be filled in.

If you do not need all these applications, I would appreciate it if you would return one of them to me for my files. You will note that they are all dated as of this date, and signed on behalf of the mining company partnership by the manager thereof.

If you find everything regular, please send on the contract, and you will take care of having it executed. I am not attempting to prepare this contract myself, because I feel that you can do it much better than I can and perhaps you would prefer to do it because of your much greater familiarity with the manner in which it should be filled out and executed.

If there is anything further that you wish, please advise me, and we will endeavor to get same for you.

Very truly yours,

KEELEY & McELWAIN

all deeds have been recorded also. W.E.K.

By W. E. Keeley

WEK:df
Enc. 4

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

REFERRED TO: DATE 10-2-52

1. Code 400
2.
3.
4.

FOR:

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

REMARKS:

Check (X) before the items needing attention.

R. E. ADAMS

GPO 16—63815-1

Initials of sender.

ARTICLES OF MINING PARTNERSHIP.

THIS AGREEMENT, Made and entered into this 18 day of September, 1952, by and between PAT T. PHALEN of Spokane, Washington, and JOHN B. HOPKINS, of Grand Junction, Colorado, the parties of the first part, and JOHN W. PHALEN and MILTON EMLEY, both of Spokane, Washington, FRANK C. CULVER of Seattle Washington, and ZILLA EMLEY, of Reardan, Washington, the parties of the second part; Witnesseth:

That, WHEREAS the parties of the first part, in the ratio and proportion of Eighty-three (83) per cent for the said Pat T. Phalen, and seventeen (17) per cent for the said John B. Hopkins, are now the sole claimants and owners, subject to the paramount title of the United States, and entitled to the possession, of the four following described (unpatented) quartz lode mining claims situate in the Ogden Mountain (unorganized) Mining District, of and in Powell County, Montana, and each and all of which claims were duly and legally located on September 12th, 1948, and are more particularly described as follows, to-wit:

New Progress Number 1, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 8 of Quartz Lode Location Records, of Powell County, Montana, at page 409;

New Progress Number 2, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 8 of Quartz Lode Location Records, of Powell County, Montana, at page 411;

Old Timer Number 1, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 8 of Quartz Lode Location Records of Powell County, Montana, at page 405; and

Old Timer Number 2, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 8 of Quartz Lode Location Records of Powell County, Montana, at page 407; and

WHEREAS, the said Pat T. Phalen, one of the parties of the first part, and his wife, on or about the same date that this instrument is made and executed, are selling and conveying, a total of thirteen (13) per cent of the ownership of the said Pat

T. Phalen in and to said mining claims, to the parties of the second part, and leaving an ownership therein hereafter of seventy (70) per cent in the said Pat T. Phalen; and whereas, of the above mentioned thirteen (13) per cent to be so deeded in the aggregate to the parties of the second part, the said John W. Phalen shall become the owner of five (5) per cent of the total ownership of said mining claims; the said Frank C. Culver shall become the owner of five (5) per cent thereof; the said Milton T. Emley shall become the owner of two (2) per cent thereof; and the said Zilla Emley shall become the owner of one (1) per cent thereof, to the end that the said Pat T. Phalen and the said John B. Hopkins, parties of the first part herein, shall own respectively seventy (70) per cent and seventeen (17) per cent of the ownership of each and all of said mining claims, and that among the parties of the second part, the said John W. Phalen shall own five (5) per cent thereof; Frank C. Culver shall own five (5) per cent thereof; Milton T. Emley shall own two (2) per cent thereof, and Zilla Emley shall own one (1) per cent thereof; and,

WHEREAS, all of the owners thereof, including the parties of the first part and the parties of the second part herein, are, and will be, engaged in the general working and exploring business of said mining claims, for all kinds of minerals, as a mining partnership, under the firm name and style of Western Mines Company, and all of said mining copartners require additional capital to properly explore and work said mining claims, and for that purpose, have made application for aid in such exploration project from the Defense Minerals Exploration Administration of the United States, under the Defense Production Act of 1950, as amended.

NOW THEREFORE, it is agreed that all of the parties hereto, in their said ratios and proportions of ownership, and as

said copartnership, shall provide and furnish, in addition to all moneys received from, and furnished by, the said Defense Minerals Exploration Administration, finances to do and perform said exploration work, and for the purpose of working said mining claims, and extracting therefrom the minerals therein, and for the construction of the necessary improvements of and on the said mining claims, and ship the ore extracted therefrom to market, and to provide all of the necessary and legitimate expenses to conduct the said exploration and mining operations as required; and they further agree that they will do all things necessary required by said Defense Minerals Exploration Administration in an exploration project contract, should one be entered into, and, except as otherwise provided in said exploration project contract, they will divide the profits of said partnership business among themselves, in accordance with their respective ratios and percentages of ownership; and that, in such proportions, they and each of them shall contribute and pay any and all losses and unpaid expenses incurred in said mining and development work; but, subject to said exploration contract, each of the parties hereto shall have a lien on the partnership property for the debts due the creditors thereof, and for money advanced by him or her for its uses.

It is further agreed that the said Pat T. Phalen, one of the parties of the first part, shall be the manager of said copartnership, and its properties, and of the doing of all mining and development work necessary or proper in and upon said mining claims, but that said manager cannot bind said business mining partnership, or the other members thereof, by a contract in writing, except by express authority derived from the other members of this partnership; and that the decision of the members of said partnership owning a majority of the shares or interests shall bind said copartnership in the conduct of its business.

This partnership shall continue as long as said copartnership, and the members thereof, or their successors in interest, shall own said mining claims or any thereof, and that

these Articles of Partnership shall be subject to, and in accordance with, each and all of the provisions of Chapter 10 of Title 63 of the Revised Codes of Montana, for 1947, and to any future amendments, if any, of any of the sections or parts of said Chapter 10.

Annual statements concerning the business of this partnership shall be rendered annually, or oftener when necessary, by said manager to all of the members of said copartnership, showing and disclosing the condition of the business of said copartnership, and the debts and obligations thereof, and the net profits thereof that can or may be distributed among the members of said copartnership; and the net profits thereof, if any, shall be distributed at least annually among the members of the partnership, in accordance with their percentages and ratios of ownership.

The principal place of business of said mining partnership will be at 500 Main Street in the City of Deer Lodge, Powell County, Montana, but any and all records of said mining partnership may be kept at the office of the manager wherever he may be or reside.

These Articles of Mining Partnership are executed in triplicate, and the original triplicate hereof shall be filed in the office of the Clerk and Recorder of Powell County, Montana, the County in which all of said mining claims, and the principal place of business of said copartnership, is and are, all situate; the second triplicate hereof shall be held by the said manager of said copartnership business; and the third triplicate shall be delivered to the said John B. Hopkins, one of the parties of the first part.

IN WITNESS WHEREOF, all of the parties hereto have hereunto affixed their seals and subscribed their names hereto, on the days, and at the times, shown in the respective notarial certificates hereunto attached and made a part hereof.

Pat T. Phelan (SEAL

John B. Hopkins (SEAL)

John W. Phalen (SEAL)

Milton Emley (SEAL)

Frank G. Culver (SEAL)

Zilla Emley (SEAL)

STATE OF WASHINGTON)
: ss.
COUNTY OF SPOKANE)

On this 24th day of September, 1952, before me, the undersigned, a Notary Public for the State of Washington, personally appeared Pat T. Phalen, John W. Phalen, Milton Emley, and Zilla Emley, four of the persons whose names are subscribed to the foregoing instrument, and, each of them acknowledged to me that he or she executed the same.

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

Dale F. Vaughn
Notary Public for the State of Washington, residing at Spokane, Washington. My Commission expires April 22, 1954.

(NOTARIAL SEAL)

STATE OF COLORADO,)
: ss.
COUNTY OF Mesa)

On this 18 day of September, 1952, before me, the undersigned, a Notary Public for the State of Colorado, personally appeared John B. Hopkins, known to me to be one of the persons whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

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

Alice R. Elder
Notary Public for the State of Colorado, residing at Grand Junction, Colorado. My Commission expires May 4, 1954.

(NOTARIAL SEAL)

STATE OF Wash.)
: ss.
COUNTY OF King)

On this 26 day of September, 1952, before me, the undersigned, a Notary Public for the State of Washington, residing at 4500 Uni. Way, Seattle, personally appeared Frank C. Culver, known to me to be one of the persons whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

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

T. O. Harfst
Notary Public for the State of Wash., residing at Seattle.
My Commission expires Oct. 14, 1955.

(NOTARIAL SEAL)

RECORDER'S OFFICE
STATE OF MONTANA, } ss.
COUNTY OF POWELL

I, DANIEL B. HERTZ, JR., County Clerk and Recorder in and for said County and State, hereby certify that the foregoing is a true, full and correct copy of Articles of Mining Partnership---Western Mines Company

Filed in my office on the 29th day of September, A. D., 1952 at 4:00 P. M.
~~XXXXXXXXXXXXXXXXXXXX XXX XXXXXX at page~~ Reception No. 57134

IN WITNESS WHEREOF, I hereunto set my hand and affix the Seal of said County this 29th day of September, A. D. 1952.

Daniel B. Hertz Jr.
County Clerk and Ex-Officio Recorder.
By ....., Deputy.

(R[illegible] 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1[illegible]

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 1952

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

Not to be filled in by applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
Participation (Government %) .....

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Western Mines Company, a mining partnership organized in Powell County, Montana; Pat T. Phalen, Manager, present address, 3914 E. Third, Spokane, Washington. For names and addresses of partners, see typewritten sheet (d) attached.

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

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Partnership. See typewritten sheet (d) attached and triplicate of Articles of Mining/

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract New Progress No. 1; New Progress No. 2; Old Timer No. 1; and Old Timer No. 2, Quartz Lode Mining Claims, Certificates of location of which are respectively recorded in Book 8, Quartz Location records of Powell County, Montana, at pages 409, 411, 405 and 407.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owners by location and purchase.

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. All unpatented. See above 3. (a) for records.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

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

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

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

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

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated September 29th, 1952.

WESTERN MINES COMPANY,
(Applicant)

By Pat T. O'Shaler
Manager,
3914 East Third,
Spokane, Washington.

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

TYPEWRITTEN SHEET EXPLANATORY OF 1. (d)

Pat T. Phalen, 3914 East Third, Spokane, Washington.

John B. Hopkins, 1158 White Street, Grand Junction, Colorado.

John W. Phalen, 3914 East Third, Spokane, Washington.

Frank C. Culver, 4730 - 15th Ave. N.E., Seattle, Washington.

Milton Emley, 1019 W. 3rd, Spokane, Washington.

Zilla Emley, Reardan, Washington.

Above are all of the mining copartners, doing business under the firm name and style of Western Mines Company.

IF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R065.2.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 1952

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

Not to be filled in by applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
Participation (Government %) .....

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Western Mines Company, a mining partnership organized in Powell County, Montana; Pat T. Phalen, Manager, present address, 3914 E. Third, Spokane, Washington. For names and addresses of partners, see typewritten sheet (d) attached.

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

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Partnership. See typewritten sheet (d) attached and triplicate of Articles of Mining/

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract New Progress No. 1; New Progress No. 2; Old Timer No. 1; and Old Timer No. 2, Quartz Lode Mining Claims, Certificates of location of which are respectively recorded in Book 8, Quartz Location records of Powell County, Montana, at pages 409, 411, 405 and 407.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owners by location and purchase.

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Explain in detail on acompanying paper.

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Dated September 29th, 1952.

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(Applicant)

By Pat T. Shaler
Manager,
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U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

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Milton Emley, 1019 W. 3rd, Spokane, Washington.

Zilla Emley, Bearden, Washington.

Above are all of the mining copartners, doing business under the firm name and style of Western Mines Company.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 1952

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

Not to be filled in by applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
Participation (Government %) .....

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3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract New Progress No. 1; New Progress No. 2; Old Timer No. 1; and Old Timer No. 2, Quartz Lode Mining Claims, Certificates of location of which are respectively recorded in Book 8, Quartz Location records of Powell County, Montana, at pages 409, 411, 405 and 407.

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(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owners by location and purchase.

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

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

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

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

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

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

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

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

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

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

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

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

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

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated September 29th, 1952.

WESTERN MINES COMPANY,
(Applicant)

By Pat T. Phelan
Manager,
3914 East Third,
Spokane, Washington.

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

TYPEWRITTEN SHEET EXPLANATORY OF 1. (d)

Pat T. Phalen, 3914 East Third, Spokane, Washington.

John B. Hopkins, 1158 White Street, Grand Junction, Colorado.

John W. Phalen, 3914 East Third, Spokane, Washington.

Frank C. Culver, 4730 - 15th Ave. N.E., Seattle, Washington.

Milton Emley, 1019 W. 3rd, Spokane, Washington.

Zilla Emley, Rearden, Washington.

Above are all of the mining copartners, doing business under the firm name and style of Western Mines Company.

W. E. KEELEY
JOSEPH A. McELWAIN

OF COUNSEL
E. M. KEELEY
J. M. DIETRICH, JR.

LAW OFFICES OF
KEELEY & McELWAIN
U. S. NATIONAL BANK BUILDING
DEER LODGE, MONTANA

TELEPHONES
OFFICE: 15
RESIDENCE: 50 AND 226

Aos

September 17th, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 19 1952

Mr. W.S. Martin,
Acting Chief,
Iron and Ferro-Alloy Division,
United States Department of the Interior,
Defense Minerals Exploration Administration,
Washington 25, D.C.

VIA AIR MAIL.

Dear Mr. Martin:

In re: Docket No. DMEA 2468 -
Tungsten
Western Mines Company
Powell County, Montana

Your air mail letter pertaining to the mining claims being stated in the proposed articles of mining partnership as being in Book 1, instead of in Book 8, just received. That mistake, in comparing, was corrected in the three original triplicates of the Articles, and I thought that the correction had likewise been made in the copies, including the one sent you. Book 8 is correct, but apparently the copy was mailed to you before the typographical error was detected.

I regret having caused you this bother and annoyance.

We sent these original articles of mining partnership to Mr. John B. Hopkins at Grand Junction, Colorado, but he called up and stated that he had not received them, and we have sent him new triplicates to execute. We should have those back from him at least in a day or two, when we will forward them to Mr. Pat T. Phalen at Spokane in order to get the other partners to sign the same.

By today's mail, we are in receipt of five mining deeds from Pat T. Phalen, and his wife in order to convey of record, the various percentages shown in the partnership articles, and which we are recording today. Mr. Hopkins is to sign a deed, and when it is returned and recorded, the County records will show the ownerships exactly as stated in the articles of partnership. As soon as I have these matters assembled, we will send them to you.

Very truly,

W. E. Keeley

WEK:df

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 9-19-52

REFERRED TO:
1. Code 400
2.
3.
4.

FOR:

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

REMARKS:

Check (X) before the items needing attention.

R. E. ADAMS

Initials of sender.

GPO 16—63815-1

400

FILE COPY
SURNAME:

Chapman
Martin
Attorney

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

AIR MAIL

SEP 15 1952

Mr. W. H. Keeley
Attorney At Law
Deer Lodge, Montana

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
Powell County, Montana

Dear Mr. Keeley:

Your letter of August 22, 1952, advises us that the New Progress No. 1 and No. 2 mining claims and the Old Timer No. 1 and No. 2 mining claims are recorded in Book 8. The Articles of Mining Partnership state that the above mentioned claims are recorded in Book 1. Will you please advise us which is correct.

Sincerely yours,

Signed

S.N. 9-15-52

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

TLChapman'lm
9/12/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
W. S. Martin
T. L. Chapman

400

FILE COPY
SURNAME:

Martin
Hofflund
Mott

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

SEP 11 1952

Mr. W. B. Keeley
Attorney at Law
Deer Lodge, Montana

Re: Western Mines Company
Docket No. DMEA 2468 - Tungsten
New Progress Nos. 1 & 2, and
Old Timer Nos. 1 & 2 claims
Powell County, Montana

Dear Mr. Keeley:

Your letter of September 6, 1952, addressed to Mr. J. F. Hofflund, Chief Counsel, Defense Minerals Exploration Administration, which was accompanied by a carbon copy of mining partnership agreement, has been referred to this Division for attention.

We thank you for advising us that the legal entity which is to be the contracting operator is a mining co-partnership, the members of which are listed as follows with their respective percentages of ownership:

Pat T. Phalen, Spokane, Washington	- 70 %
John B. Hopkins, Grand Junction, Colorado	- 17 %
Frank C. Culver, Seattle, Washington	- 5 %
Milton T. Imley, Spokane, Washington	- 2 %
Zilla Imley, Reardan, Washington	- 1 %
John W. Phalen, Spokane, Washington	- 5 %

You are entirely correct in your understanding that only sections 1 and 3 of the Form MF-103 need now be completed in connection with the subject application. As soon as the executed forms are returned to us, we will send to Mr. Hofflund's office a draft of the proposed contract. When the contract is prepared, it will be sent to you in order that you may obtain the signatures of the partnership and its members at the same time the articles of the mining partnership are executed and filed.

In accordance with your request we are enclosing a copy of DMEA Order No. 1 and a copy of a "Questions & Answers" booklet which explains certain sections of the order more fully.

Sincerely yours,

Signed

J.H. 9-11-52

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Enclosures

Copy to: Mr. Hofflund

Copy to: Docket
Admn. Read. File
Field Team, Region 2
W. S. Martin
D. M. Lemmon, USGS
R. W. Geehan, USBM

9/10/52

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

REFERRED TO: DATE 9-11-52

1. Code 402 - 3538
2.
3.
4.

FOR:

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

REMARKS: For docket file, please.

Check (X) before the items needing attention.

GPO 16—63815-1

R.E. Adams S.H.
Initials of sender.

W. E. KEELEY
JOSEPH A. McELWAIN

OF COUNSEL
E. M. KEELEY
J. M. DIETRICH, JR.

LAW OFFICES OF
KEELEY & McELWAIN
U. S. NATIONAL BANK BUILDING
DEER LODGE, MONTANA

TELEPHONES
OFFICE: 15
RESIDENCE: 50 AND 226

September 6th, 1952

RECEIVED
SEP 8 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Mr. J.F. Hofflund,
Chief Counsel,
Defense Minerals Exploration
Administration,
Washington 25, D.C.

Dear Mr. Hofflund: In re: Western Mines Company (Pat T. Phalen Application for an exploration project loan.)

I want to thank you for your very excellent informative letter of the 28th ult., and also apologize to you for not answering it sooner. The delay was necessarily caused by reason of Mr. Pat T. Phalen and some of his associates living in Spokane, Washington, and one of the persons involved residing in Grand Junction, Colorado. I had to await a conference with them, which took place yesterday morning at our office, before having the necessary information to give to you.

It has been decided to organize a mining co-partnership under the laws of Montana to be known as Western Mines Company, rather than to organize a corporation. The names of the co-partners are the same as those who were listed in a general technical data, form MF100, dated September 8th, 1951, and submitted to you with the application, as stockholders in the proposed corporation of the same name, except that the name of Mrs. Pat T. Phalen will be eliminated. Hence, there will be six co-partners. The names I gave in my letter to Jerry House, Secretary to Senator Zales N. Ecton of Montana, were the names that were listed as directors of the proposed corporation to be organized under the same name as Western Mines Company. Thus, the members of the mining co-partnership, together with their respective addresses and respective percentages of ownership, are as follows:

Pat T. Phalen, Spokane, Washington, 70% ownership; John B. Hopkins, Grand Junction, Colorado, 17%; Frank C. Culver, Seattle, Washington, 5%; Milton T. Emley, Spokane, Washington, 2%; and Zilla Emley, Reardan, Washington, 1%; and John W. Phalen, Spokane, Washington, 5%.

We are to immediately draft and send around for execution to the various six co-partners, articles of a mining co-partnership, in the usual form. When that is completed, we

will send to you, if required, a certified copy of the original articles of mining co-partnership filed in the office of the Clerk and Recorder of Powell County, Montana, and the partnership, and the members thereof, will be the contracting party.

Under our Montana Code provisions, a mining partnership is one in which the percentages of ownership are practically similar to stock in a corporation. The percentage owned by any partner, or any part thereof, may be sold by him to any other person without dissolving the partnership. An amount of the percentages controlled, in the same manner as majority of all stock in a corporation controls its functions and dealings, although no minutes of meetings of members of a mining co-partnership are made or kept. The manager of the mining co-partnership is provided by law, and Pat T. Phalen will be the manager. The mining partnership is the legal entity acting by and through its members, who may be increased or decreased, in accordance with sales or purchases of percentages from other partners. It is our understanding from your letter, and from discussion with the principal partners that all of the ground work concerning the obtaining of the exploration project contract has been done. You enclosed MF-103 asking that Sections 1 and 3 thereof be filled in on this form and the form signed by the contracting operator. That will be done just as soon as the mining partnership is completely formed, as I would not want them to sign as a mining co-partnership until one is formally in existence.

Do I understand that only Sections 1 and 3 are now required to be filled in in connection with this form MF-103? I would very much like to know this as soon as possible, as we are taking immediate steps to form the partnership. If possible, we would appreciate it if you prepare the form of contract you will require, and send it on to us in order to obtain the signatures of the partnership and its members at the same time the articles of mining partnership are executed and filed; and without DMEA executing the same until the contract executed by the co-partnership is returned to you. This may not be feasible, but if it is, it would save a great deal of time, and these people are anxious to get operating under the contract, just as soon as possible, and while the weather is good.

If you do not have available the Revised Codes of Montana for 1947, pertaining to mining co-partnerships, we will be glad to make a copy of the Chapter pertaining to this form of partnerships, as the Chapter is a rather short one, but very complete.

The printed application MF-103 refers to DMEA Order 1, which we do not have available. Hence, we would appreciate it greatly if you could send us a copy of this printed Order, together with whatever pamphlets you may have available that touch upon this particular loan under consideration.

Again thanking you for your courtesy, and hoping to meet you sometime in the future, I beg to remain,

Very truly,

W. E. Keeley

WEK:df

P.S. I also enclose carbon copy of mining partnership agreement as yet unsigned.

W.E.K.

ARTICLES OF MINING PARTNERSHIP.

THIS AGREEMENT, Made and entered into this _____ day of September, 1952, by and between PAT T. PHALEN of Spokane, Washington, and JOHN B. HOPKINS, of Grand Junction, Colorado, the parties of the first part, and JOHN W. PHALEN and MILTON EMLEY, both of Spokane, Washington, FRANK C. CULVER of Seattle Washington, and ZILLA EMLEY, of Reardan, Washington, the parties of the second part; Witnesseth:

That, WHEREAS the parties of the first part, in the ratio and proportion of Eighty-three (83) per cent for the said Pat T. Phalen, and seventeen (17) per cent for the said John B. Hopkins, are now the sole claimants and owners, subject to the paramount title of the United States, and entitled to the possession, of the four following described (unpatented) quartz lode mining claims situate in the Ogden Mountain (unorganized) Mining District, of and in Powell County, Montana, and each and all of which claims were duly and legally located on September 12th, 1948, and are more particularly described as follows, to-wit:

New Progress Number 1, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 1 of Quartz Lode Location Redords, of Powell County, Montana, at page 409;

New Progress Number 2, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 1 of Quartz Lode Location Records, of Powell County, Montana, at page 411;

Old Timer Number 1, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 1 of Quartz Lode Location Records of Powell County, Montana, at page 405; and

Old Timer Number 2, Quartz Lode Mining Claim, the Certificate of Location of and to which was duly recorded in Book 1 of Quartz Lode Location Records of Powell County, Montana, at page 407; and

WHEREAS, the said Pat T. Phalen, one of the parties of the first part, and his wife, on or about the same date that this instrument is made and executed, are selling and conveying, a total of thirteen (13) per cent of the ownership of the said Pat

T. Phalen in and to said mining claims, to the parties of the second part, and leaving an ownership therein hereafter of seventy (70) per cent in the said Pat T. Phalen; and whereas, of the above mentioned thirteen (13) per cent to be so deeded in the aggregate to the parties of the second part, the said John W. Phalen shall become the owner of five (5) per cent of the total ownership of said mining claims; the said Frank C. Culver shall become the owner of five (5) per cent thereof; the said Milton T. Emley shall become the owner of two (2) per cent thereof; and the said Zilla Emley shall become the owner of one (1) per cent thereof, to the end that the said Pat T. Phalen and the said John B. Hopkins, parties of the first part herein, shall own respectively seventy (70) per cent and seventeen (17) per cent of the ownership of each and all of said mining claims, and that among the parties of the second part, the said John W. Phalen shall own five (5) per cent thereof; Frank C. Culber shall own five (5) per cent thereof; Milton T. Emley shall own two (2) per cent thereof, and Zilla Emley shall own one (1) per cent thereof; and,

WHEREAS, all of the owners thereof, including the parties of the first part and the parties of the second part herein, are, and will be, engaged in the general working and exploring business of said mining claims for all kinds of minerals, as a mining partnership, under the firm name and style of Western Mines Company, and all of said mining copartners require additional capital to properly explore and work said mining claims, and for that purpose, have made application for aid in such exploration project from the Defense Minerals Exploration Administration of the United States, under the Defense Production Act of 1950, as amended.

NOW THEREFORE, it is agreed that all of the parties hereto, in their said ratios and proportions of ownership, and as

said copartnership, shall provide and furnish, in addition to all moneys received from, and furnished by, the said Defense Minerals Exploration Administration, finances to do and perform said exploration work, and for the purpose of working said mining claims, and extracting therefrom the minerals therein, and for the construction of the necessary improvements of and on the said mining claims, and ship the ore extracted therefrom to market, and to provide all of the necessary and legitimate expenses to conduct the said exploration and mining operations as required; and they further agree that they will do all things necessary required by said Defense Minerals Exploration Administration in an exploration project contract, should one be entered into, and, except as otherwise provided in said exploration project contract, they will divide the profits of said partnership business among themselves, in accordance with their respective ratios and percentages of ownership; and that, in such proportions, they and each of them shall contribute and pay any and all losses and unpaid expenses incurred in said mining and development work; but, subject to said exploration contract, each of the parties hereto shall have a lien on the partnership property for the debts due the creditors thereof, and for money advanced by him or her for its uses.

It is further agreed that the said Pat T. Phalen, one of the parties of the first part, shall be the manager of said copartnership, and its properties, and of the doing of all mining and development work necessary or proper in and upon said mining claims, but that said manager cannot bind said business mining partnership, or the other members thereof, by a contract in writing, except by express authority derived from the other members of this partnership; and that the decision of the members of said partnership owning a majority of the shares or interests shall bind said copartnership in the conduct of its business.

This partnership shall continue as long as said copartnership, and the members thereof, or their successors in interest, shall own said mining claims or any thereof, and that

these Articles of Partnership shall be subject to, and in accordance with, each and all of the provisions of Chapter 10 of Title 63 of the Revised Codes of Montana, for 1947, and to any future amendments, if any, of any of the sections or parts of said Chapter 10.

Annual statements concerning the business of this partnership shall be rendered annually, or oftener when necessary, by said manager to all of the members of said copartnership, showing and disclosing the condition of the business of said copartnership, and the debts and obligations thereof, and the net profits thereof that can or may be distributed among the members of said copartnership; and the net profits thereof, if any, shall be distributed at least annually among the members of the partnership, in accordance with their percentages and ratios of ownership.

The principal place of business of said mining partnership will be at 500 Main Street in the City of Deer Lodge, Powell County, Montana, but any and all records of said mining partnership may be kept at the office of the manager wherever he may be or reside.

These Articles of Mining Partnership are executed in triplicate, and the original triplicate hereof shall be filed in the office of the Clerk and Recorder of Powell County, Montana, the County in which all of said mining claims, and the principal place of business of said copartnership, is and are, all situate; the second triplicate hereof shall be held by the said manager of said copartnership business; and the third triplicate shall be delivered to the said John B. Hopkins, one of the parties of the first part.

IN WITNESS WHEREOF, all of the parties hereto have hereunto affixed their seals and subscribed their names hereto, on the days, and at the times, shown in the respective notarial certificates hereunto attached and made a part hereof.

_____ (SEAL)

_____(SEAL)

_____(SEAL)

_____(SEAL)

_____(SEAL)

_____(SEAL)

(NOTARIAL CERTIFICATES OMITTED.)

W. E. KEELEY
JOSEPH A. McELWAIN

OF COUNSEL
E. M. KEELEY
J. M. DIETRICH, JR.

LAW OFFICES OF
KEELEY & McELWAIN
U. S. NATIONAL BANK BUILDING
DEER LODGE, MONTANA

TELEPHONES
OFFICE: 15
RESIDENCE: 50 AND 226

September 13th, 1952.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 15 1952

Mr. J. F. Hofflund,
Chief Counsel,
Defense Minerals Exploration
Administration,
Washington 25, D. C.

Dear Mr. Hofflund: In re: Western Mines Company (Pat T. Phalen Application for an exploration project loan.)

Mr. John B. Hopkins called me up very early this morning from Grand Junction, Colorado, and said that while he had received my air mail letter of September 6th promptly, he has not yet received the three triplicates of the Articles of Mining Partnership which were straight mailed under separate cover in order to avoid excessive air mail stamps. Evidently, this straight mail envelope containing these documents has either been lost or delayed in the mails.

Hence, we are today making three of these new triplicates and sending them to him. He should receive them Monday, and upon their return properly executed by him, they will be sent to Mr. Pat T. Phalen for execution by him and his associates.

I regret this delay, the cause of which we do not know now, and have been unable to ascertain, because we are sure that the instruments were deposited in the post office, property addressed, and with more than sufficient postage on the envelope.

I am sending a copy of this letter to Mr. Hopkins and one to Mr. Pat T. Phalen.

The various deeds to place the percentage interest of the four mining claims in the respective parties in accordance with the percentages set forth in the Articles of Mining Partnership are in course of execution, as Mr. Phalen called me long distance several days ago after having received the deeds he and his wife were to execute, and, as aforesaid, Mr. Hopkins called me early this morning. These deeds will all be recorded as soon as we get the same, which should be between now and Monday some time.

RECEIVED
SEP 15 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

With very kindest personal regards and best wishes, I beg to remain

Very truly,

W. E. Keeley

WEK:dh

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

REFERRED TO: DATE 9-15-52

1. Case 140-Rmd 4-6-27
2.
3.
4.

FOR:

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

RECEIVED
SEP 15 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

REMARKS:

Check (X) before the items needing attention.

GPO 16—63815-1

Adams (LW)
Initials of sender.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : John L. Hofflund, Chief Counsel, DMEA DATE: Sept. 12, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Review and preparation of exploration project contract
Docket No. DMEA 2468 - Tungsten
Western Mines Company
Powell County, Montana

Transmitted herewith is the subject docket, together with a rough draft of a proposed exploration contract for your use in preparing the contract in final form.

We are awaiting answers to Sections 1 and 3 of form MF-103 which the applicants expect to supply us shortly. To expedite the completion of this contract, it is suggested that the contract be prepared while awaiting the receipt of the assignment.

WSMartin

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Attachment

FILE COPY
SURNAME:

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

John L. Hefflund, Chief Counsel, DMEA

Sept. 12, 1952

Chapman
Martin

Iron and Ferro-Alloy Division, DMEA

Review and preparation of exploration project contract
Docket No. DMEA 2468 - Tungsten
Western Mines Company
Powell County, Montana

Transmitted herewith is the subject docket, together with a rough draft of a proposed exploration contract for your use in preparing the contract in final form.

We are awaiting answers to Sections 1 and 3 of form MF-103 which the applicants expect to supply us shortly. To expedite the completion of this contract, it is suggested that the contract be prepared while awaiting the receipt of the assignment.

W. S. Martin, Acting Chief
Iron and Ferro-Alloy Division

Attachment

TLChapman'lm
9/12/52

cc: Admn. Reading File
Docket
W. S. Martin
T. L. Chapman

. E. KEELEY
JOSEPH A. McELWAIN

OF COUNSEL
E. M. KEELEY
J. M. DIETRICH, JR.

LAW OFFICES OF
KEELEY & McELWAIN
U. S. NATIONAL BANK BUILDING
DEER LODGE, MONTANA

TELEPHONES
OFFICE: 15
RESIDENCE: 50 AND 226

August 22nd, 1952.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 27 1952

Mr. G. C. Selfridge,
Chief, Iron & Ferro-Alloy Div.,
Defense Minerals Exploration Administration,
Washington 25, D. C.

Dear Sir:

In re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress and Old Timer
Claims, Powell County, Montana.

Mr. Pat T. Phalen, of Spokane, Washington, one of the owners of the Western Mines Company of Helmville, in this County, has requested me to answer your air mail letter of August 7th, 1952, giving you the data as to book and page numbers and respective dates of location of the New Progress and Old Timer mines in this County.

I find that there are four claims instead of two, as hereinafter shown by location records. I have had Mr. Dietrich of this office get the detailed information; and this data is as follows:

The New Progress Quartz Lode mining claim was located on September 12th, 1948 by John B. Hopkins and Mark Welch, and is recorded in Book 8, Quartz Location Records of Powell County, Montana at page 409.

New Progress No. 2 Quartz mining claim, was located on September 12th, 1948, and is recorded in Book 8, Quartz Location Records of Powell County, at page 411. The locaters were John B. Hopkins, 6/8, Mark Welch, 1/8, and Collier Stout, 1/8.

The two Old Timer claims hereinafter mentioned were each located also on September 12th, 1948, and Old Timer Quartz Lode mining claim No. 1 was recorded in said Book 8 at page 405, and the original location of Old Timer Quartz Lode mining claim No. 2 was recorded in said Book 8 at page 407. The locaters of Old Timer No. 1 were John B. Hopkins, 7/8, and Mark Welch, 1/8. Old Timer No. 2 was located by John B. Hopkins and Mark Welch without designation of fractional interests.

Very truly,

W. E. Keeley

WEK:dh

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

REFERRED TO: DATE 8-27-52

1. Code 400 - Rm. 3538
2.
3.
4.

FOR:

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

REMARKS:

Check (X) before the items needing attention.

Adams (AP)
Initials of sender.

GPO 16—63815-1

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FILE COPY
SURNAME:

Hofflund
Martin

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

AUG 29 1952

Hon. Zales N. Ecton
United States Senate
Washington 25, D. C.

My dear Senator Ecton:

Reference is made to your letter of August 25 (by Mr. Jerry B. House, Secretary) to me, enclosing a copy of a letter dated August 20 to Mr. House from Mr. W. E. Keeley, Attorney at Law, Deer Lodge, Montana, all relating to an application for an exploration project contract by Mr. Pat T. Phalen, DMEA Docket No. 2468.

Attached is a copy of a letter from Mr. J. L. Hofflund, Chief Counsel, DMEA, to Mr. Keeley, in reply to the one above referred to.

I trust that Mr. Keeley or Mr. Phalen, in response to the Chief Counsel's letter, will be able to supply this Administration with the necessary information to enable it to proceed with the application.

Sincerely yours,

C. O. Mittendorf (for) J.H. 8-29-52

Acting Administrator

Enclosure

JLHofflund/em
8/28/52
Copy to: Mails and Files
C. O. Mittendorf
Adm. Reading File
G. C. Selfridge
J. L. Hofflund
chron.

ZALES N. ECTON
MONTANA

COMMITTEES:
APPROPRIATIONS
INTERIOR AND INSULAR AFFAIRS

United States Senate

WASHINGTON, D. C.

August 25, 1952

DEPARTMENT
Defense Mine
AUG 26 1952

2468-W03

dmen

ans 8/28/52
JJH/em

Dear Administrator Mittendorf:

Enclosed is a copy of a letter directed to me and received from Mr. W. E. Keeley, Attorney at Law, Deer Lodge, Montana, inasmuch as Senator Ecton is out of the city.

Mr. Keeley points out certain action that he desires to have considered in connection with the application, and Senator Ecton would greatly appreciate anything you may do to expedite a reply to this inquiry. Please address the same to the Senator at his Washington office.

Cordially yours,

Jerry B. House

Jerry B. House
Secretary

Honorable C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Interior Building
Washington, D. C.

Enc.

August 20th, 1952.

Mr. Jerry Louse,
Secretary to Hon. Zales N. Ecton,
Senator from Montana,
Washington, D. C.

Dear Jerry:

In re: Application of Western Mines Company, Helmville, Montana, for a defense mineral loan under the Defense Production Act of 1950.

Defense Minerals Exploration Administration, Docket No. DMEA 2468 - Tungsten for New Progress and New Progress No. 2; and Old Timer, and Old Timer No. 2, claims in Powell County, Montana.

This application was made around the 8th day of September, 1951. In it the Western Mines Company was designated as a Montana corporation, and the names of the directors were therein given. This corporation was not then organized, and has not yet been organized. The application and other data pertaining to the proposed loan was prepared by a very competent mining engineer, but not by a lawyer. The intention to form the corporation was in good faith, and it will be organized now if essential or necessary. We could form such a corporation within a very few days.

The names of the owners are those set forth in Paragraph C of General Technical Data filed with the DMEA on September 8th, 1951, except that D. L. Browne is not now connected with the ownership of these lode claims. The individual shares of ownership are not identical, but are in the proportions shown in such Technical Data concerning the ownership of the common stock of said corporation which has not been organized; except that the interest of the said D. L. Browne is now owned by Pat T. Phelan, in addition to his previous interest. It would appear to me from the DMEA printed blank, DF-203 (Owner's Consent to Lien), that there will be no note signed in connection with this loan, but merely an agreement or contract, and that in the event the enterprise is not successful, no personal liability will be incurred by any of the persons who might sign the lien obligation as individuals. If this be true, I see no reason why the loan could not be granted to these individuals

in person, instead of to the corporation which would have to be organized. If I am correct in the above assumption, we would like very much to have the individuals substituted as the lenders instead of, and in lieu of, this, as yet, unorganized corporation.

As it looks very much as though this loan is going through, and time is urgent, I am sending this letter to you air mail, and I would appreciate your seeing Mr. G. C. Selfridge, Chief of the Iron and Ferro-Alloy Division of said DMEA just as soon as you possibly can, and ascertain if this substitution can be made. If Mr. Selfridge, or other proper officer of the DMEA, would prefer some other sort of an arrangement, whereby these owners could be considered individuals, that could be arranged. However, as above stated, we would greatly prefer it if the loan could be switched from the Western Mines Company as applicant to the individuals named as directors (eliminating D. H. Browne) on DMEA Form MF-100, General Technical Data, but as individuals.

Since dictating the above, I learned definitely that Mr. John T. Hopkins of Grand Junction, Colorado is also now a co-individual owner of the properties, and therefore, please have his name inserted and considered together with the above mentioned individual owners.

All of these people acted in good faith in making the application in a corporate name of a proposed corporation, and they will organize the corporation, as aforesaid, if strictly necessary; but I have advised them that I thought it would be rather foolish to spend out considerable money in the organizing of a corporation until exploration of the properties would justify that to be done.

I know, Jerry, that you are extremely busy, but in your usually competent way I do hope that you may be able to give this immediate consideration.

Thinking that it might be that you would want copies of this letter in order to obviate the necessity of writing other letters or making copies of this one, I am enclosing herewith two carbon copies.

Thanking you in advance, and assuring you that things look extremely good for Lales in Montana, I beg to remain

Very truly,

WWK:dh

Enclosures 2

P.S. What I particularly want to know now is whether there would be any personal liability upon the above individuals should the loan not be fully paid out of production.

W. W. K.

P.P.S. Will you please ascertain if the DMEA would not permit a corporation to be organized for a capitalization of $50,000.00 instead of the $280,000.00 given in the application or the Technical Data; that is, if the DMEA insist upon this Western Mines Company corporation being formed? [illegible]

COPY

housing, footage involved, ground to be drilled, and other factors. Consequently, the policy of field team representatives in drafting contracts has been to set an average maximum figure. When bids finally are received, Field Team approval or rejection is based entirely on a current knowledge of factors involved.

Contractors' rates for AX size core drilling usually range from $4.50 to $8.00 per foot depending on conditions, with the average about $7.00. In the light of advancing costs, several contractors are considering a general upward revision of rates. It should be noted that core sizes smaller than AX usually are not considered advisable by the Field Team. Consequently, specimen contracts prepared in the field normally refer to AX size drilling although that fact may not be stated.

The contract originally recommended has been revised slightly after a recent conference between the applicant and field team representatives. The revised specimen contract is forwarded herewith for consideration.

E. G. Erickson

cc: USGS, Spokane
Wash.,D.C. (2)

140

FILE COPY
SURNAME:

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

Hoffman
Martin

August 28, 1952

Mr. W. E. Keeley
Attorney at Law
Deer Lodge, Montana

N. S. in R. J. R.

Dear Mr. Keeley:

Reference is made to your letter dated August 20 to Mr. Jerry House, Secretary to Hon. Zales N. Ecton, Senator from Montana, which was referred to this agency by Mr. House by letter addressed to Mr. C. O. Mittendorf, Administrator, dated August 25.

I gather from your letter and from the file that action upon Mr. Pat T. Phalen's application, Docket No. DMEA-2468, has been held up pending organization of a corporation which was to have been the Operator, and which you now wish to eliminate. This agency will be prepared to proceed with the application and with the preparation of an exploration project contract as soon as it is advised who is to be the contracting party. As nearly as I can gather from your letter, I believe that instead of the proposed corporation it is now intended that the contract shall be with the following individuals: Pat T. Phalen, Mrs. Pat T. Phalen, Frank C. Culver, Milton Emley, and John B. Hopkins. You have not informed me what legal entity is to be the contracting operator. Are these individuals to operate as a partnership under a partnership name, and if so, what is the name of the partnership?

Enclosed herewith is a form, "Application for Aid in an Exploration Project" (MF-103). Section 1, "Name of Applicant," and Section 3, "Applicant's Property Rights," should be filled in on this form and the form signed by whoever is to be the contracting operator. This is necessary to supply us with information for drafting the contract as you now want to have it.

You have made some inquiries as to the nature of the obligation of the contracting operator to repay the money contributed by the Government. Under the provisions

of the exploration project contract, the operator is obligated to repay only in the event that the exploration is successful and that production results therefrom. This obligation is in the form of a percentage royalty on such production. Enclosed herewith is a copy of Exploration Project Contract, Form MF-200.

You have also made some inquiries as to the requirements of DMEA with respect to the capitalization of an applicant corporation (assuming, I suppose, if you should revert to a corporate applicant). DMEA is not concerned with the amount of the capitalization of corporate applicants. If the applicant does not own the property which is the subject of an exploration project contract, consents to lien will be required from those who do own it. A copy of Form MF-103, Owner's Consent to Lien, is enclosed.

As soon as we have the necessary information in hand, this agency can proceed to process the subject application.

Sincerely yours,

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Enclosures

JLHofflund/em

Copy to: Mails and Files
Sen. Zales N. Ecton
G. C. Selfridge
A. O. Mittendorf
Administrator's Reading File
J. L. Hofflund
chron.

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Wash.
August 22, 1952

Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloy Division
Defense Minerals Exploration Administration
Washington 25, D. C.

Subject: Docket No. DMEA 2468 (tungsten)
Western Mines Company
Powell County, Montana

Dear Mr. Selfridge:

Enclosed are three copies of a specimen contract for the work proposed in the subject application. This contract has been revised to show in greater detail the estimated costs of the project. These costs were discussed with and agreed to by the applicant.

The delay in supplying you this information was occasioned by a misstatement in the application regarding ownership of the property. We had hoped to clear up this matter quickly and include a correction in this letter.

Mr. Pat Phalen signed the application as president of the Western Mines Company, indicated to be a corporation holding title to the claims on which the proposed work would be done. Actually, there is no such corporation, although it was Mr. Phalen's intention to form one if the project was approved. In addition, the property is recorded in the names of Mr. Phalen and a Mr. Hopkins who is a former partner. Mr. Phalen was negotiating to buy Hopkins' interest at the time the application was submitted. Those persons indicated in the application as owning Western Mines Co. stock had purchased part of Mr. Phalen's interest in the property.

Mr. Phalen was advised that a contract could not be negotiated with a non-existent corporation and that ownership of the property would have to be established before proceeding with the application. He promised that he would take action to transfer title to the property to an existing corporation of which he is an officer, and amend his application accordingly.

Evidently Mr. Phalen's negotiations have taken longer than he anticipated as we have heard nothing from him for a week. You will be informed immediately of any new developments.

By Field Team, Region II

A. E. Weissenborn

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

M. E. Volin

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

Enclosures

cc: USGS, Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON Division St.
Spokane 2, Wash.
August 22, 1952

Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloy Division
Defense Minerals Exploration Administration
Washington 25, D. C.

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

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

Enclosures

cc: USGS, Spokane

DMEA, Wash. (3)

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

1200 N. Division St.
Spokane 2, Wash.
August 22, 1952

Mr. G. C. Selfridge, Chief
Iron and Ferro-Alloy Division
Defense Minerals Exploration Administration
Washington 25, D. C.

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By Field Team, Region II

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

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

Enclosures

cc: USGS, Spokane

DMEA, Wash. (3)

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

DOCKET NO. DMEA 2486X

COMMODITY Tungsten

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Powell, described as follows: [3] Four unpatented lode mining claims known as New Progress No. 1, New Progress No. 2, Old Timer No. 1, and Old Timer No. 2, in Secs. 22 and 23, T. 13 N., R. 10 W., Ogden Mountain Mining District.

the Operator represents and undertakes: [4]

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

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

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

ARTICLE 3. *Exploration project.*—The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] tungsten

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $16,237.50, which is 75 percent of $21,650.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(Operator)

By _____

By _____

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

_____

[CORPORATE SEAL]

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

Western Mines Company
Helmville, Montana
Exploration Project Contract

Exhibit "A"

Description of Work

The purpose of this project shall be to determine the extent and grade of the tungsten bearing vein or veins on the property, the presence of which are indicated by tungsten ore in old adit dumps.

The project shall be divided into two stages, the first stage to consist of bulldozer trenching to locate the vein or veins. The first trench shall be dug near the portal of the old No. 1 adit, as indicated on the attached sketch map. The location of each succeeding trench shall be determined by information gained from preceeding trenches.

The second step, to determine at depth the extent and grade of any vein or veins exposed by the surface trenching, to be undertaken only on Government approval, shall consist either of 1500 feet of diamond drilling or 375 feet of drifting and crosscutting. The location and extent of the work to be performed in Stage II shall be based on the results of the trenching and shall be mutually agreeable to the Operator and the Government.

In order to provide access to the site of the work, roads and trails shall be constructed and improved to the extent approved by the Government.

ESTIMATED COST SUMMARY

* Indicates Allowable Maximum

Time schedule estimated -- - - - - - - - - 2 months

Stage I

(1)	Independent Contracts	
	Trenching, 150 hours bulldozing @ $15.00/hr 1/	$2,250.00*
	Roads & trails, 33 hours " @ $15.00/h4 1/	495.00*
(2)	Labor, Supervision & Consultants	
	Supervisor to supervise dozing and do necessary sampling, 2 months @ $400/mo	800.00*
	Consultants	400.00*
		$1,200.00*

1/ Fully Operated

(3) Operating Materials & Supplies
Small tools, sample bags, miscellaneous supplies $ 205.00

(4) Operating Equipment
To be rented: None
To be purchased: None
To be furnished:

Item	Monthly depreciation allowable	Period of use	Total
Pickup truck	$25.00	2 months	$ 50.00*
		Total	$ 50.00*

(5) Rehabilitation & Repairs
None

(6) New Buildings, Improvements, Installations
None

(7) Miscellaneous
Analytical work $ 550.00

(8) Contingencies 150.00

Total for Stage I $4,900.00

Stage II (Alternative No. 1)

(1) Independent Contracts
Road improvement $1,500.00*

Total (1) $1,500.00*

(2) Labor, Supervision and Consultants
Supervision, 5 mos. @ $550/mo 2,750.00*
Labor for drifting and crosscutting 4,125.00
Miscellaneous labor 300.00

Total (2) $7,175.00

(3) Operating materials and Supplies
All supplies, materials necessary to complete drifting and crosscutting operations that are not specified elsewhere in the contract 3,460.00

Total (3) $3,460.00

(4) Operating Equipment

To be rented:

Item	Monthly Rental	Period of use	Total
Compressor	$212.00	5 mos.	$1,060.00*
Jackhammer & Jackleg	50.00	5 mos.	250.00*
Mine car	10.00	5 mos.	50.00*
	Total, to be rented		$1,360.00*

To be purchased:

Operator may at his discretion purchase the above items of equipment in lieu of renting them. In such case the Government will participate in the cost thereof, but only to the extent specified above for rental.

To be furnished:

Item	Monthly depreciation allowance	Period of use	Total
Chain-saw	$7.00*	5 mos.	$35.00*
Truck	25.00*	5 mos.	125.00*
	Total, to be furnished		$160.00*
	Total (4)		$1,520.00*

(5) Rehabilitation and Repairs

None

(6) New Buildings and Installations

Rack and fuel dump	$50.00*	
Small shed	100.00*	
Small tool house	100.00*	
Total (6)		$ 250.00*

(7) Miscellaneous

Payroll taxes	$681.00	
Analytical work	800.00*	
Accounting, 5 mos. @ $75/mo*	375.00*	
Total (7)		$1,856.00

(8) Contingencies 989.00

Total cost of Stage II 1/ $16,750.00*

*"Maximum allowable"

Stage II (Alternative No. 2)

Exploration by diamond drilling
Time schedule estimated to be 3 months.

(1) Independent contracts

Road improvement	$1,500.00*	
Diamond drilling 1500 ft. @ $7.50/ft.	11,250.00*	
Total (1)		$12,750.00

Costs of all equipment, supplies, labor and other costs of drilling are included in the cost per foot except items specifically set forth elsewhere in the contract.

(2) Labor, supervision and consultants

Consultants	$1500.00*	
Miscellaneous labor	300.00	
Total (2)		$1,800.00

(3) Operating materials and supplies
Any items that may be necessary and not furnished by independent contractor will be under contingency item (8)

(4) Operating equipment
To be rented:
None

To be purchased:
None

To be furnished:

Item	Monthly depreciation allowance	Period of Use	Total
Truck	$25.00*	3 mos.	$75.00*
	Total (4)		$75.00

(5) Rehabilitation and repair
None

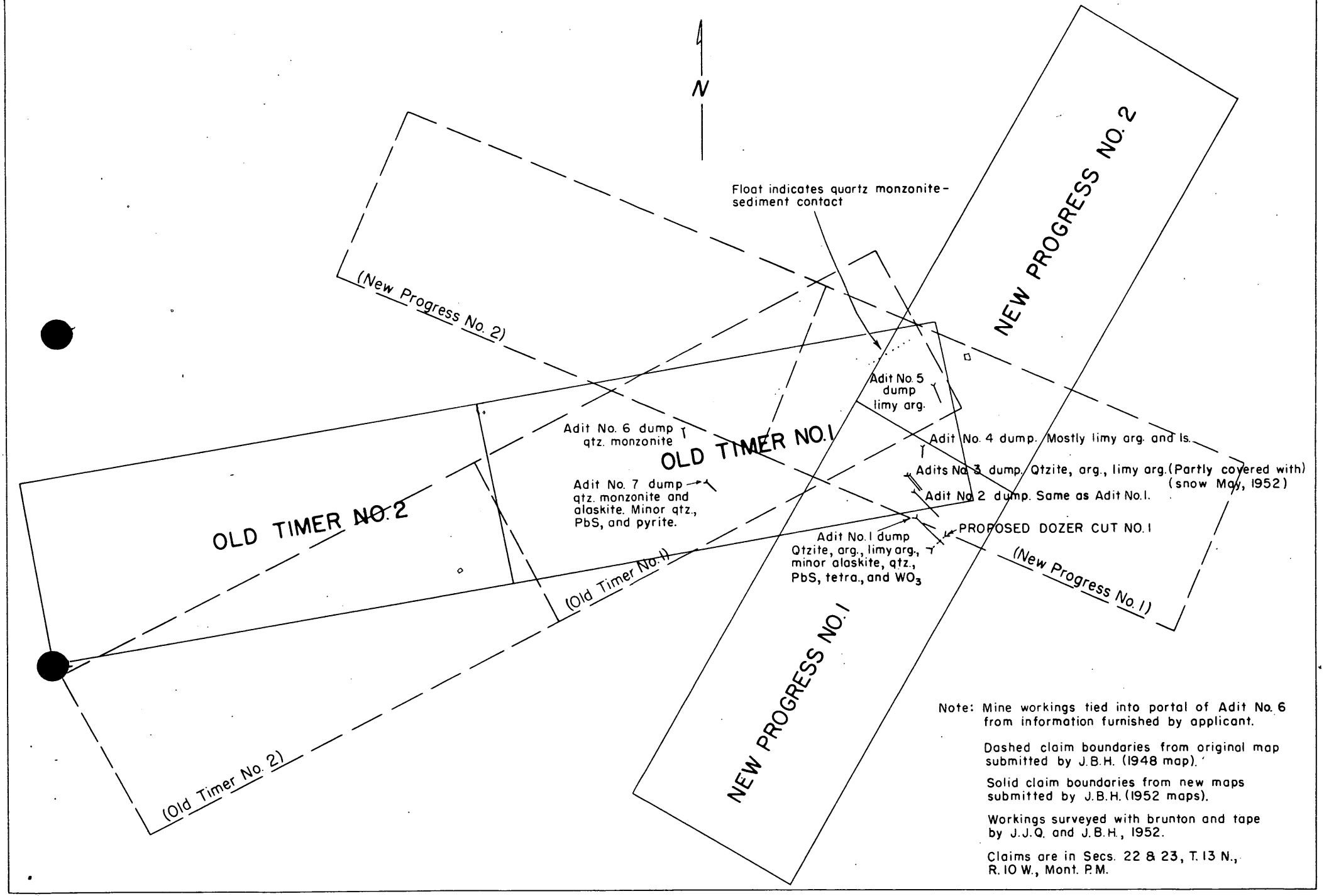
(6) New buildings, improvements and installations
None

(7)	Miscellaneous		
	Payroll taxes	$216.00	
	Analytical work	800.00	
	Accounting, 3 mos. @ $75/mo*	225.00*	
	Travel expenses for consultants	100.00*	
	Total (7)		$1,341.00
(8)	Contingencies		784.00
	Total cost of Stage II 2/		$16,750.00*

*Maximum allowable

Total cost of the project, Stage I & Stage II 1/ $21,650.00

Total cost of the project, State I & Stage II 2/ $21,650.00



CLAIM MAP SHOWING LOCATION OF PRINCIPAL ADITS AND DUMPS OF TUNGSTEN AREA
WESTERN MINES CO., POWELL COUNTY, MONTANA

400 200 0 400 800 1200 FEET

FILE COPY
SURNAME:

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION
GCSelfridge
5284
3538
Selfridge

August 21, 1952

S. Warren Hobbs, Acting Member, DMEA Field Team, Region II, South 157 Howard St., Spokane, Washington

Docket No. DMEA 2468 - Western Mines

When can we expect further detail on estimated costs Selfridge recently discussed with you by telephone?

C. O. Mittendorf (fw) 8/21

C. O. Mittendorf,
Acting Administrator, DMEA

GCSelfridge:ls 8/21/52

Copy to: Docket DMEA 2468
Admn. Read. File
G. C. Selfridge
~~Audit~~
Audits

FILE COPY 400
SURNAME:
Ka
Chapman
Selfridge
Copy

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

AIR MAIL

AUG 7 1952

Western Mines Company
Helmsville, Montana

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress and Old Timer Claims
Powell County, Montana

Gentlemen:

Please send us the following data as soon as possible:

Book and page number, and date of location for New Progress and Old Timer claims.

Sincerely yours,

George C. Selfridge

S.N.
8-7-52

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

TLChapman:lm
8/6/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
G. C. Selfridge
T. L. Chapman

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

August 5, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Western Mines Company — DMEA 2468
New Progress and Old Timer Claims — Tungsten
Powell County, Montana

Proposal: Trenching ($4, 900) and diamond drilling $16, 750.

General: Scheelite has been found in quartz piles on the dumps at two caved adits. There is no other information regarding tungsten mineralization. Samples of the ore piles gave low results, except a sample of "specimens". (Specimens 3.66% WO_3, Grab 0.06%, Grab 0.10%). The Field Team recommends approval of a two stage project as outlined in a sample contract.

Recommendation: Approve trenching in two stages. Limit stage 1 to $3, 000, to be followed by $1, 900 more if Field Team approves. As there is no data on which to base a drilling or drifting program at this time, I do not believe it should be included in the contract.

Robert W. Geehan

Robert W. Geehan

Attachment

Copy retained 400

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

August 5, 1952

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Robert W. Geehan

Attachment

Copy to Field Team

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

August 5, 1952

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New Progress and Old Timer Claims Tungsten
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Robert W. Geehan

Attachment

Copy to Field Team

IN REPLY REFER TO:

G-MD-CF

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

July 31, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, USGS

Subject: Field report DMEA 2468 - Tungsten
Western Mines Company
New Progress and Old Timer claims
Powell County, Montana

This group of 4 claims was briefly visited September 3, 1951 by J. W. Taber, Bureau of Mines, and again examined May 20 and 21, 1952 by J. J. Quinlan, Geological Survey. Quinlan's memorandum of July 1, 1952 concurs with Taber's memorandum, and recommends a small exploration project to consist of bulldozer trenching and geologic mapping as stage I, followed if warranted by 1,500 feet of diamond drilling or 375 feet of drifting as stage II.

The only scheelite visible on the property at the time of examination was on dumps of adit No. 1 and adit No. 2, which are 85 feet apart. The dump of adit No. 3 was under snow, and may also have some scheelite. All 3 dumps fall in a straight line 140 feet long. The dumps suggest that the scheelite occurs in a quartz vein about 18 inches wide, accompanied by galena and tetrahedrite.

The scheelite showing, although apparently of minor importance, probably warrants some more prospecting by bulldozer trenching as recommended by the field team. Unless a great deal more vein is found than is indicated at present, the maximum recommended core drilling (1,500 feet) would certainly not be warranted, and I am dubious about setting up more than 1,000 feet as a possibility.

I have not seen a draft of the proposed contract prepared by the field team, and consequently cannot comment on costs. The Field Team suggestion that the contract provide for supervision by a geologist hired only after approval of the Field Team is particularly valid in this instance, for the geologic information presented by the applicant or by J. B. Hopkins is inadequate and misleading.

Copy retained 400

IN REPLY REFER TO:

G-MD-CF

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

July 31, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, USGS

Subject: Field report DMEA 2466 - Tungsten
Western Mines Company
New Progress and Old Timer claims
Powell County, Montana

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DMLemmon:gt

IN REPLY REFER TO:

G-MD-CF

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

July 31, 1952

Memorandum

To: George G. Selfridge, DMEA

From: D. M. Lemmon, USGS

Subject: Field report DMEA 2468 - Tungsten
Western Mines Company
New Progress and Old Timer claims
Powell County, Montana

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DMLemmon:gt

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

July 11, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 18 1952

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region II

Subject: Docket No. DMEA 2468-Tungsten, Western Mines Company, New Progress and Old Timer Claims, Powell County, Montana

Enclosed are the original and 3 copies of a memorandum by J. J. Quinlan, USGS and 4 copies of a memorandum by E. G. Erickson, USBM. These memoranda answer questions in Mr. Mittendorf's letter of April 24, 1952, requesting additional information needed to write a contract on the subject application.

There has been some delay in answering the letter as it was necessary to make a field examination in order to answer several questions. Weather conditions did not permit a field examination until the latter part of May.

The field examinations indicated that a part of the proposed exploration would not be conducted on the applicant's claims. The applicant was advised of this matter and had Mr. J. B. Hopkins prepare a new set of maps, further delaying action.

The field team recommends that the modified exploration program as outlined in Mr. Quinlan's and Mr. Erickson's memoranda be given favorable consideration.

By DMEA Field Team, Region II

A. E. Weissenborn

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

M. E. Volin

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

cc: USBM-Albany
USBM-Spokane
USGS(SRO)

13771

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

REFERENCE SLIP

DATE 7-19-52

REFERRED TO:

1. ~~Mrs Berry Rm 4624~~
2. ~~Op Com~~
3. ~~Miss Jenkins R4539~~
4. CODE 400 - RM 3538

FOR:

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

REMARKS: Agenda 7/25

Check (X) before the items needing attention.

Adams (AA)
Initial of sender

INT.-DUP. SEC., WASH., D.C.

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

So. 157 Howard Street
Spokane 4, Washington

July 1, 1952

Memorandum

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

From: J. J. Quinlan, Geologist, U. S. Geological Survey

Subject: Field Examination, Docket No. DMEA-2468X, Tungsten, Western Mines Company, Powell County, Montana.

Re: Letter dated April 24, 1952 from C. O. Mittendorf, Acting Administrator, DMEA.

INTRODUCTION

This memorandum concerns a field examination of the Western Mines Company's New Progress and Old Timer claims, Powell County, Montana.

Mr. Mittendorf's letter requests answers to nine specific questions, the first seven of which deal with geologic problems, the last two with operating equipment and diamond drilling rates. This memorandum is designed to answer the first seven questions and to point out several other matters relative to the proposed contract.

The property was examined by J. W. Tabor, Mining Engineer, U. S. Bureau of Mines, September 3, 1951. Mr. Tabor prepared a memorandum recommending approval of a limited exploration project. Mr. Tabor's geologic description of the deposit is quite adequate, considering that the prospect was examined before the applicant planned to apply for a DMEA loan and incidental to other business with the applicant.

The application contains a geologic description of the deposit. Mr. Pat Phelan, President, Western Mines Company, reports that this portion of the application was prepared by Mr. D. E. Browne, a mining engineer principally experienced in placer mining operations.

Reviewed by
DMEA OPERATING COMMITTEE
7-25-52
(date)

Mr. Browne's description of the deposit indicates that the vein follows a granite-limestone contact. This is illustrated by the "sketch showing typical trench section." Incidentally, from the slope of the hill shown in the section, I presume this is a section looking northeast; if it is, the position of the limestone and granite should be reversed.

Meager evidence available indicates that the "veins" do not follow the contact, and the description of the deposits in the application is wholly inadequate and misleading. I suggest that DMEA not attempt to use any of the geologic information furnished in the original application in evaluating the project.

Following the DMEA field examination, the applicant had Mr. J. B. Hopkins prepare a set of 4 maps, which have been submitted to this office. Copies of these maps accompany this memorandum. The maps, drawn on several different scales, show claims, workings, geology, and proposed dozer cuts.

The workings located on the different scale maps do not coincide. The maps present an idealized picture, not necessarily correct in details. From the information now available, I do not believe it is practicable to lay out all the dozer cuts in advance (see "Discussion of Proposed Exploration" in this memorandum).

LOCATION

A brunton and pace traverse from the Blackfoot mine camp located the claims in secs. 22 and 23, T. 13 N., R. 10 W., Ogden Mountain Mining District, Powell County, Montana. The application states the claims are in sec. 23. The new maps submitted by the applicant show the claims to be in secs. 22 and 23.

A sketch map (see Plate II) prepared during the examination shows the workings in the tungsten area. These workings could not be tied to any claims as no claim corners could be located. Following the examination, the applicant furnished a sketch map by J. B. Hopkins, 1948, and the position of Adit No. 6, as shown on this map, was used as a base point from which my survey was oriented. Using this information, it was determined that Adit No. 1 was not on the applicant's claims and part of the proposed exploration would also not be on the applicant's claims (see dotted claim boundaries on Plate II).

The new maps prepared by J. B. Hopkins show a great change in the location of claim boundaries; these boundaries are shown as solid lines on Plate II.

RESUME OF FIELD EXAMINATION

A field examination of the Western Mines property was made May 20 and 21, 1952. Three representatives of the applicant accompanied me on the examination: Mr. Pat Phelan, President, Western Mines Company; Mr. John Phelan, Director, Western Mines Company; and Mr. J. B. Hopkins, one time owner of the property. Mr. Hopkins is a geologist now employed by the Atomic Energy Commission at Moab, Utah.

Underground workings on the claims were inaccessible. The adit dump and pits were inspected and lamped for scheelite, as was the surface along the contact for a distance of approximately one mile. The accessible workings of the nearby Blackfoot mine were inspected and lamped; these workings showed no scheelite.

Mr. Hopkins called to my attention a thesis prepared by Koehler Stout 1/ describing the Ogden Mountain mining district. This thesis was reviewed at the Montana School of Mines Library, Butte, Montana.

GEOLOGY

The geology of the Ogden Mountain mining district is described in Koehler Stout's 1/ thesis.

The district is principally underlain by argillites, quartzites, and limestones belonging to the Belt series of pre-Cambrian age. A small quartz monzonite stock, approximately five square miles in area occupies the central portion of the district. Plate 1, accompanying this memorandum shows the general geology of the district in the vicinity of the applicant's claims. The plate was prepared by J. B. Hopkins, and infers that the geology was done by J. B. Hopkins, whereas comparison of the plate with K. Stout's thesis map showed it to be a copy of a portion of Stout's map with minor addition. When this was brought to Mr. Hopkins attention, he admitted the map was after K. Stout, and the cross section prepared from Stout's map.

Stout's thesis indicates the veins of the district are narrow, a few inches up to 36 inches wide, averaging 18 inches. The veins are found both in sediments and quartz monzonite, a few veins being continuous from the quartz monzonite into the sediments. The veins have been exploited for their gold and silver values. Stout reports the occurrence of minor amounts of scheelite in several veins of the district, however, no mention is made of any scheelite in the

---

1/ Stout, K., Geology and Mines of Ogden Mountain Mining District, Powell County, Montana, M. S. Thesis, Montana School of Mines, 1948.

vicinity of the applicant's claims. Significant amounts of scheelite accompanying auriferous gravels have been found during the course of placer operations in the area. The tungsten lode prospect the applicant proposes to explore is in the Belt sediments near the east margin of the quartz monzonite stock. Details of the geology in the area are obscured by dense timber and undergrowth. All mine workings in the area were inaccessible at the time of the examination.

Stout's thesis map shows the sediments along the east margin of the stock to be a part of the Spokane formation. However, the limy nature of the sediments on the adit dumps in the tungsten area suggest the wall rock of the tungsten deposit probably is a part of the Newland formation and not a part of the Spokane formation as Stout's map shows.

The contact metamorphic effect of the igneous stock on the sediments appears to be slight. Stout reports the sedimentary rocks along the contact are very dense and hard, although the color is unchanged. No contact metamorphic minerals were noted in the float or on the dump in the vicinity of the applicant's claims.

Scheelite was noted in small ore piles on the No. 1 and No. 2 adit dumps (see Plate 2 for location). The No. 3 adit dump was mostly covered with snow. It is quite probable that it also has similar small ore piles. The small ore piles, obviously selected vein material, show the mineralogy of the vein to be predominantly quartz with minor amounts of galena, tetrahedrite, and scheelite. The scheelite occurs as massive pods up to 2 inches in size, as well as disseminated grains. A grab sample from the No. 1 adit dump ore pile assayed: 0.03 ounces gold, 4.0 ounces silver, 1.0 percent lead, and 0.06 percent WO_3. A grab sample from the No. 2 adit dump assayed: 0.14 ounces gold, 15.0 ounces silver, 5.4 percent lead, and 0.10 percent WO_3. A selected sample of specimens containing scheelite assayed: 0.01 ounces gold, 0.8 ounces silver, no lead, and 3.66 percent WO_3. The tungsten values shown in the grab samples appear to be low. The ore piles lamped much better than the assay values show. The reason for this is probably due to the small size of the grab samples (10 pounds) and the pod-like nature of the scheelite. Although other dumps in the area and approximately a mile of traverse along the hillside were lamped, the only other scheelite noted was a specimen found along the trail to the dumps. This specimen undoubtedly came from one of the ore piles on the adit dumps.

The strike and position of the adits in the tungsten area suggest that the adits were driven along a vein striking southeast and dipping 30° to 40° SW. A few pieces of alaskite found on the dump suggest that the vein may be associated with a small dike. Float along the hillside indicates the adits are 200 to 400 feet northeast of the quartz monzonite stock.

DISCUSSION OF PROPOSED EXPLORATION

The specimens of scheelite on the several adit dumps indicate that a small exploration project to find out more about the deposit is justified.

Inspection showed the adits in the tungsten area to be caved for a distance of 40 to 60 feet from the portal, and it is impossible to predict just how much more of the adits might be caved. The size of the dumps indicate the adits are not over 100 to 150 feet in length. For these reasons, I do not believe it practicable to attempt to open up the adits with hand labor. However, a small dozing program intelligently directed would show if further work is justified.

As so little is known about the deposit, the location of each successive cut is dependent on the preceding cuts. Therefore, it is suggested that the applicant employ a competent geologist to direct the dozing. The first cut should be located at the end of the cave above the No. 1 adit.

The proposed dozing program is rather intangible; therefore, ample funds should be made available to prospect the vein in the tungsten area. If this is successful, it would be well to expose some of the veins upon which work has been done in the quartz monzonite, attempting to trace these veins into the sediments to see if they contain tungsten out in the sediments.

If a competent geologist is hired to direct the dozing, he should be able to tell with a very few cuts if additional dozing is warranted. He should be instructed not to use all the funds allowed in the contract for dozing, unless it is warranted and each successive cut should be justified on the information gained from the preceding cuts. For the above stated reasons, I believe it would be well to have the Field Team approval of the geologist hired to direct the dozing.

Stage II of the project is predicated on the successful completion of the dozing program and is to be undertaken only on Field Team approval. Again, the evidence available does not give sufficient information to plan a detailed program. Therefore, two alternative programs are recommended: (1) 1500 feet of diamond drilling, or (2) 375 feet of underground exploration. These should be maximum allowable items, and the Operator need not use all the funds available if the Field Team does not believe it to be justified.

A specimen contract has been prepared by E. G. Erickson, U. S. Bureau of Mines, for such a program, a copy of which is attached to Mr. Erickson's memorandum.

ANSWERS TO QUESTIONS

1. Do the adit dumps show contact zone minerals indicating they have reached this zone?

No contact metamorphic minerals were noted in the area. The adit dumps in the tungsten area consist of quartzites, argillites, and limy argillites, with subordinate amounts of vein material and alaskite.

The adits in the tungsten area are 200 to 400 feet northeast of the contact. The adits are portaled in sediments and are driven in the opposite direction from the contact.

Two adits west of the tungsten area are portaled in quartz monzonite. These adits are driven toward the contact, however, the dumps indicate they did not reach the contact. No scheelite was noted on these dumps.

2. Do the adit dumps show any granite indicating they have reached the contact?

See answer to question 1.

3. How would it be to open up these adits? If this could be done with moderate labor and cost, would it not be preferable to trenching and more informative? Being in limestone, the adits should be in good condition.

Inspection showed the adits in the tungsten area to be caved for a distance of 40 to 60 feet from the portals, and it is impossible to predict just how much more of the adits might be caved. The size of the dumps indicate the adits are not over 100 to 150 feet in length. For these reasons I do not believe it is practicable to attempt to open up the adit portals with hand labor. However, a small dozing program intelligently directed would show if further work is justified.

4. Applicant's sketch, showing a generalized plan of contact zone and crosscut adits would indicate that the contact is nearly vertical. The field report indicates that the contact zone and veins have rather a flat dip, which is borne out by the fact that the adit dumps are 300 to 500 feet down the hill from the assumed contact zone and the adit dumps indicate a maximum length of 150 feet for the adits.

The contact is not exposed in the immediate vicinity of the property. Sections prepared by K. Stout and John Hopkins show the contact to be flat dipping. Evidence indicates that the veins do not follow the contact. Float indicates that the contact is 200 to 400 feet down slope from the adits in the tungsten area.

5. A great difference would be made in the placement and length of diamond drill holes by the attitude of vein and contact zones. Anything that will help us in this question will help in estimating the footage of diamond drilling that will be necessary.

The diamond drilling program is dependent on the results of the trenching program. It would be impossible to intelligently plan a drilling program at the present time. However, I believe funds should be made available on the basis of allowable maximum for a drilling or drifting program, depending on the information and results obtained from the trenching program.

6. A sketch from a brunton survey always helps in laying out the work. This should include a plan or cross section or two.

See maps accompanying memorandum.

7. A few assays from samples of available material are always a great help in arriving at conclusions.

Sample No.	Gold (ozs. per ton)	Silver (ozs. per ton)	Lead Percent	WO_3 Percent
WM-1	0.01	0.8	None	3.66
WM-2	0.03	4.0	1.0	0.06
WM-3	0.14	15.0	5.4	0.10

Description of samples

WM-1 Specimens containing scheelite upper adit dump

WM-2 Grab sample - ore pile upper adit dump

WM-3 Grab sample - ore pile mid adit dump

The tungsten values shown in the grab samples appear to be low. The ore piles lamped much better than the assay values show. The reason for this is probably due to the small size of the grab samples (10 lbs.), and the pod-like nature of the scheelite.

cc: USBM, Albany
USBM, Spokane
DMEA, Wash., D.C.
USGS (SRO)

J. J. Quinlan,
Geologist

1201 N.Division St.
Spokane 2, Wash.
June 25, 1952

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: E. G. Erickson, mining engineer, Bureau of Mines

Subject: Docket DMEA 2468X (tungsten), Western Mines Company, Jefferson County, Mont.; ~~T. L. Chapman's~~ C. O. Mittendorf's letter dated April ~~23~~ 24, 1952.

Mr. ~~Chapman~~ Mittendorf has requested further information concerning the captioned docket. Questions 1-7 inclusive will be answered by the U. S. Geological Survey, and I will comment on questions 8 and 9.

Question 8. "The Field Team makes no reference to the costs as presented by the applicant. Agreement with or criticism of these costs would be of assistance in writing contracts; i.e., the bulldozer and pickup truck belong to the applicant and would only be subject to depreciation and not rental. We should have some idea as to the condition of these machines in order to figure fair market values.

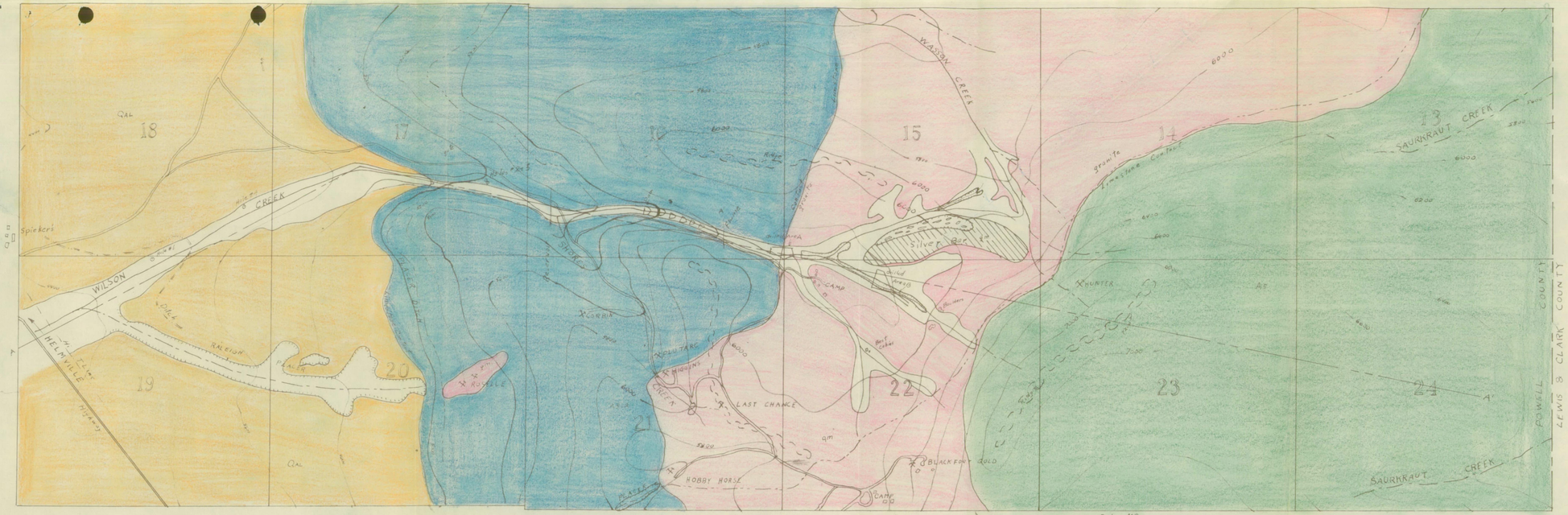
"The rental cost of compressor and machines at $150.00 per week is much too high."

Apparently Mr. ~~Chapman~~ Mittendorf at the time of his review of the application did not have the specimen contract forwarded with the Field Team's letter of recommendation. It is pointed out that depreciation allowances calculated on the basis of estimated fair market values were set up in the specimen contract. For example, monthly depreciation allowances of $267 and $25 were established for the bulldozer and pickup truck. With respect to rented operating equipment, allowable monthly rentals for a 105 cfm compressor and jackhammer were established at $212 and $50.

Question 9. "Advise as to going rate of diamond drilling in this area and the availability of contractors."

At the present time, five diamond drill contractors are more or less active in this region. Quotations for drilling prices in advance of an invitation to bid cannot be obtained because of widely varying conditions with respect to access, availability of

DMEA DOCKET No. 2468
PLATE I



PASSABLE ROAD
PLACER DITCH
INTERMITTENT STREAM
MINES
BUILDINGS
PLACER CUTS
PLACER DAM
200' CONTOUR INTERVAL. DATUM - SEA LEVEL

N.
W
E

(T13N, R10W, MONTANA)

JB Hopkins
after K. Stout
March 1951

SCALE

0 ¼ ½ ¾ 1 MILE

Map No 2

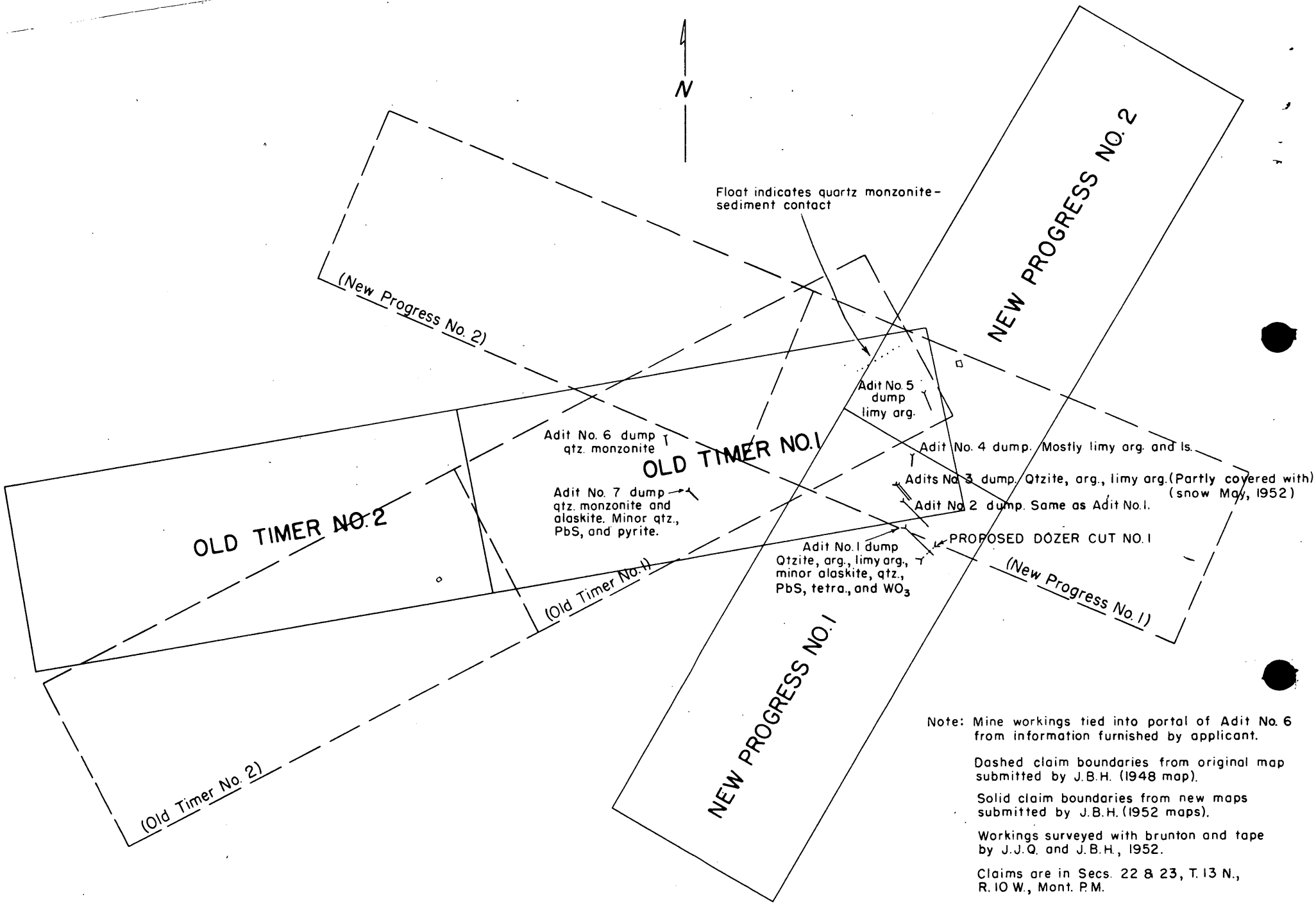
SEDIMENTARY ROCKS

Qal ALLUVIUM
Ao SPOKANE
Ans, Ans, Ans, Ans NEWLAND
Ag GRINNELL
Ap APPEKUNNY
RAVALLI SITEH BELT

IGNEOUS ROCKS

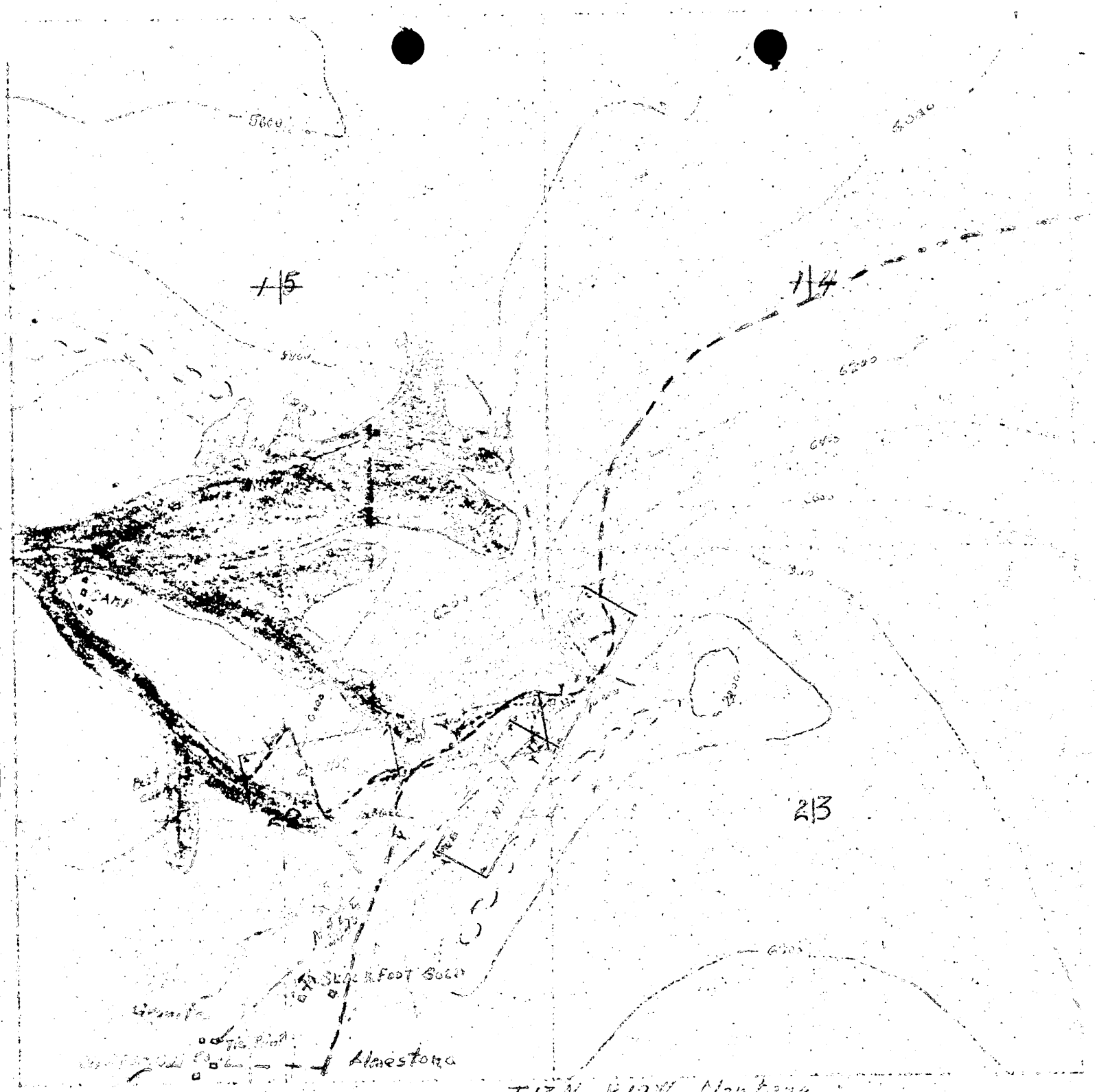
Qm QUARTZ MONZONITE

HOPKINS MINES INC. - PLACER



CLAIM MAP SHOWING LOCATION OF PRINCIPAL ADITS AND DUMPS OF TUNGSTEN AREA
WESTERN MINES CO., POWELL COUNTY, MONTANA

400 200 0 400 800 1200 FEET



T13N R10W Montana.

EXPLANATION

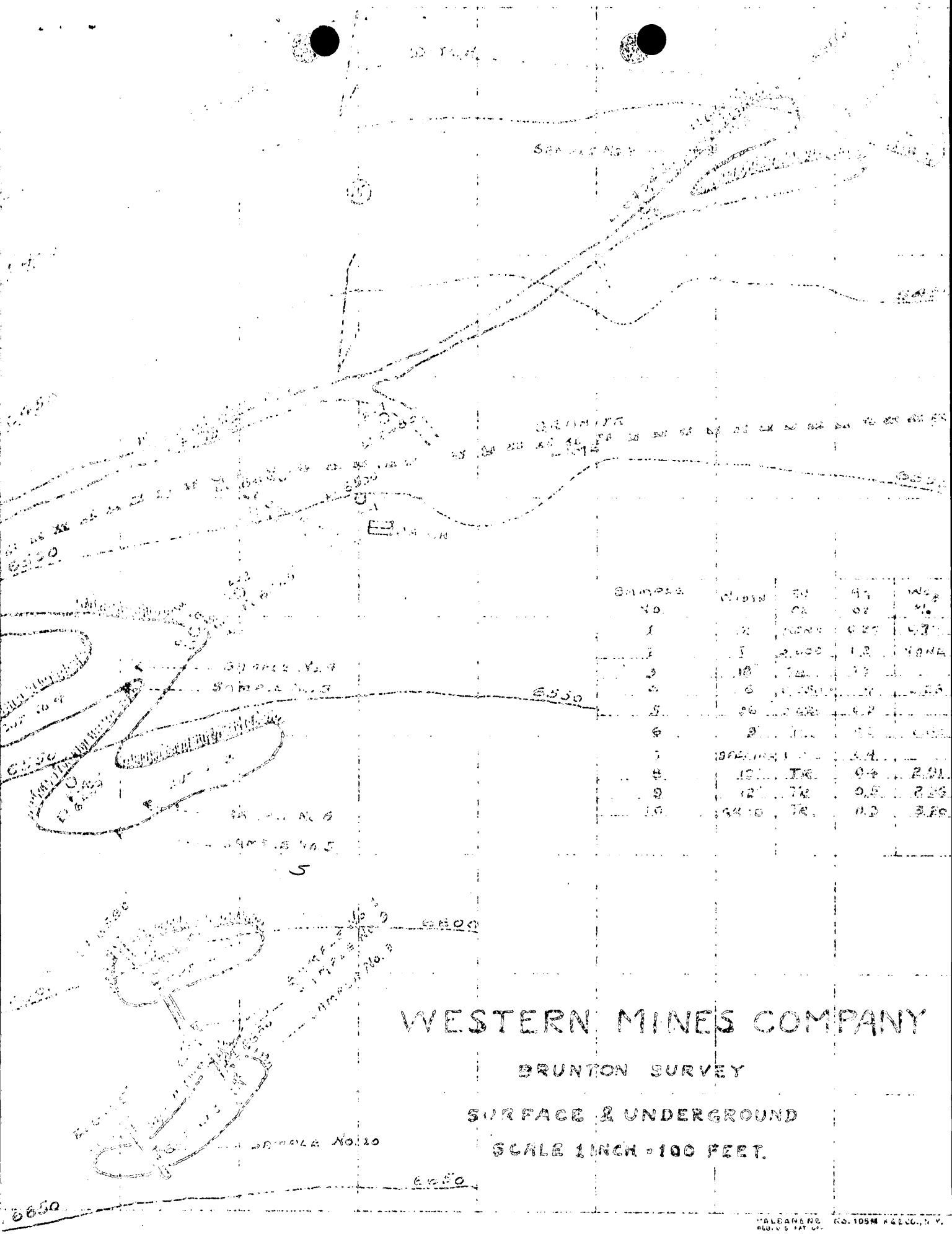
Montana June 1952.

SCALE

OVER LAY

Map No. 1 of 4

Lot 4 Sec 2



SAMPLE No.	WIDTH	Au OZ	Ag OZ	Wo %
1	[illegible]	NONE	0.20	[illegible]
2	5	2.00	1.2	NONE
3	18	TR.	[illegible]	
4	6	[illegible]	[illegible]	[illegible]
5	36	[illegible]	0.2	
6	8	[illegible]	[illegible]	[illegible]
7	[illegible]		0.4	
8	18	TR.	0.4	2.01
9	12	TR.	0.5	2.56
10	[illegible]	TR.	0.3	3.20

WESTERN MINES COMPANY

BRUNTON SURVEY

SURFACE & UNDERGROUND

SCALE 1 INCH = 100 FEET.

HALBERG NO. 105M K&E CO., N.Y.

Docket 400

FILE COPY
SURNAME:

Chapman
Selfridge

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

APR 24 1952

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

Re: Docket No. DMMA 2468X - Tungsten
Western Mines Company
New Progress and Old Timer Claims
Powell County, Montana

Dear Mr. Weissenborn:

We acknowledge the receipt of application for exploration assistance by the Western Mines Company and the report by J. W. Taber, of the field team.

Before we can write a contract we would like to have more information.

1. Do the adit dumps show contact zone minerals indicating they have reached this zone?

2. Do the adit dumps show any granite indicating they have reached the contact?

3. How difficult would it be to open up these adits? If this could be done with moderate labor and cost, would it not be preferable to trenching and more informative? Being in limestone, the adits should be in good condition.

4. Applicant's sketch, showing a generalized plan of contact zone and crosscut adits, would indicate that the contact is nearly vertical. The field report indicates that the contact zone and veins have rather a flat dip, which is borne out by the fact that the adit dumps are from 300 to 500 feet down the hill from the assumed contact zone and the adit dumps indicate a maximum length of 150 feet for the adits.

5. A great difference would be made in the placement and length of diamond drill holes by the attitude of vein and contact zones. Anything that will help us in this question will help in estimating the footage of diamond drilling that will be necessary.

6. A sketch from a Brunton survey always helps in laying out the work. This should include a plan or cross section or two.

7. A few assays from samples of available material are always a great help in arriving at conclusions.

8. The field team makes no reference to the costs as presented by the applicant. Agreement with or criticism of these costs would be of assistance in writing contracts; i.e., the bulldozer and pickup truck belong to the applicant and would only be subject to depreciation and not rental. We should have some idea as to the condition of these machines in order to figure fair market values.

   The rental cost of compressor and machines at $150.00 per week is much too high.

9. Advise as to going rate of diamond drilling in this area and the availability of contractors.

Sincerely yours,

C. O. Mittendorf (for) CC
4/24

Acting Administrator
Defense Minerals Exploration
Administration

TLChapman'lm
4/23/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
G. C. Selfridge
T. L. Chapman
Operating Committee

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

April 18, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Western Mines Company DMEA 2468, Tungsten
Helmville, Powell County, Montana

Since writing my memo on April 7, the report from the Field Team has been received. In view of the favorable recommendation in this report, it is recommended that this application be approved, subject to the negotiation of a contract such as suggested in the Field Team report.

Robert W. Geehan
Robert W. Geehan

Copy retained 400

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

April 18, 1952

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Robert W. Geehan

Copy to: Field Team

FILE COPY
Surname:

Geehan

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DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
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Robert W. Geehan

Copy to: Field Team

RWGeehan:lds

Copy to: Ferrous Metals
Mr. Geehan
F i l e s

DMEA-2468

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

1201 N. Division St.
Spokane 2, Wash.
March 25, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

MEMORANDUM

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

From: Field Team, Region II

Subject: Application for exploration assistance, Western Mines Co., Powell County, Mont.

Copy retained 400

The subject application and specimen contract accompanied by a memorandum report concerning the property by J. W. Taber, mining engineer, Bureau of Mines, are forwarded herewith for review.

It is the Field Team's belief that the relatively small step exploration program proposed by the applicant and detailed in the accompanying contract is fully justified in the light of available evidence.

A significant amount of scheelite accompanying auriferous gravels has been found widespread during the course of medium-scale placer operations. At the head of the placer basin massive float fragments unusually rich in scheelite have been recognized. Dumps marking the site of several caved prospect adits have been found to contain both massive and disseminated scheelite, accompanied by galena in a quartz gangue.

Inasmuch as nothing is known concerning the vein structure, its width or persistence, mechanical trenching of the inferred lode zone in the vicinity of the caved adit is considered advisable as an initial step of the exploration. If a definite vein structure is demonstrated by the trenching, it will be proved at depth by diamond drilling.

The applicant, who is both financially and administratively competent, intends to develop the property for production without further Government assistance provided the initial exploration is successful.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer

M. E. Volin

M. E. Volin, Member

Enclosures

cc: USGS, Spokane

DMEA-2468

1201 N. Division St.
Spokane 2, Wash.

September 25, 1951

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: J. W. Taber, mining engineer, Bureau of Mines

Subject: Preliminary examination of New Progress (Hopkins Mines) Tungsten Prospect, Powell County, Montana.

On September 3, I made a brief examination of this prospect incidental to other business with the principal owner of the deposit. The examination consisted of a quick inspection of the several dumps of the old caved prospect adits and an observation of the general situation of the workings with respect to topography and general geology of the area.

At the time of my examination, the company representative, Mr. Pat Phalan, indicated that his company primarily was interested in churn drill testing and ultimately placer mining for tungsten in the adjoining basin. The evidence of lode deposits at the head of the basin was then considered a side issue. Their tentative plan was to apply to the DMA principally for assistance on the placer deposit, and if permissible, to ask for some additional funds to prospect the apparent lode source of the tungsten.

Phalan is a retired fuel (propane) retailer, not formerly experienced in mining. He has employed a placer mining engineer for the present enterprise, thereby indicating his competency in administrative judgment.

Reviewed by
DMEA OPERATING COMMITTEE
4-9-52
(JHB) (date)

The tungsten lode prospects are situated low on the densely forested northwestern slope of Ogden Mountains, at the head of Wilson Creek. They are reached by a new company-built road up Wilson Gulch, thence by a trail along an old placer ditch skirting the lower slope of Ogden Mountain. The roads are adequate for summer access to the point where the trail begins. About 1 mile of near-level road would have to be built to replace the trail for equipment access to the lode area.

The prospect pits are at about 6,800-foot altitude on a moderately sloping bench on the otherwise steep mountainside. The bench directly overlooks the narrow basin heading Wilson Creek. Five old adit openings were observed in an area roughly 800 feet along the contour of the hill and roughly 500 feet down the hill slope. All of the adits were caved at the portals. Dump sizes indicated that none of the adits could have been longer than about 100 feet. In addition to the adits, there is faint evidence of old trenches which presumably represent the original prospect tracing of float to find the veins.

The general geology of the area is not readily or clearly apparent because of dense timber and undergrowth with few outcrops. Directly up slope from the uppermost adit, about 300 feet distant, are outcrops of a limy metasediment series. Bedding appears to dip gently into the slope of the hill. Down slope from the adit openings abundant granitic float rock is evident. The inference is that the old prospect openings are in the vicinity of a contact between an igneous intrusive and the metasediments.

A group of three of the adits are positioned to suggest that a vein dipping about 40 degrees northerly and striking easterly into the hill was explored. A second group of two adits are so situated to suggest that a vein of high angle dip striking easterly was explored. In both cases the evidence is inferential.

The dumps from the adits on the low angle vein have small collections of quartz vein material. These ore piles, obviously select vein material, contain numerous pieces of quartz enclosing bunches of massive scheelite as well as some disseminated scheelite. A few small bunches of galena also were observed. One large quartz vein fragment had wall-like sides, suggesting a vein width of about 18 inches. The vein material resembled tungsten-bearing float found in the basin placer gravel. However, sherty float rock containing scheelite which has been found more abundantly in the basin placer gravel, bears no resemblance to the vein material found on the adit dumps.

The problem primarily is one of prospecting a suspected lode zone area for individual sources of the tungsten float found in the basin placer gravel. A beginning point obviously is the quartz vein formerly exposed in the old workings. A secondary target may be the apparent contact zone. Bulldozer trenching would be a suitable method to explore these areas.

The meager evidence now available suggests that the tungsten source probably consists of narrow quartz veins stemming from the granite. Should the trenching reveal persistent tungsten veins of sufficient size, a second exploration step of diamond drilling might be in order. Diamond drilling would, of course, be entirely contingent upon the findings of the trenching program and would be adapted accordingly.

The evidence now available is adequate to justify a small trench prospecting program. The proposal submitted to the DMA since this examination is about the maximum amount of trenching justified. The applicant's proposal to supplement the trenching program by cross-cutting underground does not appear advisable at this time.

It is recommended that the applicant's second step proposal be changed to diamond drilling not in excess of 1,500 feet and that the diamond drilling be made entirely contingent upon the findings of the trench program.

DMEA-2468

1201 W. Division St.
Spokane 2, Wash.
March 25, 1952

MEMORANDUM

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

From: Field Team, Region II

Subject: Application for exploration assistance, Western Mines Co., Powell County, Mont.

The subject application and specimen contract accompanied by a memorandum report concerning the property by J. W. Taber, mining engineer, Bureau of Mines, are forwarded herewith for review.

It is the Field Team's belief that the relatively small step exploration program proposed by the applicant and detailed in the accompanying contract is fully justified in the light of available evidence.

A significant amount of scheelite accompanying auriferous gravels has been found widespread during the course of medium-scale placer operations. At the head of the placer basin massive float fragments unusually rich in scheelite have been recognized. Dumps marking the site of several caved prospect adits have been found to contain both massive and disseminated scheelite, accompanied by galena in a quartz gangue.

Inasmuch as nothing is known concerning the vein structure, its width or persistence, mechanical trenching of the inferred lode zone in the vicinity of the caved adit is considered advisable as an initial step of the exploration. If a definite vein structure is demonstrated by the trenching, it will be proved at depth by diamond drilling.

The applicant, who is both financially and administratively competent, intends to develop the property for production without further Government assistance provided the initial exploration is successful.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer

M. L. Volin, Member

Enclosures

cc: USGS, Spokane

IN REPLY REFER TO:

G-MD-DML

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

April 9, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Exploration project $18,623.62 DMEA 2468 - Tungsten
Western Mines Co.
Helmville, Montana

Property: New Progress Nos. 1 and 2 and Old Timer Nos. 1 and 2
Section 23, T. 13 N., R 10 W.
Ogden Mountain
Powell County, Montana.

Proposal: It is proposed to expose and sample a contact zone between granite and limestone by surface trenching followed by 2 cross-cuts. Two miles of road will be constructed.

Conclusions: 1) The Geological Survey has no information about tungsten on these claims.

2) The applicant has not submitted sufficient information about geology and topography, and has given no assays.

3) It appears that considerable information about mineralization could be obtained from the 7 abandoned crosscut adits, and that some provision should be made for reopening them, or for sampling the dumps, as part of the project.

Recommendation: It is recommended that the application be referred to the Field Team, Region II, Spokane for examination of the property.

D M Lemmon

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2468
Metal or Mineral
Date Received 4-3-52
Amount $
Participation (Government %)

RECEIVED APR 3 - 1952

WESTERN MINES CO.,
HELMVILLE, MONTANA.

Name and address of applicant

September 8, 1951
Date

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

DMA Docket Number (if available) .....

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

By Patt. T. Phalen
(Signature of authorized official)
3-20-52

September 8, 1951
(Date)

President.
(Title)

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

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

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 1. (a) The proposed exploration project is confined to the contact zone situate within four unpatented lode Mining Claims located on the Western slope of Ogden Mountain in Powell County, Montana.

No present mine workings exist on the property. A series of abandoned cross-cuts and the accompanying dumps constitute the only evidence of previous operation.

(b) Applicant is the owner of subject property.

(c) The legal description of the property follows:

New Progress No. 1)
New Progress No. 2)
Old Timer No. 1)
Old Timer No. 2)

Each being a lode mining claim, 1500 feet long by 600 feet in width. Recorded individually in Township 13, Section 23, Range 10 West, Ogden Mountain Mining District, Powell County, Montana, at Deer Lodge, the County seat.

NOTE (1) Both areas are the same.

(2) Applicant is the owner.

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 2. (a) Applicant expects that exploration as proposed will result in the discovery of an extensive ore body containing commercial scheelite ($CaWO_4$) values. It is contemplated that proper investigation will furnish the basic information necessary to the development and operation of the deposit as a producing mine.

Applicant is prepared further to carry out a development program looking toward actual production during the summer of 1952.

(b) Geologic Features - General discussion:

The mineral deposit under investigation is located along a contact zone following the slope of an isolated granitic monolith of relatively small size. This intrusion may, perhaps, be more properly described as an igneous stock, resembling an eliptical dome in shape and flanked by lapping sedimentary rims.

The surrounding cover rocks consist mainly of massive, hard and blocky limestones, thin-bedded argillites, and interbedded quartzites.

Local Features -

Primary mineralization occurs within a contact zone lying between the granitic and adjacent limestone formations. The basic vein structure is presumably of the type generally associated with contact metamorphic fractures. It suggests itself that the enrichment sources are allied to the movement of solutions through temperature changes and pressure effects.

It is probable that the scheelite exists as a replacement deposit. The association of calcites, quartzites and vein materials containing disseminated fragments of altered limestone, jasperoids and cherts would indicate replacement processes as the basic depositing agency.

The inference from present evidence suggests that concentrated deposition occurs across the vein at intervals and probably in fissures.

The unusually high enrichment evidenced in samples available is not likely to extend in grade across the entire vein structure, altho no banding effect is likely to be present.

It would be perhaps, more accurate to anticipate an ore body composed of irregularily spaced quartz stringers accompanied by scheelite deposition as replacement mainly of the associated calcites.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

The vein structure under discussion has provided evidence of its direction, length and continuity through samples taken from a series of cross-cuts. These cross-cuts - seven in number, were driven at right angles to the general direction of the vein at intervals of approximately 150 linear feet. A total length of 1100 feet along the strike has been established with a clear evidence of consistently high grade scheelite occurance at each interval.

It is suggested that the existance of an uninterrupted vein over a distance of 1100 feet has been demonstrated. Scheelite enrichment over this length is established by the evidence of the cross-cut dumps. Probable continuation of the vein is presumed. However, the limit of extension is a matter of conjecture and no basis for estimate exists.

The question arises then, of the probability of an ore section of commercial grade. It would appear that a proper inference of ore is justified and that further exploration is consistant with sound geological probabilities.

Conclusions with respect to tenor and grade of inferred ore are based upon random samples taken from material excavated in the old cross-cuts. The dumps located at each portal contain specimens of ore ranging to 53.4% Ca WO_4, with occurance obtaining throughout the section. assay?

Examination by fluorescent light indicates a remarkable scattering of scheelite, frequently in massive clusters, in the broken rock. The fact that this evidence of heavy deposition is encountered consistently in each cross-cut lends support to the belief that a true orebody is present.

Existing information provides a proper basis for the conclusion that scheelite deposition may be wide enough to make ore and that determination of such width by exploration is warranted.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 3. (a) PROPOSED EXPLORATION -

General Purpose:

It is intended that the entire length of the vein structure be exposed by surface trenching at intervals of 200 feet over a contour distance of 1500 feet. Further information is to be obtained through interception of the vein by cross-cutting at two points along its exposed length, the location of such points to be determined by the results of surface trenching.

The exploration program as proposed will include the construction of a rough access road, movement of necessary equipment, supplies and other activity usually connected with an examination project of this type. All equipment, supplies and facilities necessary to the project are either owned by Applicant and at hand or are available immediately in the direct area.

Specific Work:

It is proposed that the project will be governed by the following rough sequence:

1) Road construction.
2) Establishment of temporary working facilities.
3) Surface trenching by bulldozing.
4) Channeling and sinking on vein.
5) Cross-Cutting.

The above schedule contemplates the probability of a certain overlapping of activity as the project develops, for instance the channeling and sinking on the surface exposures may accompany closely the trenching operations. It is conceivable that cross-cutting may be considered unnecessary should the results of surface work be unusually favorable. The converse may be true; surface exposure may indicate that deeper exploration is not justified.

Generally, however, the schedule set forth above is consistant with the purposes intended. A discussion of each item follows:

1) Road construction -

Applicant has constructed approximately five miles of road to his main camp facilities. Two additional miles of passable truck road are necessary for access to the site of the proposed exploration.

Location of this road is established partly along an abandoned ditch following the contour of the hillside. The right-of-way is partially cleared and local conditions are unusually favorable. An occasional rocky point must be shot out and three or four minor fills are necessary.

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WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Applicant has obtained a Forest Service permit, and no other legal obstacles are present. It is expected that a servicable truck road will be completed to site within ten days.

The cost breakdown:

Equipment	Opr. Hrs.	Rate	Total Cost
TD 18 International with Dozer	100	$10.00 pr.hr.	$1000.00
205 CFM Compressor	#	$150.00 pr.wk.	150.00
Chain Saw	50	1.00 pr.hr.	50.00
Pick-up Truck 1946 Ford 1/2 Ton	#	6.00 pr.day	60.00
	Total equipment charges - - - - - -		$1260.00

Compressor & Truck on stand-by and service rate. Estimated hrs. - 140.

Force	Hours	Rate	Total
Dozer Operator	100	$2.00	$200.00
Powderman	#100	1.85	185.00
Laborer	100	1.50	150.00
	Total Payroll expense - - - - - -		$535.00

Powderman to operate jackhammer, chain saw.

Supplies:

Item	Quantity	Cost
Fuel Oil	450 gallons	78.75
Gasoline	108 gallons	28.62
Lubricants	10 gallons	25.00
Powder & Caps	5 boxes	80.00
	Total supplies - - -	$212.37

Charges to road construction - - - - - - - - - - - - $2007.37

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HELMVILLE, MONTANA.

September 8, 1951

2) Temporary facilities at site : -

Good practice would suggest that a few rough arrangements be set-up for efficient and orderly conduct of the project. A grease rack and fuel dump, personnel shack and stove, tool house and sample dock provide adequate facilities usually.
Costs are estimated as follows:

Rack and Fuel dump - timber at site - - - - - - -	$ 50.00
Shack - Sheet iron - - - - - - - - - - - - - - - -	100.00
Tool house - Sheet iron - - - - - - - - - - - - -	50.00
Sample dock - Timber and lumber - - - - - - - - -	50.00
Total this item - -	$250.00

3) Trenching: -

Topographically, the exploration area is well suited to bulldozer - trench excavation. Sloping is not excessive, and yet efficient disposal of waste is permitted without long ramping. It appears that standard lift procedure will enable the dozer to excavate continously without the necessity for climbing out to rehandle waste. Surface features tend to show that downgrade and level dozing will be possible over an estimated 75% of each excavation.

At the crown, depth is indicated at an average of 20 feet, with linear distance of slope to the toe estimated at 150 feet. Vein exposure should be encountered at 100 feet linearally along the trench with the remaining void below grade used for dumping and lift. (See sketch)

In estimating progress on a trenching operation of this type, it is difficult to arrive at dependable yardage figures. Calculations must allow for local occurance of rock slides, tightness of material, and other obstacles requiring blasting, slight changes in direction and other problems which delay the dozer.

It is reasonably accurate to base such calculations upon the following factors: -

1) The first 10 feet will go fast with little dozer delay and no disposal problem.
2) The bottom 1/3 of the trench will furnish most of the trouble and yardage efficiency will drop by about 75%.
3) Similar experience has shown that lost time in handling obstructions will account for approximately 25% of the entire project time.

With these allowances considered, the trenching operation is outlined below:

Excavation: -

No. Trenches	Cu. Yds. each	length	Average depth	Bottom width
8	1000	150'	12'	15'

Distribution of time - %:-

Dozing	Drilling and Blasting	Clearing, etc.	Servicing & other
60%	25%	10%	5%

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HELMVILLE, MONTANA.

September 8, 1951

In admitting to estimate these charges to delay and low yardage expectancies, it is necessary to allow five full days for completion of each trench.

As a check on the foregoing, Applicant has referred to a cost and project analysis undertaken jointly in 1943 by the Bureau of Mines and Cleary Hill Mines Co., of Fairbanks, Alaska. Conditions and general features were similar.

Cost factors included in the proposed trenching work are shown:

Equipment	Opr. Hrs.	Rate	Cost
TD-18 International W/dozer	400	$10.00	$4,000.00
Compressor & attachments	#	150.00 prwk	900.00
Pick-up truck-1946 Ford 1/2Ton	#	6.00 prda	240.00
		Total equipment costs - - -	$5,140.00

Compressor and truck on irregular and stand-by basis.

Force account:-

Personnel	Hrs.	Rate pr. hr.	Total
Dozer operator	400	$2.00	800.00
Powderman	#400	1.85	740.00
Laborer	400	1.50	600.00
		Charges to payroll - - - - -	$2,140.00

Supplies	Quantity	Total
Fuel Oil	1600 gallons	280.00
Gas & lubricants	250 gallons	66.25
Powder	20 boxes	300.00
	Charges to supplies - - - -	$ 646.25

Total to trenching - - - - - - - - - - - - - - $7,926.25

4) Channeling and Sinking : -

It is proposed that exposure of the vein structure be accompanied by precise lateral channeling for assay purposes. Standard procedures for this type of sampling probably can be worked in with addition of one man and a relatively minor cost.

It is expected further that occasion for several deeper excavations may be indicated by favorable surface mineralization. This work involves almost entirely a minor payroll charge and the use of hand tools. Probable costs are estimated:

Classified	Man hours	Rate	Total
laborers	160	$1.50	$240.00

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WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

5) Cross-cutting : -

This phase of the project is necessarily dependent upon the results of the trench cross-cuts. In assuming favorable evidence of ore, it follows clearly that a check at depth is indicated.

Two cross-cuts, at intervals suggested by surface assays, are proposed. Interception points at any given depth are of course unknown. It is probable that 150 feet of cross-cut will furnish the basis for evaluating the ore-body as to commercial development.

Some discussion of this part of the proposed exploration seems appropriate. It is the thought of Applicant that funds contemplating the cost of this latter phase be authorized with the actual disbursement conditioned upon geological probabilities revealed by trenching. Further, a cost analysis is perhaps somewhat speculative. It appears reasonable to permit a fairly wide latitude in arriving at the total expenditure subject to authorization.

Such expenditure then, would be subject to determination jointly by Applicant and the Administrator. It is in the interest of orderly procedure to incorporate these costs in subject application with what ever conditions appear reasonable and consistant with the purpose of both Applicant and the Government.

Based upon these considerations, Applicant proposes that the amount of $5,000.00 be authorized for cross-cutting. Such amount to be disbursed upon joint approval of the contracting parties, and after preliminary work has demonstrated the justification for the expenditure.

Technical and Administrative Expense : -

Applicant suggests that cost of supervision, accounting, technical services, payroll taxes and insurance, and other administrative expense be applied to the project as a whole. Analysis of accounts will show distribution of these charges upon completion of the program. Preliminary break-down is estimated : -

Item	Rate	Period	Cost
Supervision	$30.00 pr.day	50 days	$1,500.00
Accounting	Fee	-	150.00
Tech-Services	#	*	300.00
Insurance	* .035%	-	175.00
Payroll taxes	* .015%	-	75 .00
Office Expense & Overhead	$350.00 pr.mo.	-	600.00
Mess costs (cook only)		50 days	400.00
	Charge to general expense - - - -		$3,200.00

- Assay charges, etc.
* - Contingency - See schedule (5)

WESTERN MINES CO.,
HELMVILLE, MONTANA

September 8, 1951

Recap : - Item 3 (a)

Applicant proposes a comprehensive exploration project with contingency for determining further the extent and depth of a geologically probable ore-body containing workable values in scheelite.

Cost of project is reviewed :

Item	Project days	Cost
Access Road	10	$2,007.37
Temporary facilities	-	250.00
Trenching	40	7,926.25
Sampling	-	240.00
Cross-Cutting	*	5,000.00
Technical and Administrative		3,200.00
Total days	50	
	Total Project Cost - - - - - -	$18,623.62

*Contract to provide for joint approval authorising disbursement upon results of primary exploration.

Note - Applicant believes that the costs estimated are reasonable and complete. No provision for percentage over-ride has been made. Such allowances usually have no meaning and the figures shown contemplate a certain amount of trouble and breakage.

Item 3. (b) The possibility of the project being closed out by unfavorable weather conditions must of course govern any estimated date of completion. The primary phase of the project provides for fifty days from date of authorization. All equipment, supplies and personnel are available immediately and project is to commence on date of authorization. Completion of second stage exploration, ie., cross-cutting must be conditioned both upon definite assurance of an ore body and seasonal factors. Applicant suggests that this estimate is subject to review as the project develops.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 5. Operating facilities with exceptions indicated in Item 3 (a), schedule 2, are in good repair and useable for expected requirements. Camp and service buildings include - bunk houses, mess house, warehouses, tool rooms, various camp equipment, and all similar facilities necessary to the project.

Item 6. None.

Item 7. Equipment : -

Owned and furnished by Applicant :

One TD-18 International diesel tractor, 1949 Model, equipped with Bucyrus-Erie Bulldozer.
One 1946 Ford 1/2 ton Pickup.
NB - Rental or depreciation charge - itemized in items 3 (a), schedule #1 and #3.
Units in good operating condition and suitable for purpose.

Rented : -

One Ingersoll-Rand Compressor - 205 c/f/m, Tractor mounted with hammer and attachments.
Rental charges shown - Item 3 (a).

Applicant has necessary hand tools, chain saw, other materials at hand.

Item 8. See Item 3 (a).

Item 9. See Item 3 (a).

Item 10. (a) Applicant is prepared to furnish 25% of the gross cost of project.
(b) Yes.

Item 11. Applicant offers as general information the following comments:

1) A considerable amount of money has been expended by Applicant prior to this application in an effort to reach a basis for a co-operative exploration program with the Government.
2) The property described was obtained by purchase rather than by location or lease or option. Direct charges to ground purchase alone are in excess of $30,000.00.
3) Substantial investment has been made in equipment and supplies.
4) New road construction providing access to the property was undertaken at Applicant's expense.
5) Applicant has every necessary item of equipment, material, facilities and personnel available at once for entry into the proposed project.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

6) Applicant has a substantial credit position through its individual members.
7) Applicant proposes to develop and to operate the property should exploration result in the discovery of an ore body.
8) The area has seasonal labor surpluses and man power is at present available in number.
9) The members of Applicant Company are prepared to lend direct personal effort to the project.
10) The co-operation of the Government is invited.

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Form MF-103
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2469

Date received 4-3-52

WESTERN MINES CO.,
HELMVILLE, MONTANA.

Name and address of applicant

Date September 8, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Pat T. Phalen	President "D"	None	*	245,499	None	None	
Frank C. Culver	"D"	None	*	7,500	None	None	
John W. Phalen	"D"	None	*	7,500	None	None	
Milton Ealey	"D"	None	*	3,000	None	None	
D. E. Browne		None	*	15,000	None	None	
Zilla Ealey		None	*	1,500	None	None	
Mrs. Pat T. Phalen	Sec.-Treas. "D"	None	*	1	None	None	
* Financial statement furnished upon request.			x x x x x	200,000		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$ No Par		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable.

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

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not applicable.

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.

16—63792-1

Item 12 to 18 - Refer - MF-103.

FORM MF-100 September 8, 1951

WESTERN MINES CO.,
HELMVILLE, Montana.

Item 1 & 2 - Refer to Form MF 103.

Item 3 - (a) Mine location - Approximately nine miles East of Helmville, Montana; Shipping point - Drummond, Montana, twenty-three miles South of Helmville.

(b) Ogden Mountain.

(c) Township 13, Section 23, Range 10 W.

(d) Powell County, Montana.

Item 4 - (a) Under exploration at present.

(b) Owner.

Item 5 - Not in production; production scheduled for June, 1952.

FORM MF-100 September 8, 1951

WESTERN MINES CO.,
HELMVILLE, MONTANA.

Item 6 - (a) Applicant Company was organized for the specific purpose of developing and operating the scheelite deposit described in subject application.

(b) The President and General Manager of Western Mines Co., Mr. Pat T. Phalen, has operated the Butane Engineering Co., Inc., of Walla Walla, Washington; the Butane Engineering Co. of Columbia Basin, Inc., of Kennewick, Washington, and the Phalen Sheet Metal Works of Bend, Oregon.

Each undertaking was successful and was developed under Mr. Phalen's direct supervision and management. Applicant offers, for credit purposes, the record of these companies as reflecting sound judgment and good business practice.

Mr. Phalen, together with associates listed under Item 8, makes representation under name of applicant Company as to financial responsibility and general business experience.

Applicant has employed a mining engineer for supervision of the preliminary investigation of subject property and proposes to use his services should mining operations result. Qualifications of the engineer are set forth as follows:

Name : D. E. Browne,
Colorado School of Mines.

Previous activity - :
1941 - 1943 - Engineer, Livengood Placer's Inc., Alaska Division Callahan Lead-Zinc Corp., at Fairbanks, Alaska.
1943-1946 - Consulting Enginmer, Metals Reserve Co., Regional Director, Reconstruction Finance Corp., for Alaska.
1946-1950 - Partner-Manager, Iditarod Operating Co., Fairbanks, Alaska; Partner* , Arctic Tin Co., Nome, Alaska; North American Dredging Co., Flat, Alaska, as lessor, one-fourth interest.

*Now listed as Northern Tin Co.

Applicant represents the above individual as capable of general supervision of proposed exploration and development work.

Frank C. Culver is Representative, A. O. Smith Company in the following states: California, Oregon, Washington, Idaho, Montana, Wyoming and Alaska.

John W. Phalen - Nine years successful owner and operator of Butane Gas Co., of Spokane, Washington.

Milton Emley, Wheat rancher.

FORM MF-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 7 - (a) The vein structure under discussion was discovered by David Hunter before 1880. Mineralization was encountered at the face in seven cross-cuts driven at right angles to the strike of the contact zone. Unusually strong evidence of scheelite occurance is present in the surface dump of each of these cross cuts at intervals of approximately 150 feet.

Presumably, the early prospecting did not consider the possible economic value of scheelite and exploration was confined to the development of a gold and copper ore body of workable grade. It appears that actual production was never attempted. The cross-cuts were closed and later abandoned by the original prospecting group.

(b) Two neighboring properties, each with a history of minor and somewhat irregular production indicate to applicant only the probability of a rather widespread mineralization throughout the area - The Hobby Horse and the Blackfoot Gold Co. have produced copper and gold ores over a period of forth years. Accurate records are not available and applicant makes no attempt to co-orelate these several occurances with the scheelite prospect under discussion.

(c) None.

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

WESTERN MINES CO.
(Name of company)

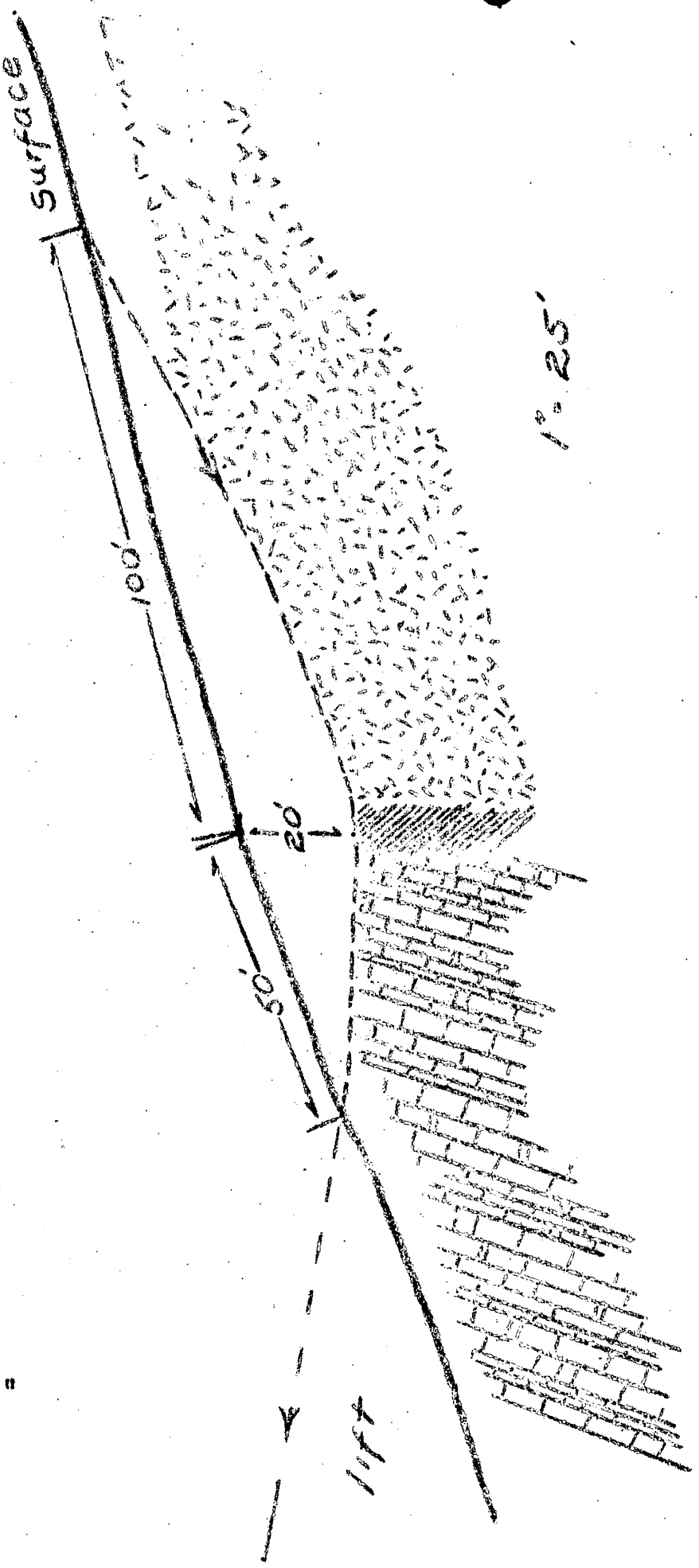
By Pat T. Phalen
(Signature of authorized official)
3-20-52

September 8, 1951
(Date)

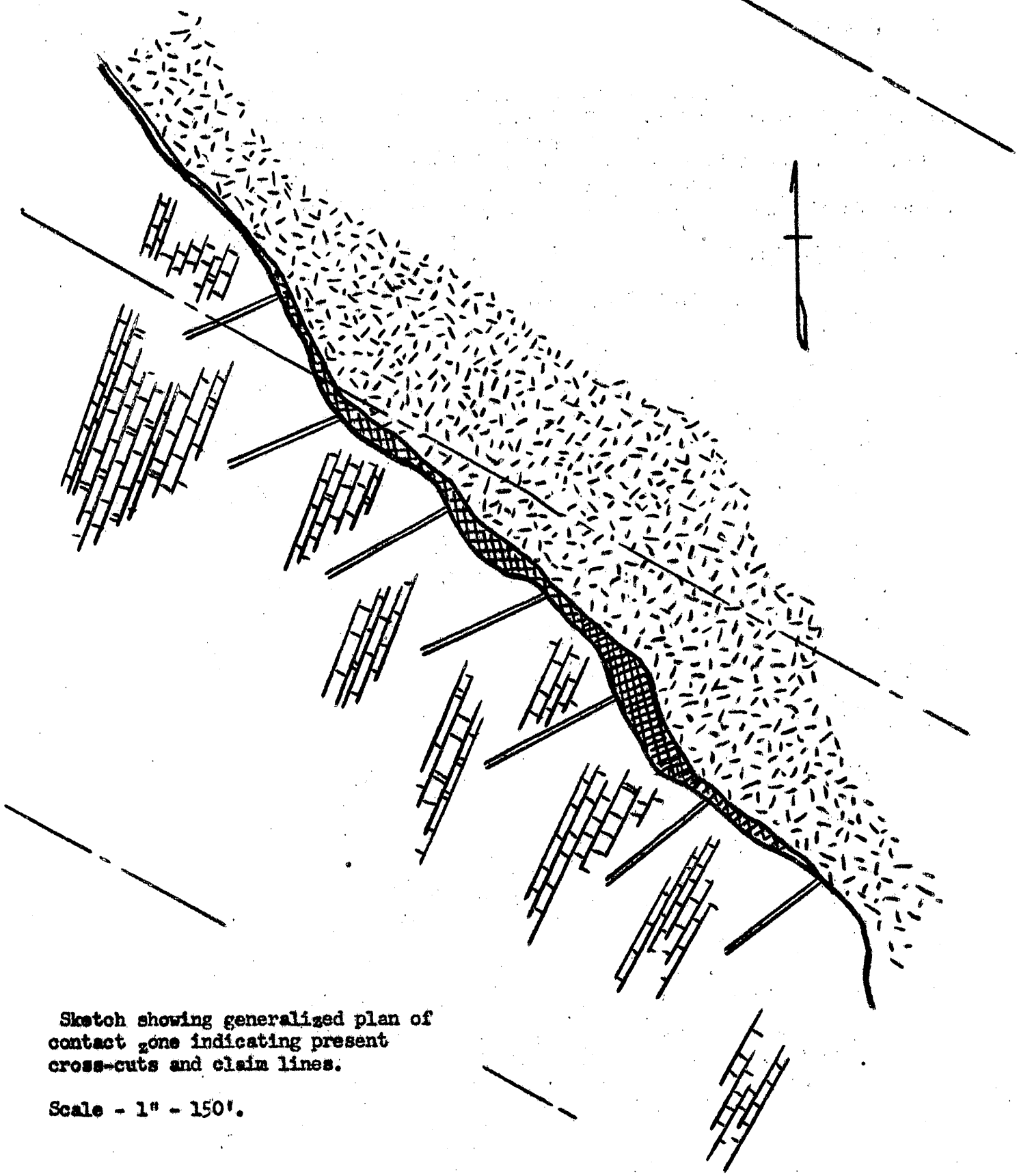
President.
(Title)

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

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



"Sketch showing
typical trench section."



Sketch showing generalized plan of contact zone indicating present cross-cuts and claim lines.

Scale - 1" - 150'.

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

April 7, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: Western Mines Company DMEA 2468, Tungsten
Helmville, Powell County, Montana

It is recommended that this docket be referred to the Field Team.

The applicant has not given enough information regarding the condition of the old crosscuts and there are no assay certificates to support the reported tungsten showings on the dump. Their engineer, D. E. Browne, has a good reputation in Alaska.

Robert W. Geehan
Robert W. Geehan

Attachment

Copy retained 400

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2468
Metal or Mineral
Date Received 4-3-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

WESTERN MINES CO.,
HELENVILLE, MONTANA.

Name and address of applicant

Date ~~September 8, 1951.~~

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

DMA Docket Number (if available) _____

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

By Pat T. Shalen
(Signature of authorized official)

President. 3-20-52
(Title)

September 8, 1951
(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—64067-2

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 6, 1951

Item 1. (a) The proposed exploration project is confined to the contact zone situate within four unpatented lode Mining Claims located on the Western slope of Ogden Mountain in Powell County, Montana.

No present mine workings exist on the property. A series of abandoned cross-cuts and the accompanying dumps constitute the only evidence of previous operation.

(b) Applicant is the owner of subject property.

(c) The legal description of the property follows:

New Progress No. 1)
New Progress No. 2)
Old Timer No. 1)
Old Timer No. 2)

Each being a lode mining claim, 1500 feet long by 600 feet in width. Recorded individually in Township 13, Section 23, Range 10 West, Ogden Mountain Mining District, Powell County, Montana, at Deer Lodge, the County seat.

NOTE (1) Both areas are the same.

(2) Applicant is the owner.

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 2. (a) Applicant expects that exploration as proposed will result in the discovery of an extensive ore body containing commercial scheelite ($CaWO_4$) values. It is contemplated that proper investigation will furnish the basic information necessary to the development and operation of the deposit as a producing mine.

Applicant is prepared further to carry out a development program looking toward actual production during the summer of 1952.

(b) Geologic Features - General discussion:

The mineral deposit under investigation is located along a contact zone following the slope of an isolated granitic monolith of relatively small size. This intrusion may, perhaps, be more properly described as an igneous stock, resembling an eliptical dome in shape and flanked by lapping sedimentary rims.

The surrounding cover rocks consist mainly of massive, hard and blocky limestones, thin-bedded argillites, and interbedded quartzites.

Local Features -

Primary mineralization occurs within a contact zone lying between the granitic and adjacent limestone formations. The basic vein structure is presumably of the type generally associated with contact metamorphic fractures. It suggests itself that the enrichment sources are allied to the movement of solutions through temperature changes and pressure effects.

It is probable that the scheelite exists as a replacement deposit. The association of calcites, quartzites and vein materials containing disseminated fragments of altered limestone, jasperoids and cherts would indicate replacement processes as the basic depositing agency.

The inference from present evidence suggests that concentrated deposition occurs across the vein at intervals and probably in fissures.

The unusually high enrichment evidenced in samples available is not likely to extend in grade across the entire vein structure, altho no banding effect is likely to be present.

It would be perhaps, more accurate to anticipate an ore body composed of irregularily spaced quartz stringers accompanied by scheelite deposition as replacement mainly of the associated calcites.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

The vein structure under discussion has provided evidence of its direction, length and continuity through samples taken from a series of cross-cuts. These cross-cuts - seven in number, were driven at right angles to the general direction of the vein at intervals of approximately 150 linear feet. A total length of 1100 feet along the strike has been established with a clear evidence of consistently high grade scheelite occurance at each interval.

It is suggested that the existance of an uninterrupted vein over a distance of 1100 feet has been demonstrated. Scheelite enrichment over this length is established by the evidence of the cross-cut dumps. Probable continuation of the vein is presumed. However, the limit of extension is a matter of conjecture and no basis for estimate exists.

The question arises then, of the probability of an ore section of commercial grade. It would appear that a proper inference of ore is justified and that further exploration is consistant with sound geological probabilities.

Conclusions with respect to tenor and grade of inferred ore are based upon random samples taken from material excavated in the old cross-cuts. The dumps located at each portal contain specimens of ore ranging to 53.4% Ca WO_4, with occurance obtaining throughout the section.

Examination by fluorescent light indicates a remarkable scattering of scheelite, frequently in massive clusters, in the broken rock. The fact that this evidence of heavy deposition is encountered consistently in each cross-cut lends support to the belief that a true ore-body is present.

Existing information provides a proper basis for the conclusion that scheelite deposition may be wide enough to make ore and that determination of such width by exploration is warranted.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 3. (a) PROPOSED EXPLORATION -

General Purpose:

It is intended that the entire length of the vein structure be exposed by surface trenching at intervals of 200 feet over a contour distance of 1500 feet. Further information is to be obtained through interception of the vein by cross-cutting at two points along its exposed length, the location of such points to be determined by the results of surface trenching.

The exploration program as proposed will include the construction of a rough access road, movement of necessary equipment, supplies and other activity usually connected with an examination project of this type. All equipment, supplies and facilities necessary to the project are either owned by Applicant and at hand or are available immediately in the direct area.

Specific Work:

It is proposed that the project will be governed by the following rough sequence:

1) Road construction.
2) Establishment of temporary working facilities.
3) Surface trenching by bulldozing.
4) Channeling and sinking on vein.
5) Cross-Cutting.

The above schedule contemplates the probability of a certain overlapping of activity as the project develops, for instance the channeling and sinking on the surface exposures may accompany closely the trenching operations. It is conceivable that cross-cutting may be considered unnecessary should the results of surface work be unusually favorable. The converse may be true; surface exposure may indicate that deeper exploration is not justified.

Generally, however, the schedule set forth above is consistant with the purposes intended. A discussion of each item follows:

1) Road construction -

Applicant has constructed approximately five miles of road to his main camp facilities. Two additional miles of passable truck road are necessary for access to the site of the proposed exploration.

Location of this road is established partly along an abandoned ditch following the contour of the hillside. The right-of-way is partially cleared and local conditions are unusually favorable. An occasional rocky point must be shot out and three or four minor fills are necessary.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 3, 1951

Applicant has obtained a Forest Service permit, and no other legal obstacles are present. It is expected that a serviceable truck road will be completed to site within ten days.

The cost breakdown:

Equipment	Opr. Hrs.	Rate	Total Cost
TD 18 International with Dozer	100	$10.00 pr.hr.	$1000.00
205 CFM Compressor	#	$150.00 pr.wk.	150.00
Chain Saw	50	1.00 pr.hr.	50.00
Pick-up Truck 1946 Ford 1/2 Ton	#	6.00 pr.day	60.00
	Total equipment charges - - - - - -		$1260.00

Compressor & Truck on stand-by and service rate. Estimated hrs. - 110.

Force	Hours	Rate	Total
Dozer Operator	100	$2.00	$200.00
Powderman	#100	1.85	185.00
Laborer	100	1.50	150.00
	Total Payroll expense - - - - - -		$535.00

Powderman to operate jackhammer, chain saw.

Supplies:

Item	Quantity	Cost
Fuel Oil	450 gallons	78.75
Gasoline	108 gallons	28.62
Lubricants	10 gallons	25.00
Powder & Caps	5 boxes	80.00
	Total supplies - - -	$212.37

Charges to road construction - - - - - - - - - - - - $2007.37

FORM MF-103

WESTERN MINING CO.,
HELMVILLE, MONTANA.

September 8, 1951

2) Temporary facilities at site : -

Good practice would suggest that a few rough arrangements be set-up for efficient and orderly conduct of the project. A grease rack and fuel dump, personnel shack and stove, tool house and sample dock provide adequate facilities usually.
Costs are estimated as follows:

Rack and Fuel dump - timber at site - - - - - - - -	$ 50.00
Shack - Sheet iron - - - - - - - - - - - - - - - -	100.00
Tool house - Sheet iron - - - - - - - - - - - - - -	50.00
Sample dock - Timber and lumber - - - - - - - - - -	50.00
Total this item - -	$250.00

3) Trenching: -

Topographically, the exploration area is well suited to bulldozer - trench excavation. Sloping is not excessive, and yet efficient disposal of waste is permitted without long ramping. It appears that standard lift procedure will enable the dozer to excavate continously without the necessity for climbing out to rehandle waste. Surface features tend to show that downgrade and level dozing will be possible over an estimated 75% of each excavation.

At the crown, depth is indicated at an average of 20 feet, with linear distance of slope to the toe estimated at 150 feet. Vein exposure should be encountered at 100 feet linearally along the trench with the remaining void below grade used for dumping and lift. (See sketch)

In estimating progress on a trenching operation of this type, it is difficult to arrive at dependable yardage figures. Calculations must allow for local occurrance of rock slides, tightness of material, and other obstacles requiring blasting, slight changes in direction and other problems which delay the dozer.

It is reasonably accurate to base such calculations upon the following factors: -

1) The first 10 feet will go fast with little dozer delay and no disposal problem.
2) The bottom 1/3 of the trench will furnish most of the trouble and yardage efficiency will drop by about 75%.
3) Similar experience has shown that lost time in handling obstructions will account for approximately 25% of the entire project time.

With these allowances considered, the trenching operation is outlined below:

Excavation: -

No. Trenches	Cu. Yds. each	length	Average depth	Bottom width
8	1000	150'	12'	15'

Distribution of time - %:-

Dozing	Drilling and Blasting	Clearing, etc.	Servicing & other
60%	25%	10%	5%

FORM NF-103

WESTERN MINES CO.,
HELENA, MONTANA.

September 8, 1951

In admitting to estimate these charges to delay and low yardage expectancies, it is necessary to allow five full days for completion of each trench.

As a check on the foregoing, Applicant has referred to a cost and project analysis undertaken jointly in 1943 by the Bureau of Mines and Cleary Hill Mines Co., of Fairbanks, Alaska. Conditions and general features were similar.

Cost factors included in the proposed trenching work are shown:

Equipment	Opr. Hrs.	Rate	Cost
TD-18 International D/dozer	400	$20.00	$4,000.00
Compressor @ attachments	@	150.00 prwk	900.00
Pick-up truck-1946 Ford 1/2Ton	@	6.00 prdy	240.00
Total equipment costs - - -			$5,140.00

@ Compressor and truck on irregular and stand-by basis.

Force account:-

Personnel	Hrs.	Rate pr. hr.	Total
Dozer operator	400	$2.00	800.00
Powderman	400	1.85	740.00
Laborer	400	1.50	600.00
Charges to payroll - - - - - -			$2,140.00

Supplies	Quantity	Total
Fuel Oil	1000 gallons	200.00
Gas & lubricants	250 gallons	66.25
Powder	20 boxes	300.00
Charges to supplies - - - - -		$ 566.25

Total to trenching - - - - - - - - - - - - - - $7,926.25

b) Channeling and Sinking :-

It is proposed that exposure of the vein structure be accompanied by precise lateral channeling for assay purposes. Standard procedures for this type of sampling probably can be worked in with addition of one man and a relatively minor cost.

It is expected further that occasion for several deeper excavations may be indicated by favorable surface mineralization. This work involves almost entirely a minor payroll charge and the use of hand tools. Probable costs are estimated:

Classified	Man hours	Rate	Total
laborers	160	$1.50	$240.00

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

5) Cross-cutting : -

This phase of the project is necessarily dependent upon the results of the trench cross-cuts. In assuming favorable evidence of ore, it follows clearly that a check at depth is indicated.

Two cross-cuts, at intervals suggested by surface assays, are proposed. Interception points at any given depth are of course unknown. It is probable that 150 feet of cross-cut will furnish the basis for evaluating the ore-body as to commercial development.

Some discussion of this part of the proposed exploration seems appropriate. It is the thought of Applicant that funds contemplating the cost of this latter phase be authorized with the actual disbursement conditioned upon geological probabilities revealed by trenching. Further, a cost analysis is perhaps somewhat speculative. It appears reasonable to permit a fairly wide latitude in arriving at the total expenditure subject to authorization.

Such expenditure then, would be subject to determination jointly by Applicant and the Administrator. It is in the interest of orderly procedure to incorporate these costs in subject application with what ever conditions appear reasonable and consistant with the purpose of both Applicant and the Government.

Based upon these considerations, Applicant proposes that the amount of $5,000.00 be authorized for cross-cutting. Such amount to be disbursed upon joint approval of the contracting parties, and after preliminary work has demonstrated the justification for the expenditure.

Technical and Administrative Expense : -

Applicant suggests that cost of supervision, accounting, technical services, payroll taxes and insurance, and other administrative expense be applied to the project as a whole. Analysis of accounts will show distribution of these charges upon completion of the program. Preliminary break-down is estimated : -

Item	Rate	Period	Cost
Supervision	$30.00 pr.day	50 days	$1,500.00
Accounting	Fee	-	150.00
Tech-Services	#	*	300.00
Insurance	* .035%	-	175.00
Payroll taxes	* .015%	-	75 .00
Office Expense & Overhead	$350.00 pr.mo.	-	600.00
Mess costs (cook only)		50 days	400.00
	Charge to general expense - - - -		$3,200.00

- Assay charges, etc.
* - Contingency - See schedule (5)

WESTERN MINES CO.,
HELMVILLE, MONTANA

September 8, 1951

Recap : - Item 3 (a)

Applicant proposes a comprehensive exploration project with contingency for determining further the extent and depth of a geologically probable ore-body containing workable values in scheelite.

Cost of project is reviewed :

Item	Project days	Cost
Access Road	10	$2,007.37
Temporary facilities	-	250.00
Trenching	40	7,926.25
Sampling	-	240.00
Cross-Cutting	*	5,000.00
Technical and Administrative		3,200.00
Total days	50	
	Total Project Cost - - - - - -	$18,623.62

*Contract to provide for joint approval authorizing disbursement upon results of primary exploration.

Note - Applicant believes that the costs estimated are reasonable and complete. No provision for percentage over-ride has been made. Such allowances usually have no meaning and the figures shown contemplate a certain amount of trouble and breakage.

Item 3. (b) The possibility of the project being closed out by unfavorable weather conditions must of course govern any estimated date of completion. The primary phase of the project provides for fifty days from date of authorization. All equipment, supplies and personnel are available immediately and project is to commence on date of authorization. Completion of second stage exploration, ie., cross-cutting must be conditioned both upon definite assurance of an ore body and seasonal factors. Applicant suggests that this estimate is subject to review as the project develops.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 5. Operating facilities with exceptions indicated in Item 3 (a), schedule 2, are in good repair and useable for expected requirements. Camp and service buildings include - bunk houses, mess house, warehouses, tool rooms, various camp equipment, and all similar facilities necessary to the project.

Item 6. None.

Item 7. Equipment : -
Owned and furnished by Applicant :
One TD-18 International diesel tractor, 1949 Model, equipped with Bucyrus-Erie Bulldozer.
One 1946 Ford 1/2 ton Pickup.
NB - Rental or depreciation charge - itemized in items 3 (a), schedule #1 and #3.
Units in good operating condition and suitable for purpose.

Rented : -
One Ingersoll-Rand Compressor - 205 c/f/m, Tractor mounted with hammer and attachments.
Rental charges shown - Item 3 (a).

Applicant has necessary hand tools, chain saw, other materials at hand.

Item 8. See Item 3 (a).

Item 9. See Item 3 (a).

Item 10. (a) Applicant is prepared to furnish 25% of the gross cost of project.
(b) Yes.

Item 11. Applicant offers as general information the following comments:

1) A considerable amount of money has been expended by Applicant prior to this application in an effort to reach a basis for a co-operative exploration program with the Government.
2) The property described was obtained by purchase rather than by location or lease or option. Direct charges to ground purchase alone are in excess of $30,000.00.
3) Substantial investment has been made in equipment and supplies.
4) New road construction providing access to the property was undertaken at Applicant's expense.
5) Applicant has every necessary item of equipment, material, facilities and personnel available at once for entry into the proposed project.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

6) Applicant has a substantial credit position through its individual members.
7) Applicant proposes to develop and to operate the property should exploration result in the discovery of an ore body.
8) The area has seasonal labor surpluses and man power is at present available in number.
9) The members of Applicant Company are prepared to lend direct personal effort to the project.
10) The co-operation of the Government is invited.

- - - - - -O- - - - -O- - - - - -

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2468

Date received 4-3-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

Western Mines Co.,
Helmville, Montana.

Name and address of applicant

Date September 8, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Pat T. Phalen	President "D"	None	*	260,499	None	None	
Frank C. Culver	"D"	None	*	7,500	None	None	
John W. Phalen	[illegible]	None	*	7,500	None	None	
Milton Emley	"D"	None	*	3,000	None	None	
Zilla Emley	[illegible]	None	*	1,500	None	None	
Mrs. Pat T. Phalen	Sec.Treas "D"	None	*	1	None	None	
*Financial statement furnished upon request.		Total	x x x x x	280,000		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$ No Par		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable.

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

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not applicable.

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.

Item 12 to 18 - Refer - [illegible]-103.

FORM MF-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 1 & 2. Refer to Form MF-103.

Item 3 (a). Mine location - Approximately nine miles East of Helmville, Montana; Shipping point - Drummond, Montana, twenty-three miles South of Helmville.

(b) Ogden Mountain.

(c) Township 13, Section 23, Range 10 W.

(d) Powell County, Montana.

Item 4 (a) Under exploration at present.

(b) Owner.

Item 5 Not in production; production scheduled for June, 1952.

FORM MP-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 6 (a). Applicant Company was organized for the specific purpose of developing and operating the scheelite deposit described in subject application.

(b) The President and General Manager of Western Mines Co., Mr. Pat T. Phalen, has operated the Butane Engineering Co., Inc., of Walla Walla, Washington; the Butane Engineering Co. of Columbia Basin, Inc., of Kennewick, Washington, and the Phalen Sheet Metal Works of Bend, Oregon.

Each undertaking was successful and was developed under Mr. Phalen's direct supervision and management. Applicant offers, for credit purposes, the record of these companies as reflecting sound judgment and good business practice.

Mr. Phalen, together with associates listed under Item 8, makes representation under name of applicant Company as to financial responsibility and general business experience.

Applicant has employed a mining engineer for supervision of the preliminary investigation of subject property and proposes to use his services should mining operations result. Qualifications of the engineer are set forth as follows:

Name : D. E. Browne,
Colorado School of Mines.

Previous activity :
1941 - 1943 - Engineer, Livengood Placer's Inc., Alaska Division Callahan Lead-Zinc Corp., at Fairbanks, Alaska.
1943 - 1946 - Consulting Engineer, Metals Reserve Co., Regional Director, Reconstruction Finance Corp., for Alaska.
1946 - 1950 - Partner-Manager, Ididarod Operating Co., Fairbanks, Alaska; Partner, *Arctic Tin Co., Nome, Alaska; North American Dredging Co., Flat, Alaska, as lessor, one-fourth interest.

*Now listed as Northern Tin Co.

Applicant represents the above individual as capable of general supervision of proposed exploration and development work.

Frank C. Culver is Representative, A. O. Smith Company in the following states: California, Oregon, Washington, Idaho, Montana, Wyoming and Alaska.

John W. Phalen - Nine years successful owner and operator of Butane Gas Co., of Spokane, Washington.

Milton Emley, Wheat rancher.

FORM MF-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 7 (a). The vein structure under discussion was discovered by David Hunter before 1900. Mineralization was encountered at the face in seven cross-cuts driven at right angles to the strike of the contact zone. Unusually strong evidence of scheelite occurance is present in the surface dump of each of these cross-cuts at intervals of approximately 150 feet.

Presumably, the early prospecting did not consider the possible economic value of scheelite and exploration was confined to the development of a gold and copper ore body of workable grade. It appears that actual production was never attempted. The cross-cuts were closed and later abandoned by the original prospecting group.

(b) Two neighboring properties, each with a history of minor and somewhat irregular production indicate to Applicant only the probability of a rather widespread mineralization throughout the area - The Hobby Horse and the Blackfoot Gold Co. have produced copper and gold ores over a period of forty years. Accurate records are not available and Applicant makes no attempt to co-orelate these several occurances with the scheelite prospect under discussion.

(c) None.

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

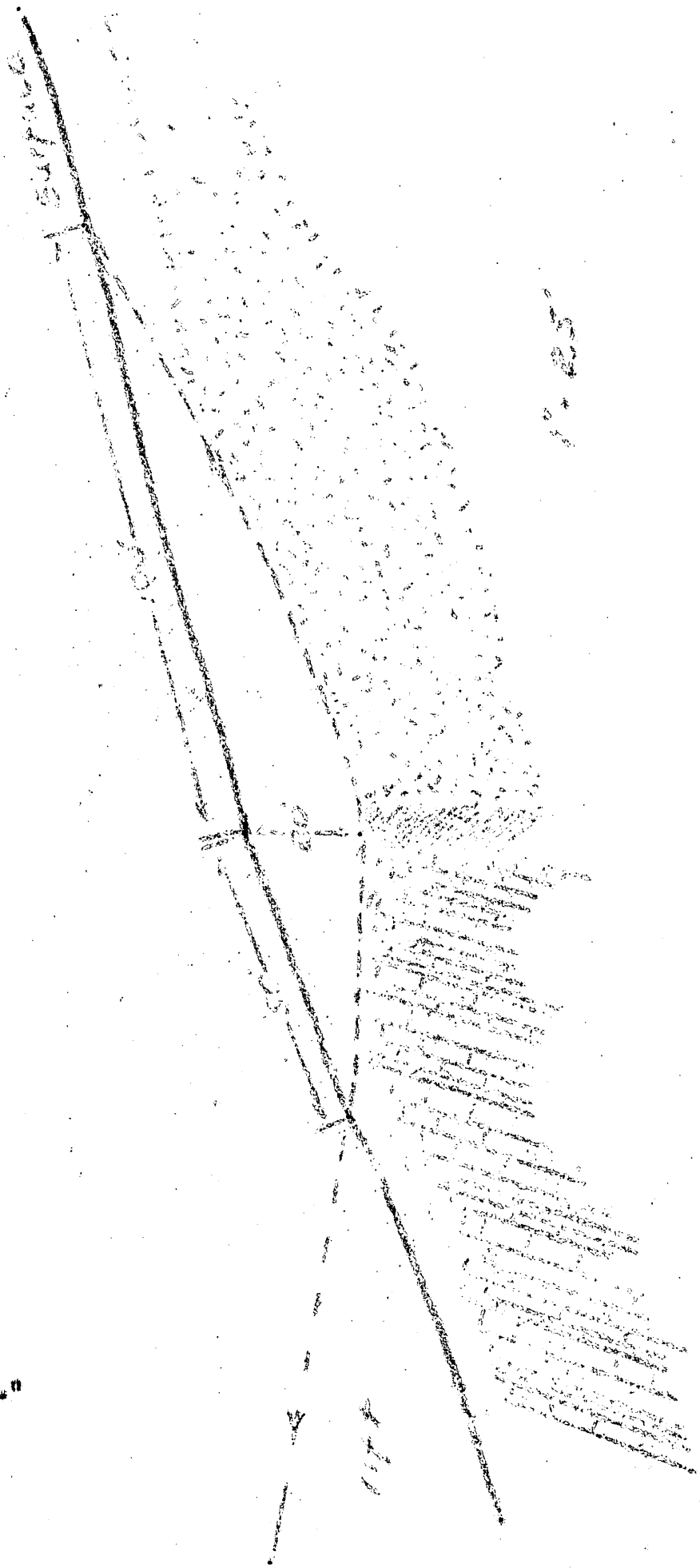
By Pat. T. Schaler
(Signature of authorized official)
3-20-52

September 8, 1951
(Date)

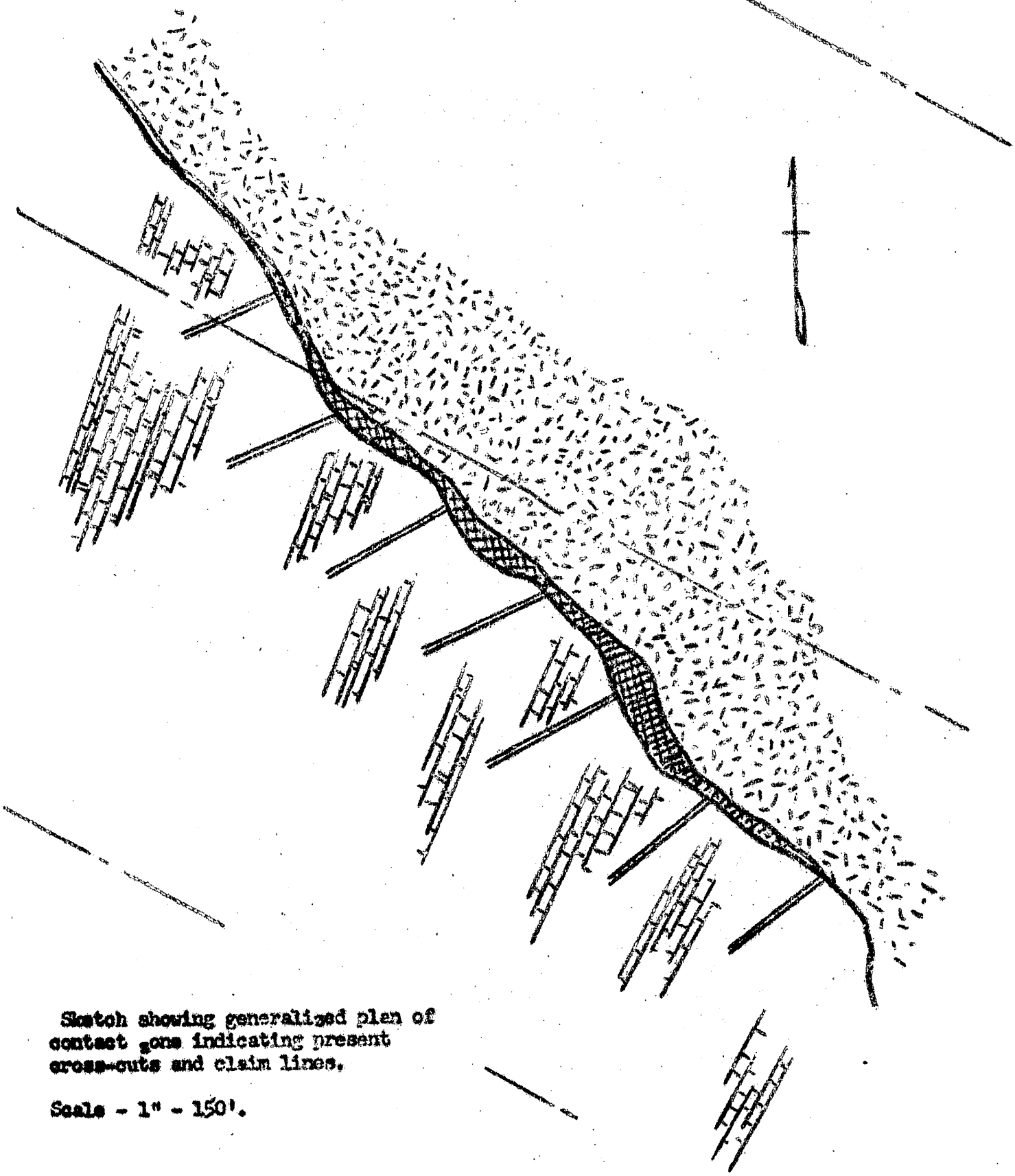
President.
(Title)

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

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



"Sketch showing
typical trench section."



Sketch showing generalized plan of contact zone indicating present cross-cuts and claim lines.

Scale - 1" - 150'.

EXPLORATION

Subject: DMEA-2468
Re: Exploration Loan
New Progress and Old Timer Mines
April 4, 1952

Mr. Pat T. Phalen
Western Mines Co.
Helmville, Montana

My dear Mr. Phalen:

This will acknowledge receipt of your application dated September 8, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2468 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2468 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-246 8
Metal or Mineral
Date Received 4-3-52
Amount $
Participation (Government %)

APR 3 - 1952

WESTERN MINES CO.,
HELMVILLE, MONTANA.

Name and address of applicant

Date September 8, 1951.

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

DMA Docket Number (if available) _____

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

By Pat T. Phalen
(Signature of authorized official)

President. 3-20-52

September 8, 1951
(Date)

(Title)

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

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

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 1. (a) The proposed exploration project is confined to the contact zone situate within four unpatented lode Mining Claims located on the Western slope of Ogden Mountain in Powell County, Montana.

No present mine workings exist on the property. A series of abandoned cross-cuts and the accompanying dumps constitute the only evidence of previous operation.

(b) Applicant is the owner of subject property.

(c) The legal description of the property follows:

New Progress No. 1)
New Progress No. 2)
Old Timer No. 1)
Old Timer No. 2)

Each being a lode mining claim, 1500 feet long by 600 feet in width. Recorded individually in Township 13, Section 23, Range 10 West, Ogden Mountain Mining District, Powell County, Montana, at Deer Lodge, the County seat.

NOTE (1) Both areas are the same.

(2) Applicant is the owner.

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 2. (a) Applicant expects that exploration as proposed will result in the discovery of an extensive ore body containing commercial scheelite ($CaWO_4$) values. It is contemplated that proper investigation will furnish the basic information necessary to the development and operation of the deposit as a producing mine.

Applicant is prepared further to carry out a development program looking toward actual production during the summer of 1952.

(b) Geologic Features - General discussion:

The mineral deposit under investigation is located along a contact zone following the slope of an isolated granitic monolith of relatively small size. This intrusion may, perhaps, be more properly described as an igneous stock, resembling an eliptical dome in shape and flanked by lapping sedimentary rims.

The surrounding cover rocks consist mainly of massive, hard and blocky limestones, thin-bedded argillites, and interbedded quartzites.

Local Features -

Primary mineralization occurs within a contact zone lying between the granitic and adjacent limestone formations. The basic vein structure is presumably of the type generally associated with contact metamorphic fractures. It suggests itself that the enrichment sources are allied to the movement of solutions through temperature changes and pressure effects.

It is probable that the scheelite exists as a replacement deposit. The association of calcites, quartzites and vein materials containing disseminated fragments of altered limestone, jasperoids and cherts would indicate replacement processes as the basic depositing agency.

The inference from present evidence suggests that concentrated deposition occurs across the vein at intervals and probably in fissures.

The unusually high enrichment evidenced in samples available is not likely to extend in grade across the entire vein structure, altho no banding effect is likely to be present.

It would be perhaps, more accurate to anticipate an ore body composed of irregularily spaced quartz stringers accompanied by scheelite deposition as replacement mainly of the associated calcites.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

The vein structure under discussion has provided evidence of its direction, length and continuity through samples taken from a series of cross-cuts. These cross-cuts - seven in number, were driven at right andles to the general direction of the vein at intervals of approximately 150 linear feet. A total length of 1100 feet along the strike has been established with a clear evidence of consistently high grade scheelite occurance at each interval.

It is suggested that the existance of an uninterrupted vein over a distance of 1100 feet has been demonstrated. Scheelite enrichment over this length is established by the evidence of the cross-cut dumps. Probable continuation of the vein is presumed. However, the limit of extension is a matter of conjecture and no basis for estimate exists.

The question arises then, of the probability of an ore section of commercial grade. It would appear that a proper inference of ore is justified and that further exploration is consistant with sound geological probabilities.

Conclusions with respect to tenor and grade of inferred ore are based upon random samples taken from material excavated in the old cross-cuts. The dumps located at each portal contain specimens of ore ranging to 53.4% Ca WO_4, with occurance obtaining throughout the section.

Examination by fluorescent light indicates a remarkable scattering of scheelite, frequently in massive clusters, in the broken rock. The fact that this evidence of heavy deposition is encountered consistently in each cross-cut lends support to the belief that a true orebody is present.

Existing information provides a proper basis for the conclusion that scheelite deposition may be wide enough to make ore and that determination of such width by exploration is warranted.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 3. (a) PROPOSED EXPLORATION -
General Purpose:

It is intended that the entire length of the vein structure be exposed by surface trenching at intervals of 200 feet over a contour distance of 1500 feet. Further information is to be obtained through interception of the vein by cross-cutting at two points along its exposed length, the location of such points to be determined by the results of surface trenching.

The exploration program as proposed will include the construction of a rough access road, movement of necessary equipment, supplies and other activity usually connected with an examination project of this type. All equipment, supplies and facilities necessary to the project are either owned by Applicant and at hand or are available immediately in the direct area.

Specific Work:

It is proposed that the project will be governed by the following rough sequence:

1) Road construction.
2) Establishment of temporary working facilities.
3) Surface trenching by bulldozing.
4) Channeling and sinking on vein.
5) Cross-Cutting.

The above schedule contemplates the probability of a certain overlapping of activity as the project develops, for instance the channeling and sinking on the surface exposures may accompany closely the trenching operations. It is conceivable that cross-cutting may be considered unnecessary should the results of surface work be unusually favorable. The converse may be true; surface exposure may indicate that deeper exploration is not justified.

Generally, however, the schedule set forth above is consistant with the purposes intended. A discussion of each item follows:

1) Road construction -

Applicant has constructed approximately five miles of road to his main camp facilities. Two additional miles of passable truck road are necessary for access to the site of the proposed exploration.

Location of this road is established partly along an abandoned ditch following the contour of the hillside. The right-of-way is partially cleared and local conditions are unusually favorable. An occasional rocky point must be shot out and three or four minor fills are necessary.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Applicant has obtained a Forest Service permit, and no other legal obstacles are present. It is expected that a servicable truck road will be completed to site within ten days.

The cost breakdown:

Equipment	Opr. Hrs.	Rate	Total Cost
TD 18 International with Dozer	100	$10.00 pr.hr.	$1000.00
205 CFM Compressor	#	$150.00 pr.wk.	150.00
Chain Saw	50	1.00 pr.hr.	50.00
Pick-up Truck 1946 Ford 1/2 Ton	#	6.00 pr.day	60.00
	Total equipment charges - - - - - - -		$1260.00

Compressor & Truck on stand-by and service rate. Estimated hrs. - 140.

Force	Hours	Rate	Total
Dozer Operator	100	$2.00	$200.00
Powderman	#100	1.85	185.00
Laborer	100	1.50	150.00
		Total Payroll expense - - - - -	$535.00

Powderman to operate jackhammer, chain saw.

Supplies:

Item	Quantity	Cost
Fuel Oil	450 gallons	78.75
Gasoline	108 gallons	28.62
Lubricants	10 gallons	25.00
Powder & Caps	5 boxes	80.00
	Total supplies - - - - - - - - - -	$212.37

Charges to road construction - - - - - - - - - - - - - - - - $2007.37

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

2) Temporary facilities at site : -

Good practice would suggest that a few rough arrangements be set-up for efficient and orderly conduct of the project. A grease rack and fuel dump, personnel shack and stove, tool house and sample dock provide adequate facilities usually.
Costs are estimated as follows:

Rack and Fuel dump - timber at site - - - - - - - - -	$ 50.00
Shack - Sheet iron - - - - - - - - - - - - - - - - - - -	100.00
Tool house - Sheet iron - - - - - - - - - - - - - - - -	50.00
Sample dock - Timber and lumber - - - - - - - - - - - -	50.00
Total this item - -	$250.00

3) Trenching : -

Topographically, the exploration area is well suited to bulldozer-trench excavation. Sloping is not excessive, and yet efficient disposal of waste is permitted without long ramping. It appears that standard lift procedure will enable the dozer to excavate continously without the necessity for climbing out to rehandle waste. Surface features tend to show that downgrade and level dozing will be possible over an estimated 75% of each excavation.

At the crown, depth is indicated at an average of 20 feet, with linear distance of slope to the toe estimated at 150 feet. Vein exposure should be encountered at 100 feet linearally along the trench with the remaining void below grade used for dumping and lift. (See sketch)

In estimating progress on a trenching operation of this type, it is difficult to arrive at dependable yardage figures. Calculations must allow for local occurance of rock slides, tightness of material, and other obstacles requiring blasting, slight changes in direction and other problems which delay the dozer.

It is reasonable accurate to base such calculations upon the following factors : -

1) The first 10 feet will go fast with little dozer delay and no disposal problem.
2) The bottom 1/3 of the trench will furnish most of the trouble and yardage efficiency will drop by about 75%.
3) Similar experience has shown that lost time in handling obstructions will account for approximately 25% of the entire project time.

With these allowances considered, the trenching operation is outlined below:

Excavation : -

No. Trenches	Cu. Yds. each	length	Average depth	Bottom width
8	1000	150'	12'	15'

DISTRIBUTION OF TIME - % :-

Dozing	Drilling and Blasting	Clearing, etc.	Servicing & other
60%	25%	10%	5%

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

In admitting to estimate these charges to delay and low yardage expectancies, it is necessary to allow five full days for completion of each trench.

As a check on the foregoing, Applicant has referred to a cost and project analysis undertaken jointly in 1943 by the Bureau of Mines and Cleary Hill Mines Co., of Fairbanks, Alaska. Conditions and general features were similar.

Cost factors included in the proposed trenching work are shown:

Equipment	Opr. Hrs.	Rate	Cost
TD-18 International W/dozer	400	$10.00	$4,000.00
Compressor & attachments	#	150.00 pr.wk.	900.00
Pick-up truck-1946 Ford 1/2ton	#	6.00 pr.da.	240.00
	Total equipment costs - - -		$5,140.00

Compressor and truck on irregular and stand-by basis.

Force account : -

Personnel	Hrs.	Rate pr. hr.	Total
Dozer operator	400	$2.00	800.00
Powderman	#400	1.85	740.00
Laborer	400	1.50	600.00
		Charges to payroll - - - - - -	$2,140.00

Supplies	Quantity	Total
Fuel Oil	1600 gallons	280.00
Gas & lubricants	250 gallons	66.25
Powder	20 boxes	300.00
	Charges to supplies - - - - - -	$646.25

Total to trenching - - - - - - - - - - - - - $7,926.25

4) Channeling and Sinking : -

It is proposed that exposure of the vein structure be accompanied by precise lateral channeling for assay purposes. Standard procedures for this type of sampling probably can be worked in with addition of one man and a relatively minor cost.

It is expected further that occasion for several deeper excavations may be indicated by favorable surface mineralization. This work involves almost entirely a minor payroll charge and the use of hand tools. Probable costs are estimated:

Classified	Man hours	Rate	Total
laborers	160	$1.50	$240.00

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

5) Cross-Cutting : -

This phase of the project is necessarily dependent upon the results of the trench cross-cuts. In assuming favorable evidence of ore, it follows clearly that a check at depth is indicated.

Two cross-cuts, at intervals suggested by surface assays, are proposed. Interception points at any given depth are of course unknown. It is probable that 150 feet of cross-cut will furnish the basis for evaluating the ore-body as to commercial development.

Some discussion ofthis part of the proposed exploration seems appropriate. It is the thought of Applicant that funds contemplating the cost of this latter phase be authorized with the actual disbursement conditioned upon geological probabilities revealed by trenching. Further, a cost analysis is perhaps somewhat speculative. It appears reasonable to permit a fairly wide latitude in arriving at the total expenditure subject to authorization.

Such expenditure then, would be subject to determination jointly by Applicant and the Administrator. It is in the interest of orderly procedure to incorporate these costs in subject application with what ever conditions appear reasonable and consistant with the purpose of both Applicant and the Government.

Based upon these considerations, Applicant proposes that the amount of $5,000.00 be authorized for cross-cutting. Such amount to be disbursed upon joint approval of the contracting parties, and after preliminary work has demonstrated the justification for the expenditure.

Technical and Administrative Expense : -

Applicant suggests that cost of supervision, accounting, technical services, payroll taxes and insurance, and other administrative expense be applied to the project as a whole. Analysis of accounts will show distribution of these charges upon completion of the program. Preliminary break-down is estimated : -

Item	Rate	Period	Cost
Supervision	$30.00 pr.day	50 days	$1,500.00
Accounting	Fee	-	150.00
Tech-Services	#	*	300.00
Insurance	* .035%	-	175.00
Payroll taxes	* .015%	-	75.00
Office Expense & Overhead	350.00pr.mo.	50 days	400.00
Charge to general expense - - - - - -			$3,200.00

- Assay charges, etc.
* - Contingency - See schedule (5)

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Recap : - Item 3 (a)

Applicant proposes a comprehensive exploration project with contingency for determining further the extent and depth of a geologically probable ore-body containing workable values in scheelite.

Cost of project is reviewed :

Item	Project days	Cost
Access Road	10	$2,007.37
Temporary facilities	-	250.00
Trenching	40	7,926.25
Sampling	-	240.00
Cross-Cutting	*	5,000.00
Technical and Administrative		3,200.00
Total days	50	
Total Project Cost - - - - - - - -		$18,623.62

*Contract to provide for joint approval authorizing disbursement upon results of primary exploration.

Note - Applicant believes that the costs estimated are reasonable and complete. No provision for percentage over-ride has been made. Such allowances usually have no meaning and the figures shown contemplate a certain amount of trouble and breakage.

Item 3. (b) The possibility of the project being closed out be unfavorable weather conditions must of course govern any estimated date of completion. The primary phase of the project provides for fifty days from date of authorization. All equipment, supplies and personnel are available immediately and project is to commence on date of authorization. Completion of second stage exploration, ie., cross-cutting must be conditioned both upon definite assurance of an ore body and seasonal factors. Applicant suggests that this estimate is subject to review as the project develops.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 5. Operating facilities with exceptions indicated in Item 3 (a), schedule 2, are in good repair and useable for expected requirements. Camp and service buildings include - bunk houses, mess house, warehouses, tool rooms, various camp equipment, and all similar facilities necessary to the project.

Item 6. None.

Item 7. Equipment : -

Owned and furnished by Applicant :

One TD-18 International diesel tractor, 1949 Model, equipped with Bucyrus-Erie Bulldpzer.
One 1946 Ford 1/2 ton Pickup.
NB - Rental or depreciation charge - itemized in items 3 (a), schedule #1 and #3.
Units in good operating condition and suitable for purpose.

Rented : -
One Ingersoll-Rand Compressor - 205 c/f/m, Tractor mounted with hammer and attachments.
Rental charges shown - Item 3 (a).

Applicant has necessary hand tools, chain saw, other materials at hand.

Item 8. See Item 3 (a).

Item 9. See Item 3 (a).

Item 10. (a) Applicant is prepared to furnish 25% of the gross cost of project.
(b) Yes.

Item 11. Applicant offers as general information the following comments:

1) A considerable amount of money has been expended by Applicant prior to this application in an effort to reach a basis for a co-operative exploration program with the Government.
2) The property described was obtained by purchase rather than by location or lease or option. Direct charges to ground purchase alone are in excess of $30,000.00
3) Substantial investment has been made in equipment and supplies.
4) New road construction providing access to the property was undertaken at Applicant's expense.
5) Applicant has every necessary item of equipment, material, facilities and personnel available at once for entry into the proposed project.

FORM MF-103

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

6) Applicant has a substantial credit position through its individual members.
7) Applicant proposes to develop and to operate the property should exploration result in the discovery of an ore body.
8) The area has seasonal labor surpluses and man power is at present available in number.
9) The members of Applicant Company are prepared to lend direct personal effort to the project.
10) The co-operation of the Government is invited.

- - - - - -0- - - - -0- - - - -

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Pat T. Phalen	President "D"	None	*	260,499	None	None	
Frank C. Culver	"D"	None	*	7,500	None	None	
John W. Phalen	~~"D"~~	None	*	7,500	None	None	
Milton Emley	"D"	None	*	3,000	None	None	
Zilla Emley	~~"D"~~	None	*	1,500	None	None	
Mrs. Pat T. Phalen	Sec.Treas "D"	None	*	1	None	None	
*Financial statement furnished upon request.			x x x x x	280,000		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$ No Par		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable.

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

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Not applicable.

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.

Item 12 to 18 - Refer - MF-103.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2468

Date received 4-3-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

Western Mines Co.,
Helmville, Montana.

Name and address of applicant

Date September 8, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

FORM MF-100

September 8, 1951

WESTERN MINES CO.,
HELMVILLE, Montana.

Item 1 & 2 - Refer to Form MF 103.

Item 3 - (a) Mine location - Approximately nine miles East of Helmville, Montana; Shipping point - Drummond, Montana, twenty-three miles South of Helmville.

(b) Ogden Mountain.

(c) Township 13, Section 23, Range 10 W.

(d) Powell County, Montana.

Item 4 - (a) Under exploration at present.

(b) Owner.

Item 5 - Not in production; ~~production scheduled for June, 1952.~~

FORM MF-100 September 8, 1951

WESTERN MINES CO.,
HELMVILLE, MONTANA.

Item 6 - (a) Applicant Company was organized for the specific purpose of developing and operating the scheelite deposit described in subject application.

(b) The President and General Manager of Western Mines Co., Mr. Pat T. Phalen, has operated the Butane Engineering Co., Inc., of Walla Walla, Washington; the Butane Engineering Co. of Columbia Basin, Inc., of Kennewick, Washington, and the Phalen Sheet Metal Works of Bend, Oregon.

Each undertaking was successful and was developed under Mr. Phalen's direct supervision and management. Applicant offers, for credit purposes, the record of these companies as reflecting sound judgment and good business practice.

Mr. Phalen, together with associates listed under Item 8, makes representation under name of applicant Company as to financial responsibility and general business experience.

Applicant has employed a mining engineer for supervision of the preliminary investigation of subject property and proposes to use his services should mining operations result. Qualifications of the engineer are set forth as follows:

Name : D. E. Browne,
Colorado School of Mines.

Previous activity - :
1941 - 1943 - Engineer, Livengood Placer's Inc., Alaska Division Callahan Lead-Zinc Corp., at Fairbanks, Alaska.
1943-1946 - Consulting Enginaer, Metals Reserve Co., Regional Director, Reconstruction Finance Corp., for Alaska.
1946-1950 - Partner-Manager, Iditarod Operating Co., Fairbanks, Alaska; Partner* , Arctic Tin Co., Nome, Alaska; North American Dredging Co., Flat, Alaska, as lessor, one-fourth interest.

*Now listed as Northern Tin Co.

Applicant represents the above individual as capable of general supervision of proposed exploration and development work.

Frank C. Clver is Representative, A. O. Smith Company in the Following states: California, Oregon, Washington, Idaho, Montana, Wyoming and Alaska.

John W. Phalen - Nine years successful owner and operator of Butane Gas Co., of Spokane, Washington.

Milton Emley, Wheat rancher.

FORM MF-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

Item 7 - (a) The vein structure under discussion was discovered by David Hunter before 1880. Mineralization was encountered at the face in seven cross-cuts driven at right angles to the strike of the contact zone. Unusually strong evidence of scheelite occurance is present in the surface dump of each of these cross cuts at intervals of approximately 150 feet.

Presumably, the early prospecting did not consider the possible economic value of scheelite and exploration was confined to the development of a gold and copper ore body of workable grade. It appears that actual production was never attempted. The cross-cuts were closed and later abandoned by the original prospecting group.

(b) Two neighboring properties, each with a history of minor and somewhat irregular production indicate to applicant only the probability of a rather widespread mineralization throughout the area - The Hobby Horse and the Blackfoot Gold Co. have produced copper and gold ores over a period of forty years. Accurate records are not available and applicant makes no attempt to co-orelate these several occurances with the scheelite prospect under discussion.

(c) None.

(*b*) If deposit is other than pla

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

By Pat. T. Phalen
(Signature of authorized official)
3-20-52

September 8, 1951
(Date)

President.
(Title)

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

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

Form MF-100
(May 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2465

Date received 4-3-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 - 1952

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Helmville, Montana.

Name and address of applicant

Date September 8, 1951

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Mrs. Pat T. Phalen	Sec.Treas "D"	None	*	1	None	None	
*Financial statement furnished upon request.			x x x x x	280,000		x x x x x	x x x x x

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For Corporate Applicants

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

16—63792-1

Item 12 to 18 - Refer - MF-103.

FORM MF-100

September 8, 1951

WESTERN MINES CO.,
HELMVILLE, Montana.

Item 1 & 2 - Refer to Form MF 103.

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FORM MF-100 September 8, 1951

WESTERN MINES CO.,
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Name : D. E. Browne,
Colorado School of Mines.

Previous activity - :
1941 - 1943 - Engineer, Livengood Placer's Inc., Alaska Division Callahan Lead-Zinc Corp., at Fairbanks, Alaska.
1943-1946 - Consulting Engineer, Metals Reserve Co., Regional Director, Reconstruction Finance Corp., for Alaska.
1946-1950 - Partner-Manager, Iditarod Operating Co., Fairbanks, Alaska; Partner , Arctic Tin Co., Nome, Alaska; North American Dredging Co., Flat, Alaska, as lessor, one-fourth interest.

Now listed as Northern Tin Co.

Applicant represents the above individual as capable of general supervision of proposed exploration and development work.

Frank C. Olver is Representative, A. O. Smith Company in the following states: California, Oregon, Washington, Idaho, Montana, Wyoming and Alaska.

John W. Phalen - Nine years successful owner and operator of Butane Gas Co., of Spokane, Washington.

Milton Daley, Wheat rancher.

FORM MF-100

WESTERN MINES CO.,
HELMVILLE, MONTANA.

September 8, 1951

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(b) Two neighboring properties, each with a history of minor and somewhat irregular production indicate to applicant only the probability of a rather widespread mineralization throughout the area - The Hobby Horse and the Blackfoot Gold Co. have produced copper and gold ores over a period of forth years. Accurate records are not available and applicant makes no attempt to co-orelate these several occurances with the scheelite prospect under discussion.

(c) None.

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

WESTERN MINES CO.,
(Name of company)

By Pat T. Phalen
(Signature of authorized official)

September 8, 1951
(Date)

President.
(Title)

3-20-52

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

MF-200
(June 1951)

Docket No. DMA _____
Commodity WO3

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

(*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 Thirty (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] Six operating 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 proper*[illegible] All facilities, buildings, fixtures, equipment, [illegible]ther 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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

Thie project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
Trench vein at about 8 separate points (200 hours bulldozing)*	2,500.00
Equipment to be purchased	100.00
Sampling of trenches and assaying	500.00
Supervision and overhead	1,300.00
Estimated cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

Improve bulldozer road for truck travel	$1,500.00
Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot#	11,250.00
Construction new facilities	250.00
Equipment to be purchased	250.00
Supervision and overhead	2,500.00
Total cost Phase II	$15,750.00

Total cost of project $20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

Rack and fuel dump	$ 50.00
Shed - sheet iron	100.00
Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:

	Allowable rental per month
Compressor 105 cfm	$ 212.00
Jackhammer with hose	50.00

To be purchased:

Misc. tools and equipment	$ 250.00

To be furnished by operator:

	Estimated Replacement Cost	Allowable Monthly Rental
Tractor TD18 International dozer	$16,000.00	$267.00
Chain saw, gas-driven	400.00	7.00
Truck, pickup, 1/2-ton	1,500.00	25.00

Rental is allowable on the above items of equipment only for the period of actual use.

#Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

None.

MF-200
(June 1951)

Docket No. DMA _____
Commodity WO3

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

(*b*) ~~That he is a lessee, in possession and entitled to possession, subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached.~~

3. *Exploration project.* The Operator, within Thirty (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] Six operating 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, and 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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

This project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
Trench vein at about 8 separate points (200 hours bulldozing)*	2,500.00
Equipment to be purchased	100.00
Sampling of trenches and assaying	500.00
Supervision and overhead	1,300.00
Estimated cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

Improve bulldozer road for truck travel	$1,500.00
Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot#	11,250.00
Construction new facilities	250.00
Equipment to be purchased	250.00
Supervision and overhead	2,500.00
Total cost Phase II	$15,750.00

Total cost of project $20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

Rack and fuel dump	$ 50.00
Shed - sheet iron	100.00
Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:

	Allowable rental per month
Compressor 105 cfm	$ 212.00
Jackhammer with hose	50.00

To be purchased:

Misc. tools and equipment	$ 250.00

To be furnished by operator:	Estimated Replacement Cost	Allowable Monthly Rental
Tractor TD18 International dozer	$16,000.00	$267.00
Chain saw, gas-driven	400.00	7.00
Truck, pickup, 1/2-ton	1,500.00	25.00

Rental is allowable on the above items of equipment only for the period of actual use.

#Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

None.

MF-200
(June 1951)

Docket No. DMA _____
Commodity W3

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

(*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 Thirty (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] Six operating 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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

This project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
Trench vein at about 8 separate points (200 hours bulldozing)*	2,500.00
Equipment to be purchased	100.00
Sampling of trenches and assaying	500.00
Supervision and overhead	1,300.00
Estimated Cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

Improve bulldozer road for truck travel	$1,500.00	
Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot#	11,250.00	
Construction new facilities	250.00	
Equipment to be purchased	250.00	
Supervision and overhead	2,500.00	
Total cost Phase II	$15,750.00	
Total cost of project		$20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

Rack and fuel dump	$ 50.00
Shed - sheet iron	100.00
Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:	Allowable rental per month
Compressor 105 cfm	$ 212.00
Jackhammer with hose	50.00

To be purchased:

Misc. tools and equipment	$ 250.00

To be furnished by operator:	Estimated Replacement Cost	Allowable Monthly Rental
Tractor TD18 International dozer	$16,000.00	$267.00
Chain saw, gas-driven	400.00	7.00
Truck, pickup, 1/2-ton	1,500.00	25.00

Rental is allowable on the above items of equipment only for the period of actual use.

#Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

None.

MF-200
(June 1951)

Docket No. DMA _____
Commodity 129

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

(*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 Thirty (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] Six operating 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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

This project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
Trench vein at about 8 separate points (200 hours bulldozing)*	2,500.00
Equipment to be purchased	100.00
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Supervision and overhead	1,300.00
Estimated cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

Improve bulldozer road for truck travel	$1,500.00	
Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot/	11,250.00	
Construction new facilities	250.00	
Equipment to be purchased	250.00	
Supervision and overhead	2,500.00	
Total cost Phase II	$15,750.00	
Total cost of project		$20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

Rack and fuel dump	$ 50.00
Shed - sheet iron	100.00
Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:

	Allowable rental per month
Compressor 105 cfm	$ 212.00
Jackhammer with hose	50.00

To be purchased:

Misc. tools and equipment	$ 250.00

To be furnished by operator:

	Estimated Replacement Cost	Allowable Monthly Rental
Tractor TD18 International dozer	$16,000.00	$267.00
Chain saw, gas-driven	400.00	7.00
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Rental is allowable on the above items of equipment only for the period of actual use.

/Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

None.

MF-2
(June 1951)

Docket No. DMA _____
Commodity WO3

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

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

3. *Exploration project.* The Operator, within Thirty (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] Six operating 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, and 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.

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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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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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.

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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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

This project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
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Equipment to be purchased	100.00
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Estimated cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

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Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot/	11,250.00	
Construction new facilities	250.00	
Equipment to be purchased	250.00	
Supervision and overhead	2,500.00	
Total cost Phase II	$15,750.00	
Total cost of project		$20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

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Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:	Allowable rental per month
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Jackhammer with hose	50.00

To be purchased:

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To be furnished by operator:	Estimated Replacement Cost	Allowable Monthly Rental
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Rental is allowable on the above items of equipment only for the period of actual use.

/Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

None.

MF-200
(June 1951)

Docket No. DMA _____
Commodity 103

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Western Mines Co., Helmville, Montana

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 Powell described as follows: [3] Four unpatented lode mining claims known as the New Progress No. 1, New Progress No. 2, Old Timer No. 1 and the Old Timer No. 2, located in sec. 23, T. 13 N., R. 10 W., Ogden Mountain Mining District

with respect to which the Operator represents and undertakes: [4]

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

(*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 Thirty (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] Six operating 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, and 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 $15,487.50, which is 75 percent of the agreed estimated total cost of this project, $20,650.00.

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.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

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

WESTERN MINES CO.
Helmville, Montana

Exploration Project Contract

EXHIBIT "A"

This project will explore veins along a granite-limestone contact within the subject claims.

The project shall be divided into two steps, the first step to consist of trenching to determine the extent and grade of ore indicated by the old workings.

The second step, undertaken only on Field Team approval, shall consist of 1,500 feet of diamond drilling to determine at depth the extent and grade of any vein or veins exposed by the surface trenching. The location and direction of the drill holes to be determined after the trenching is completed.

ESTIMATED COST SUMMARY

Phase I

Construct bulldozer road to prospect	$ 500.00
Trench vein at about 8 separate points (200 hours bulldozing)*	2,500.00
Equipment to be purchased	100.00
Sampling of trenches and assaying	500.00
Supervision and overhead	1,300.00
Estimated cost Phase I	$4,900.00

*To include all bulldozer costs and labor, rental and cost of supplies for digging trenches.

Phase II

Improve bulldozer road for truck travel	$1,500.00
Diamond drill the vein or veins exposed by trenching, 1,500 feet at $7.50 per foot*	11,250.00
Construction new facilities	250.00
Equipment to be purchased	250.00
Supervision and overhead	2,500.00
Total cost Phase II	$15,750.00

Total cost of project $20,650.00

Fixtures and Improvements

Construction of the following buildings shall be allowed as a cost of the project:

Rack and fuel dump	$ 50.00
Shed - sheet iron	100.00
Tool house - sheet iron	100.00
Total	$ 250.00

Operating Equipment:

To be rented:

	Allowable rental per month
Compressor 105 cfm	$ 212.00
Jackhammer with hose	50.00

To be purchased:

Misc. tools and equipment	$ 250.00

To be furnished by operator:

	Estimated Replacement Cost	Allowable Monthly Rental
Tractor TD18 International dozer	$16,000.00	$267.00
Chain saw, gas-driven	400.00	7.00
Truck, pickup, 1/2-ton	1,500.00	25.00

Rental is allowable on the above items of equipment only for the period of actual use.

*Per foot costs to include labor, supplies for sampling, core boxes and assaying costs.

Labor and Supervision.

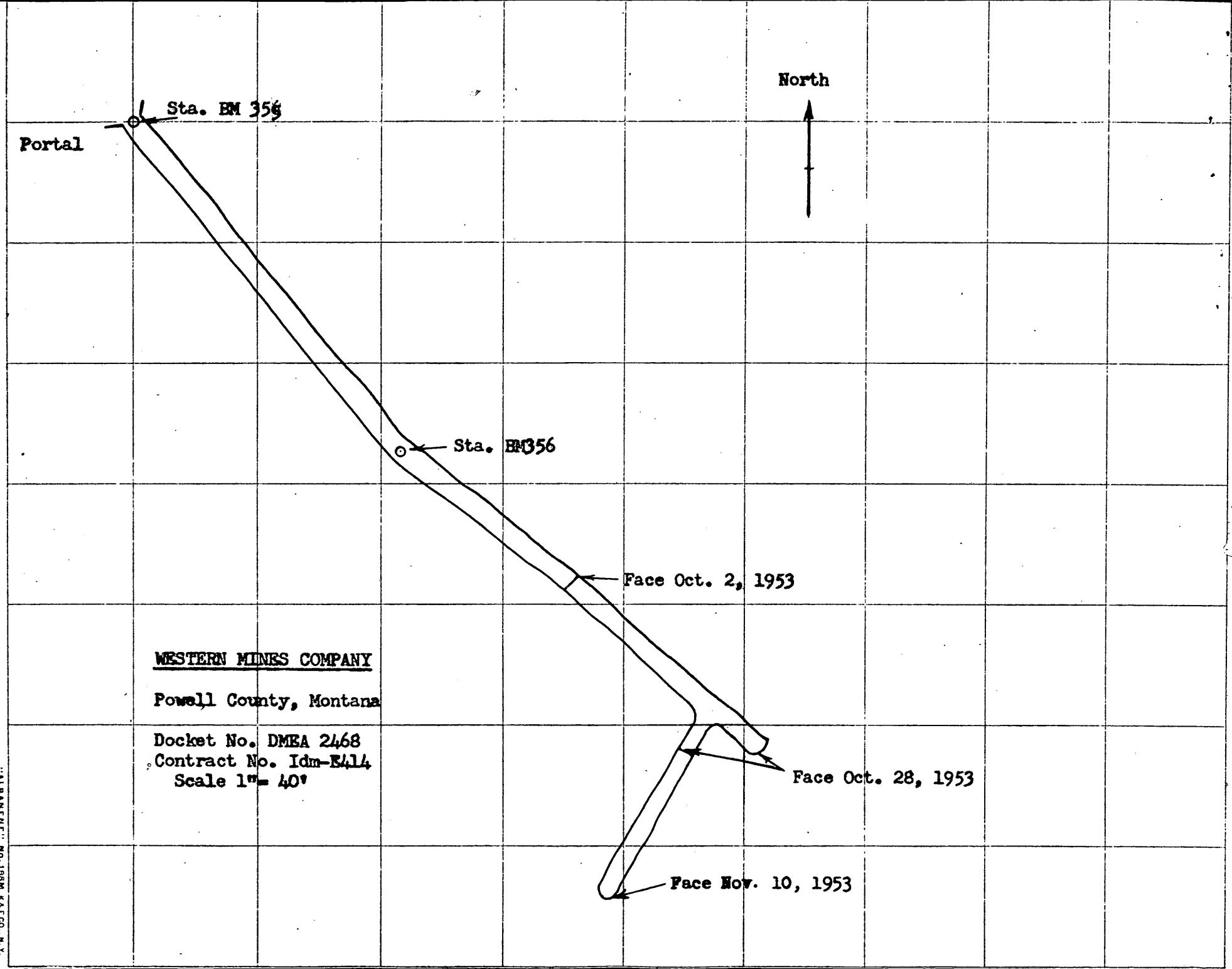
Labor for the herein described project may be paid at shift rates or unit contracts at the discretion of the operator, but may not exceed standards prevailing in the mining district in which the project is located for like work.

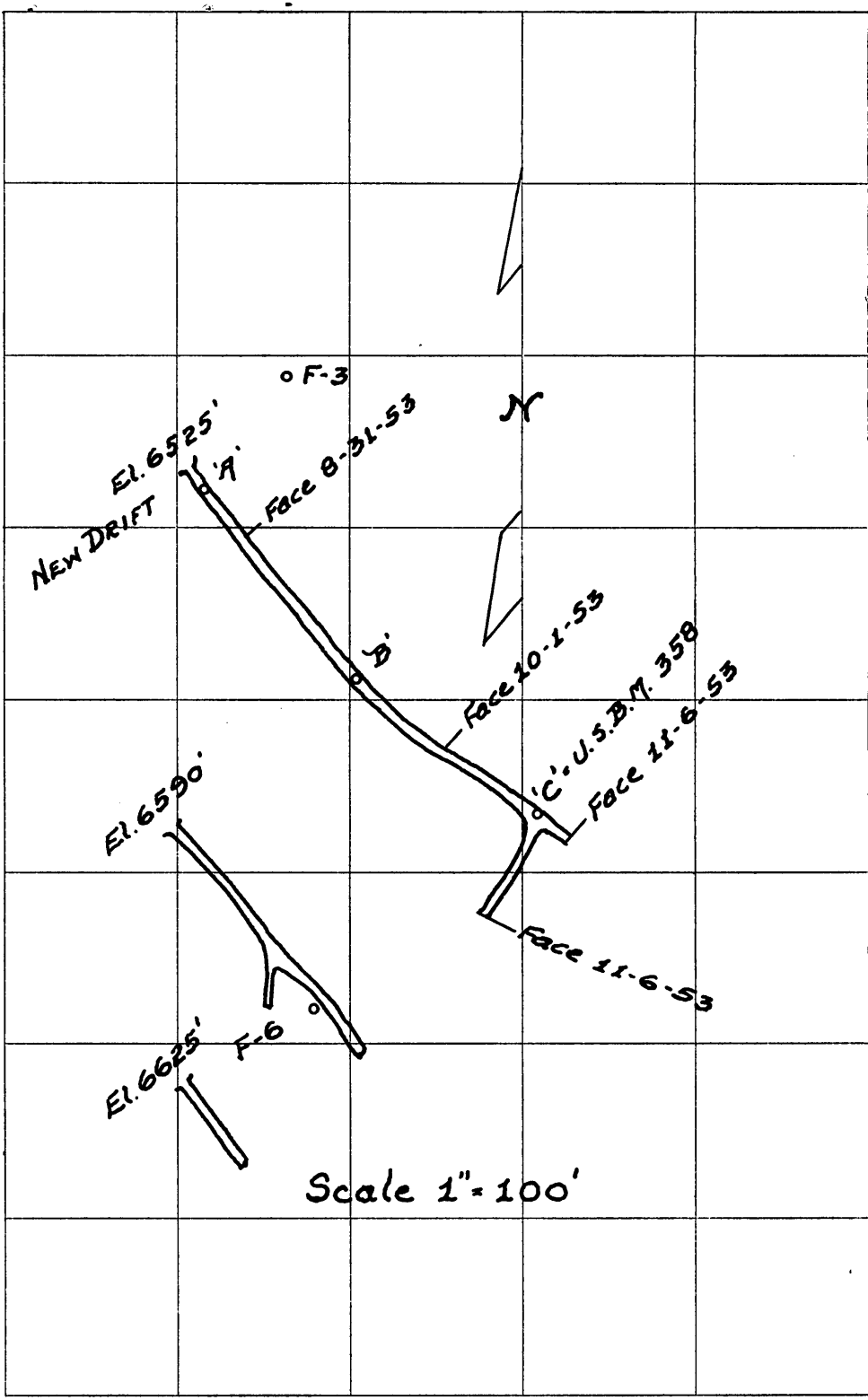
The salary of one engineer-supervisor at the rate of $600.00 per month is allowable as a cost of the project.

Rehabilitation and Repairs.

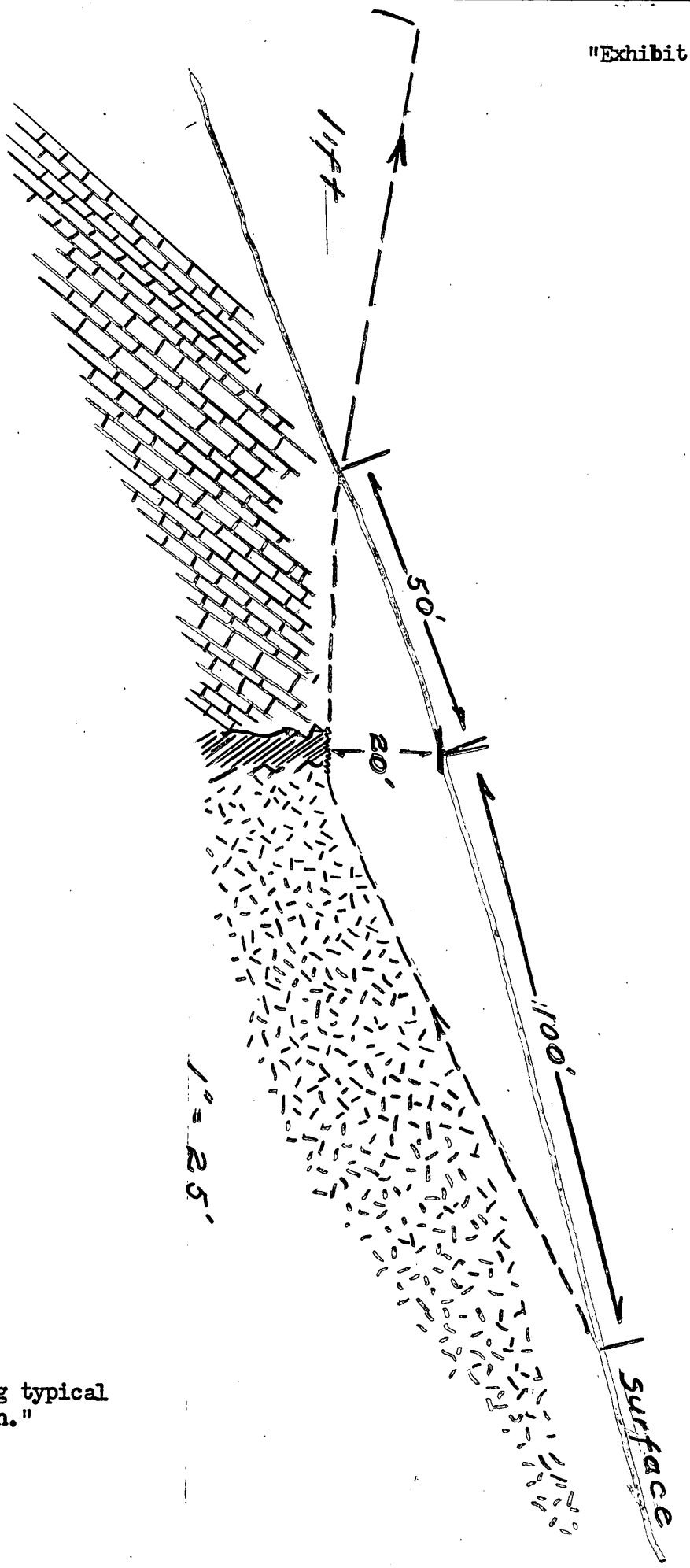
None.

"ALBANENE" NO. 195M K&E CO., N.Y.
REG. U.S. PAT. OFF

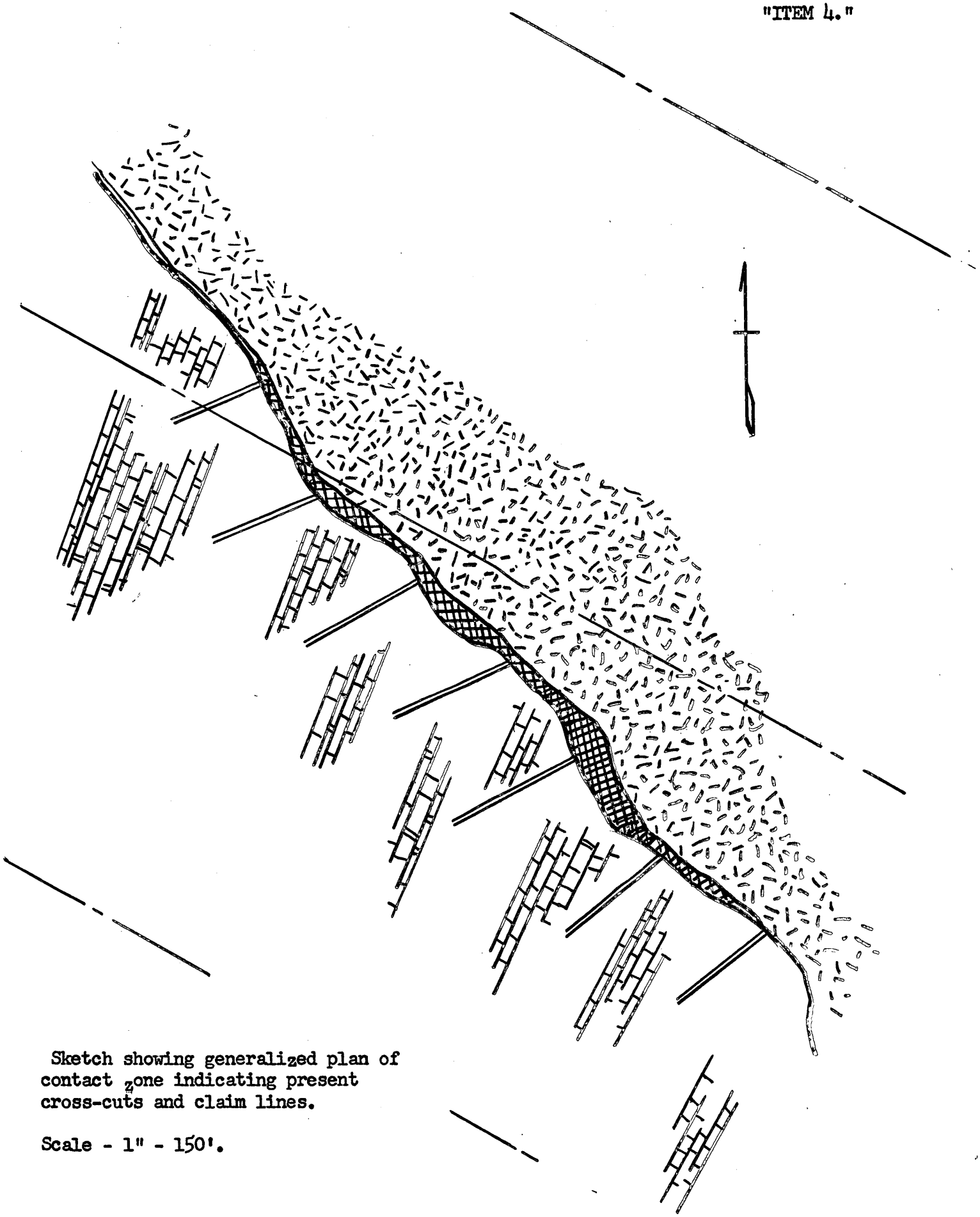

North
Sta. BM 356
Portal
Sta. BM356
Face Oct. 2, 1953
WESTERN MINES COMPANY
Powell County, Montana
Docket No. DMEA 2468
Contract No. Idm-E414
Scale 1" = 40'
Face Oct. 28, 1953
Face Nov. 10, 1953


F-3
N
El. 6525'
'A'
Face 8-31-53
NEW DRIFT
'B'
Face 10-1-53
'C' - U.S.B.M. 358
Face 11-6-53
El. 6590'
Face 11-6-53
F-6
El. 6625'
Scale 1" = 100'

"Exhibit 1 - Item 3 (a)."



"Sketch showing typical trench section."



Sketch showing generalized plan of contact zone indicating present cross-cuts and claim lines.

Scale - 1" - 150'.

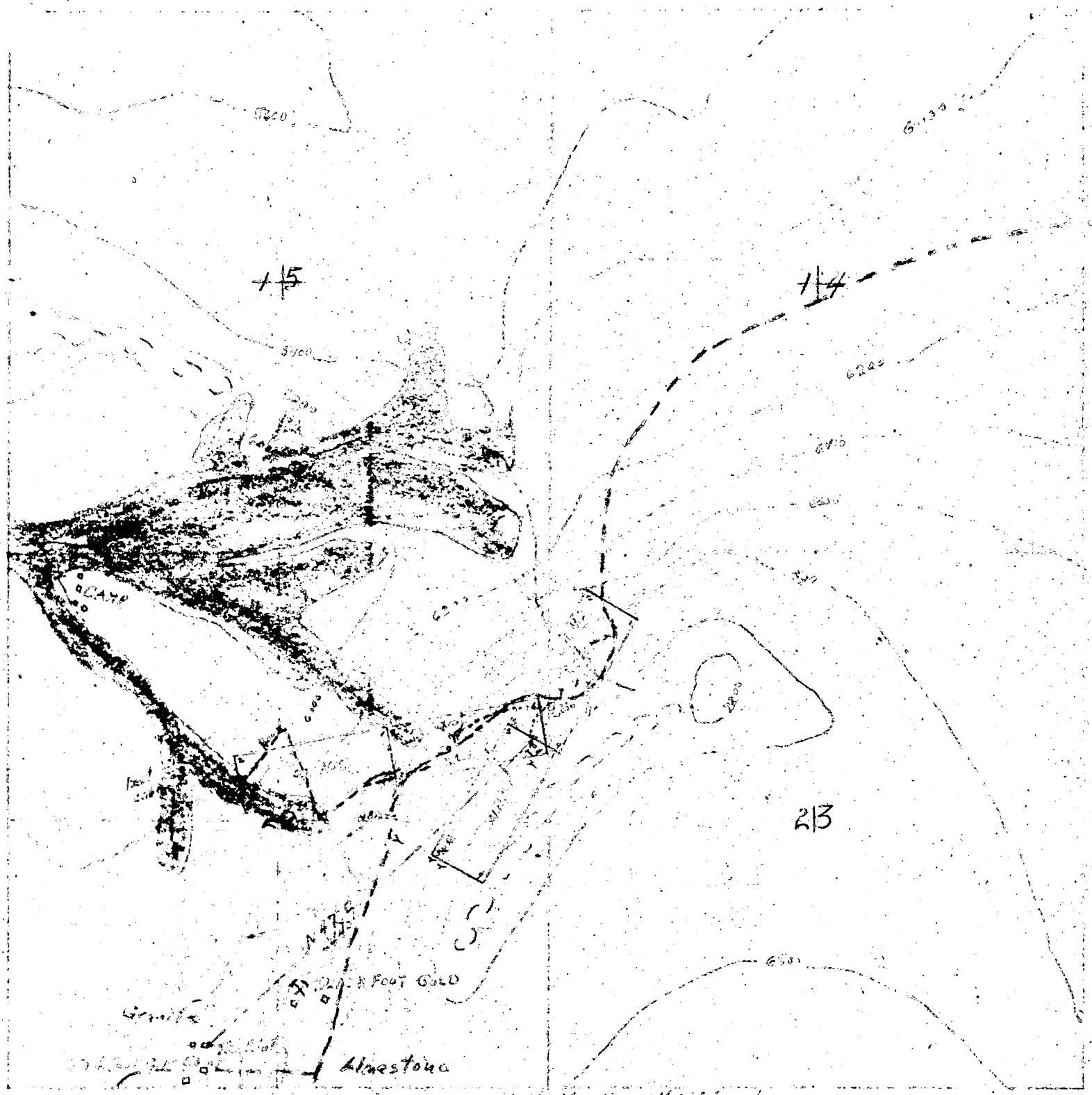
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
SPOKANE 2, WASHINGTON

OFFICIAL BUSINESS

(PMGC)

SPOKANE
FEB 7
8 PM
1952
WASH.

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



T13N, R10W, Montana.

18 Inches June 1952.

SCALE

OVER LAY

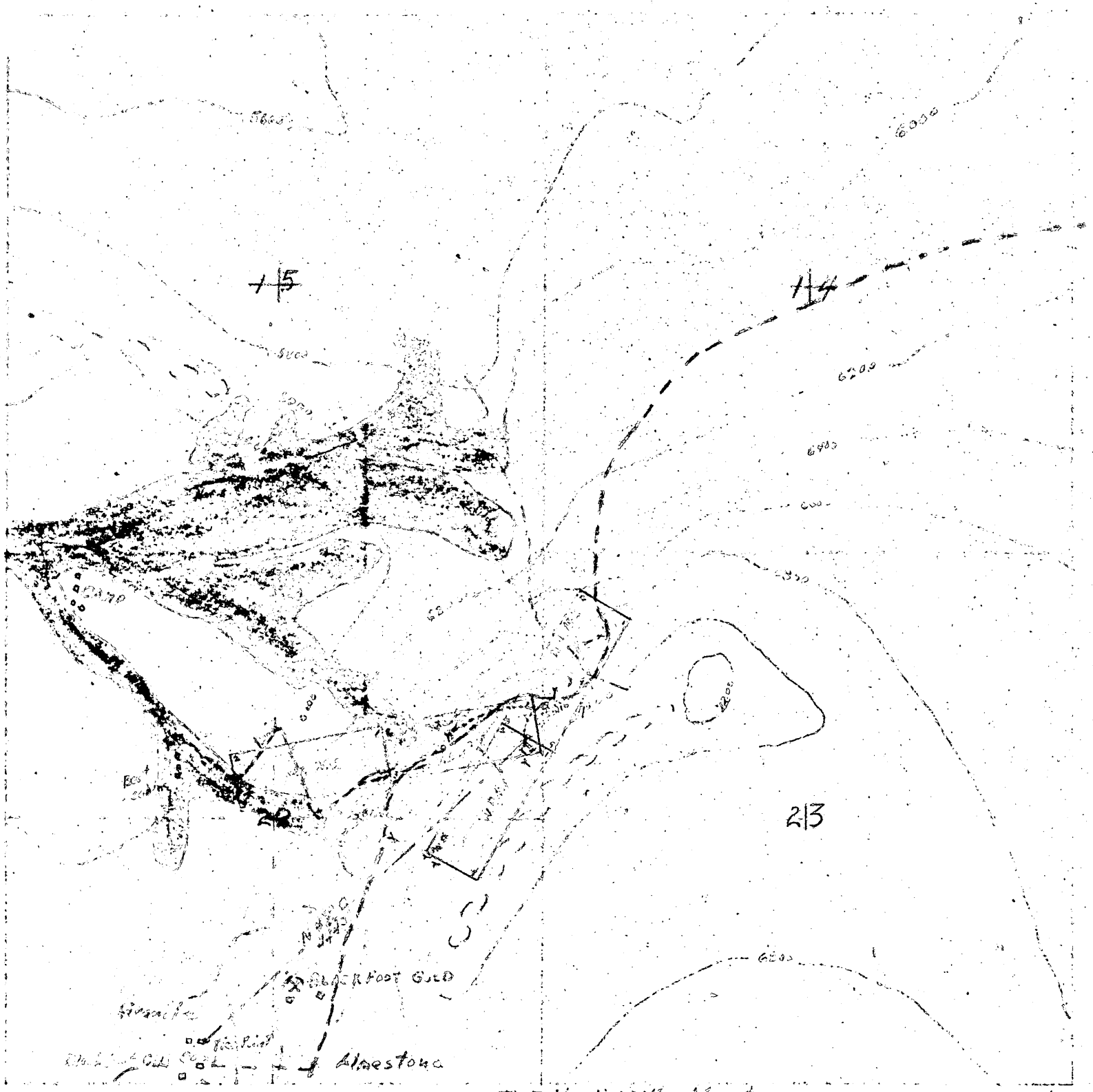
Map No. 1 of 4

EXPLANATION

- Alluvium
- Proposed Road
- Trail surveyed
- Mine Tested

Mile

- Limestone
- Granite
- Andesite



T13.N R10W. Montana

EXPLANATION

Adit
Proposed Road
Trail surveyed
Mine Tunnel

Limestone
Shale
Apatite Dike

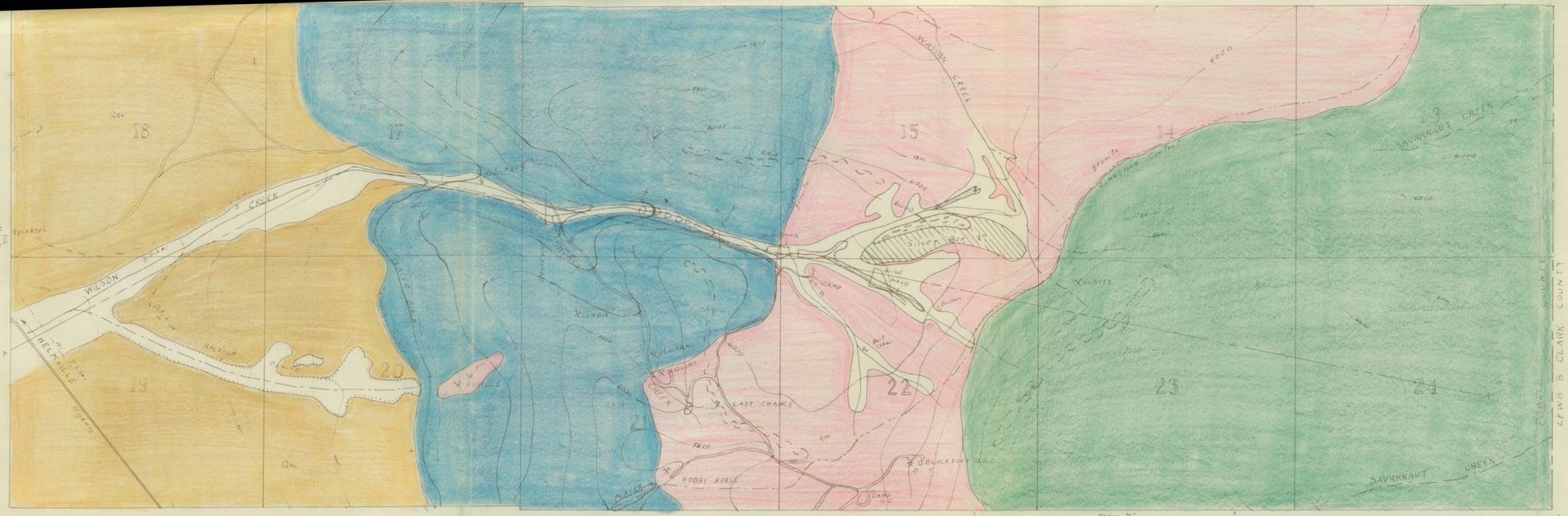
Jan 1952

SCALE

OVER LAY

Map No. 1 of 4

DMEA DOCKET No. 2468
PLATE I



PASSABLE ROAD
PLACER DITCH
INTERMITTENT STREAM
MINES
BUILDINGS
PLACER CUTS
PLACER DAM
200' CONTOUR INTERVAL. DATUM - SEA LEVEL

N
W
E

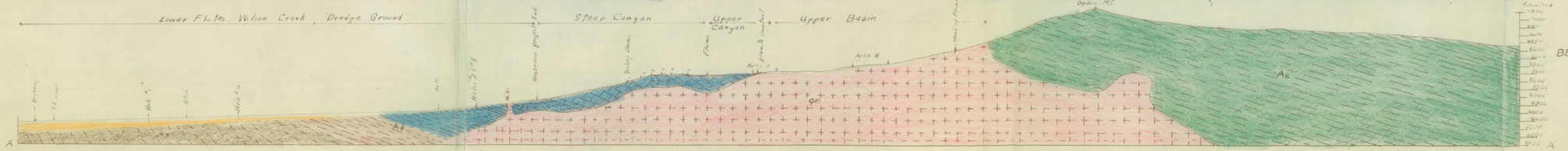
(T13N, R10W, MONTANA)

J.B. Hopkins
after K. Stout
March 1951

SCALE

0 1/4 1/2 3/4 1 MILE

Map No. 2



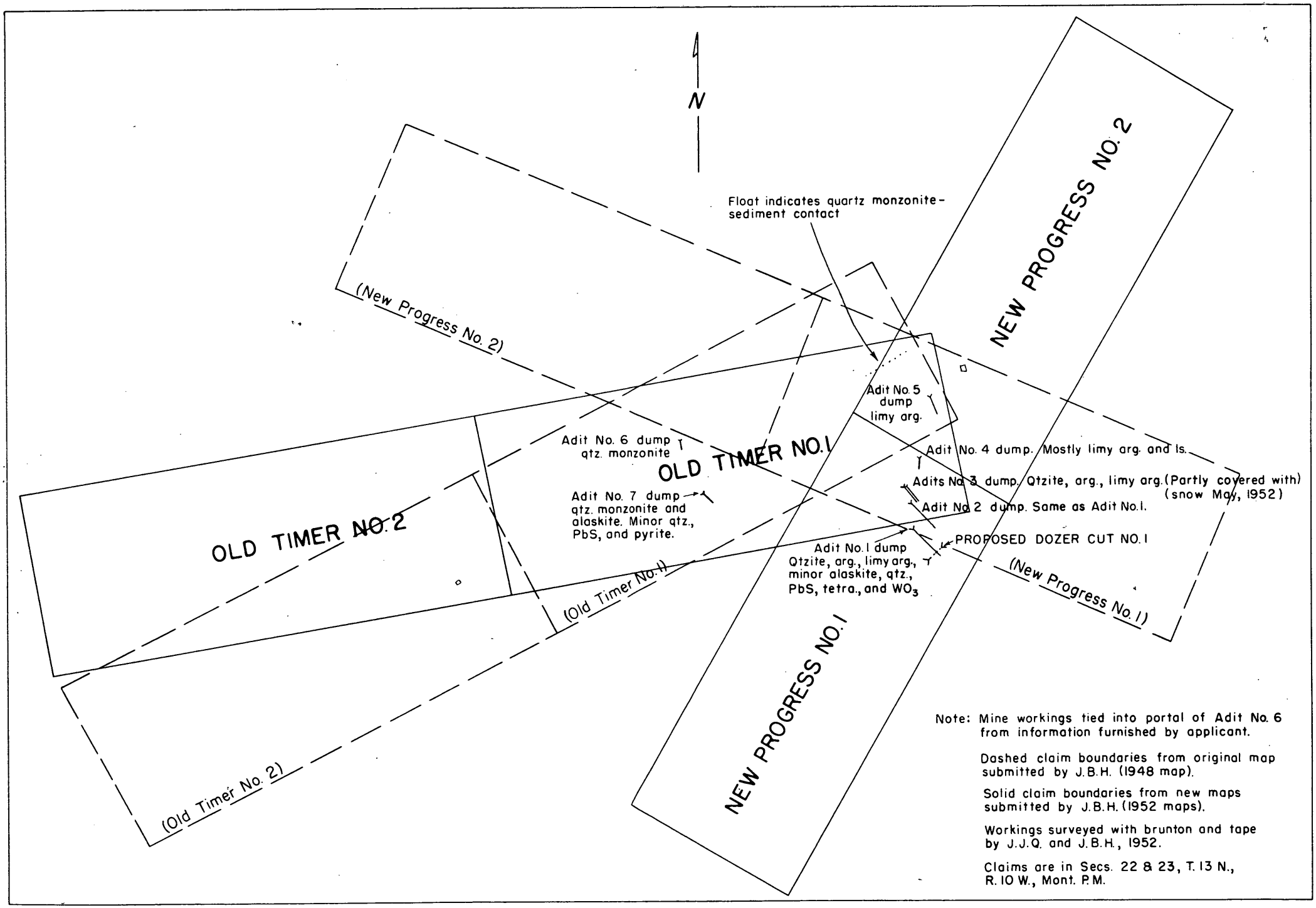
SEDIMENTARY ROCKS

	QAL	ALLUVIUM
RAVALLI SERIES		SPOKANE
		NEWLAND
BELT		
		GRINNELL
		APPEKUNNY

IGNEOUS ROCKS

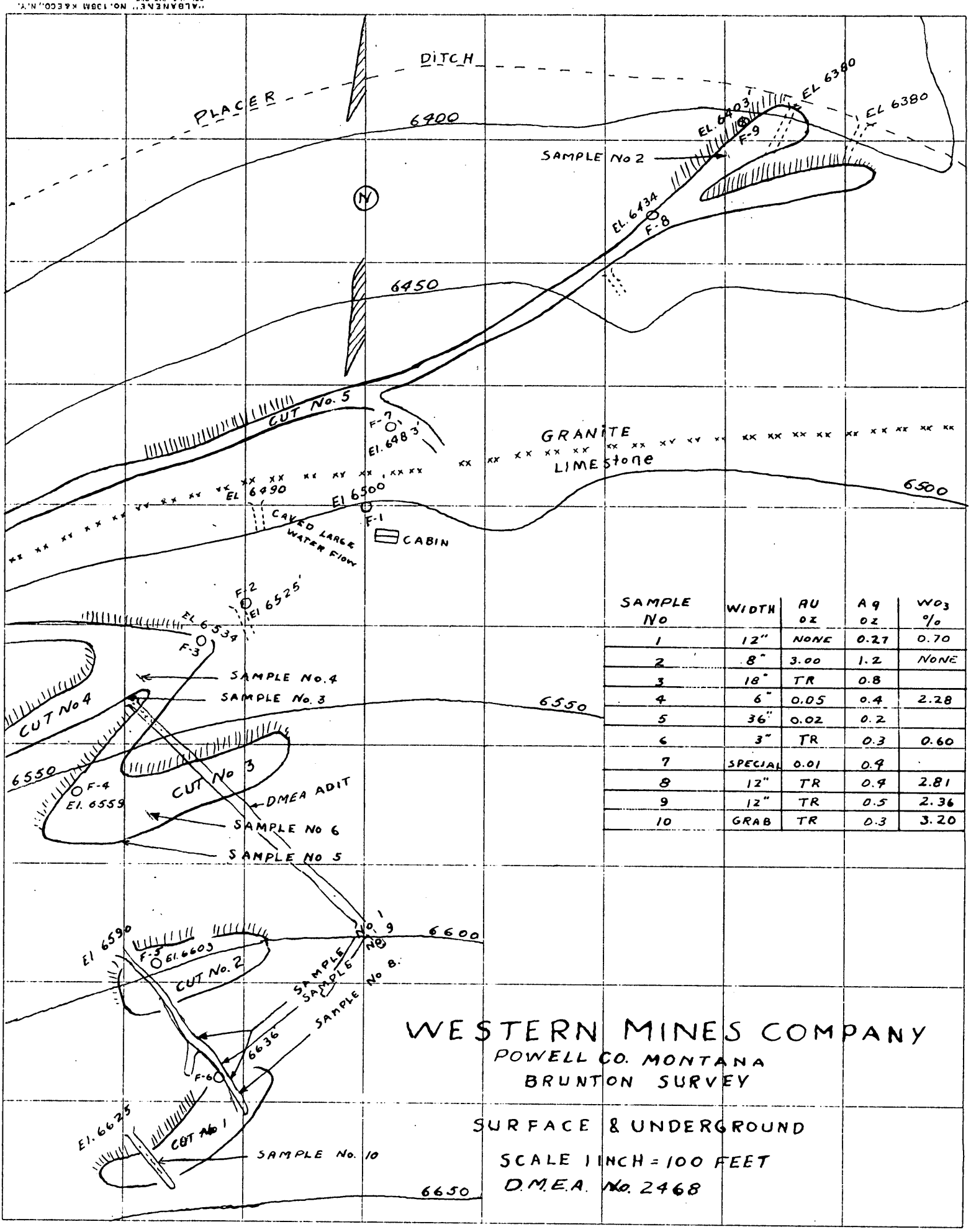
	QUARTZ MONZONITE

HOPKINS MINES INC. - PLACER



CLAIM MAP SHOWING LOCATION OF PRINCIPAL ADITS AND DUMPS OF TUNGSTEN AREA
WESTERN MINES CO., POWELL COUNTY, MONTANA

400 200 0 400 800 1200 FEET



SAMPLE No	WIDTH	AU OZ	AG OZ	WO_3 %
1	12"	NONE	0.27	0.70
2	8"	3.00	1.2	NONE
3	18"	TR	0.8	
4	6"	0.05	0.4	2.28
5	36"	0.02	0.2	
6	3"	TR	0.3	0.60
7	SPECIAL	0.01	0.4	
8	12"	TR	0.4	2.81
9	12"	TR	0.5	2.36
10	GRAB	TR	0.3	3.20

WESTERN MINES COMPANY

POWELL CO. MONTANA

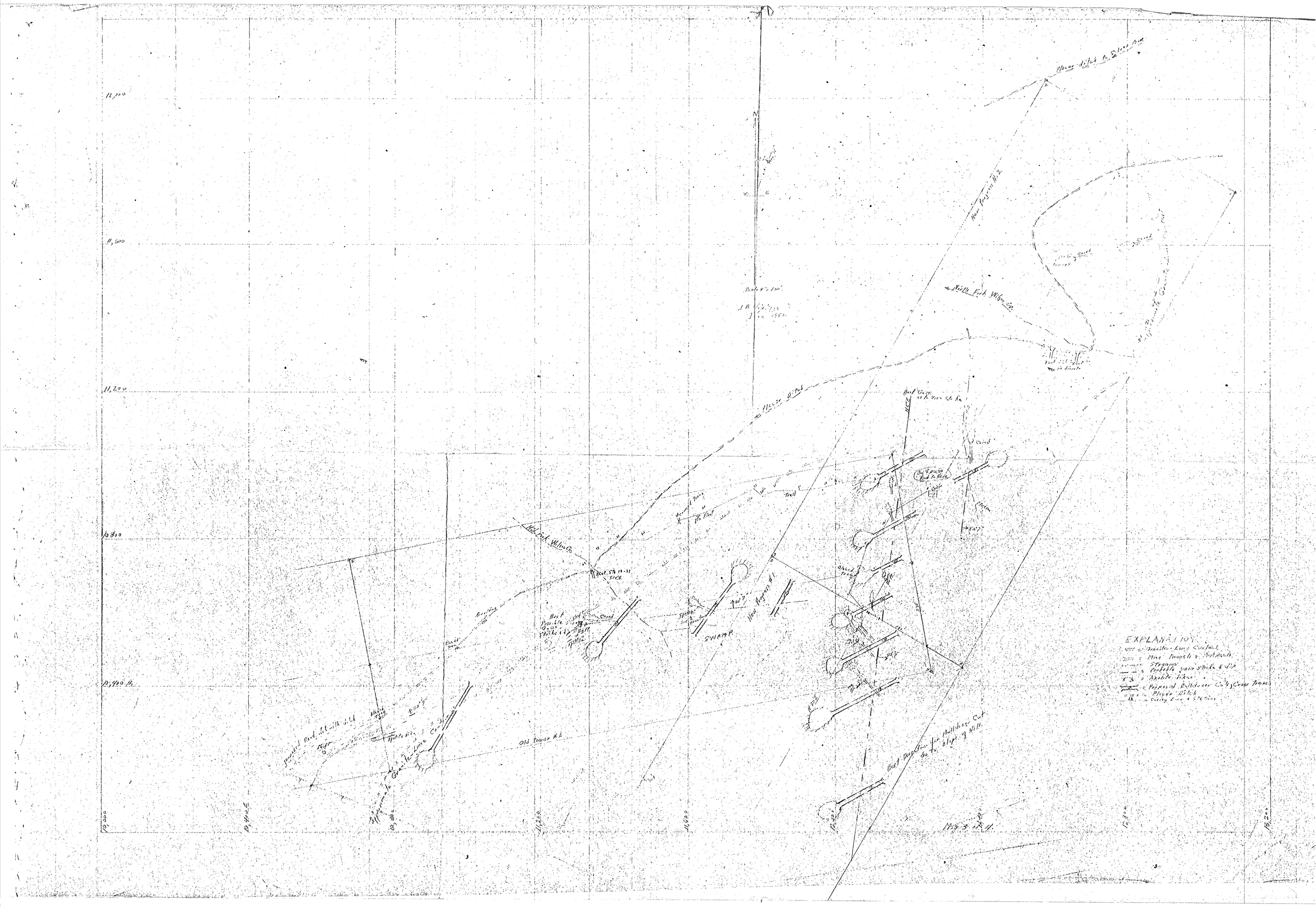
BRUNTON SURVEY

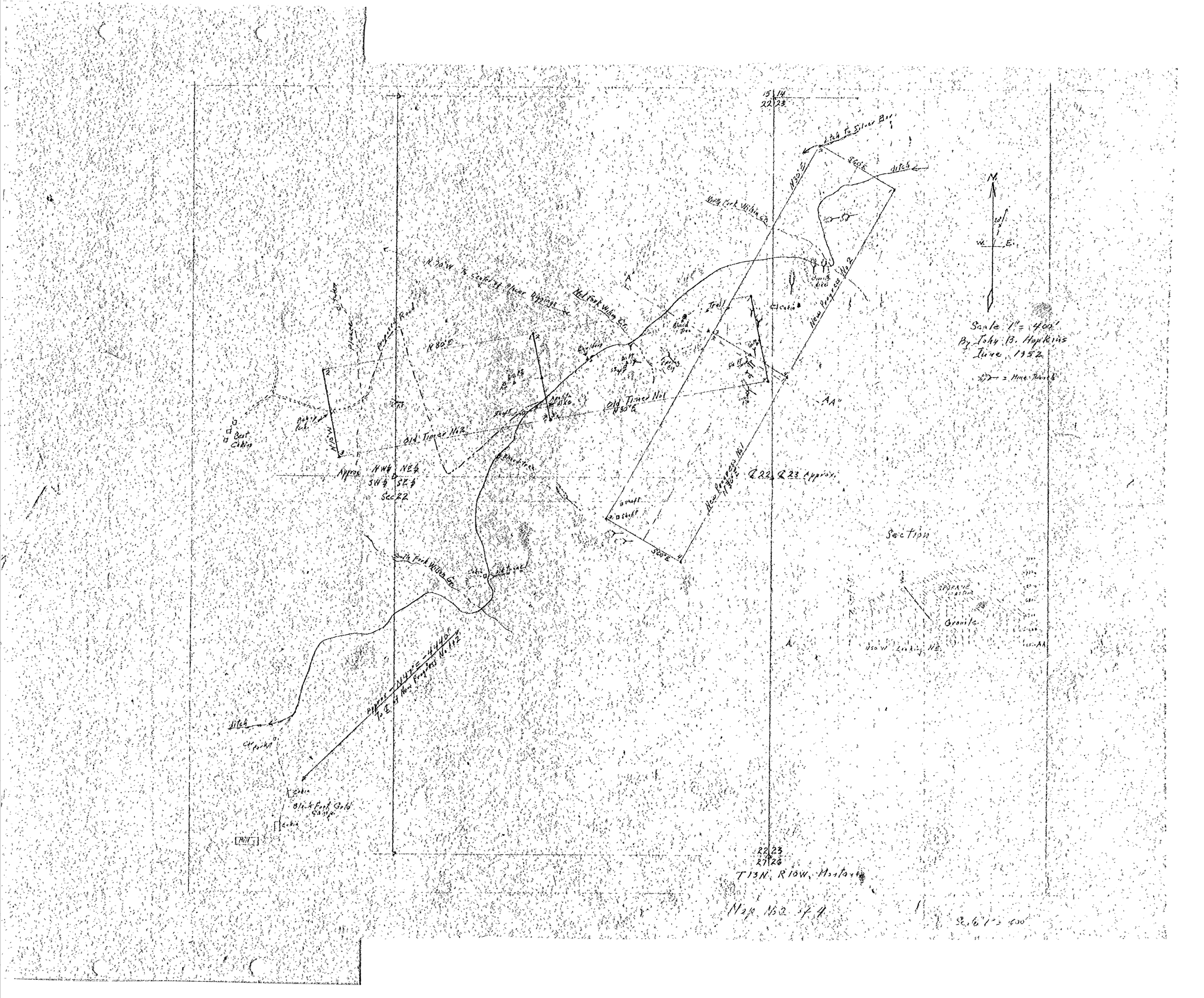
SURFACE & UNDERGROUND

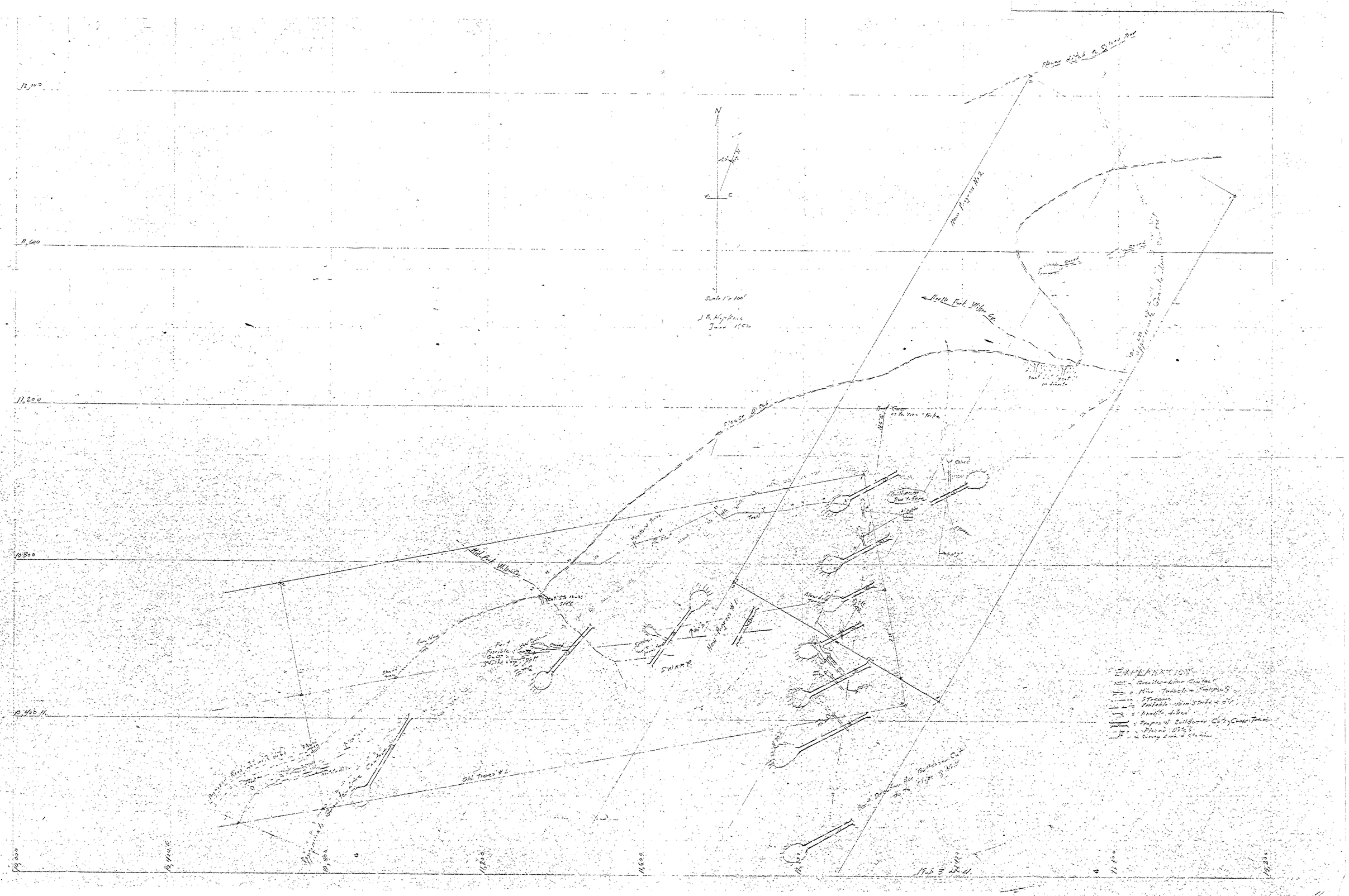
SCALE 1 INCH = 100 FEET

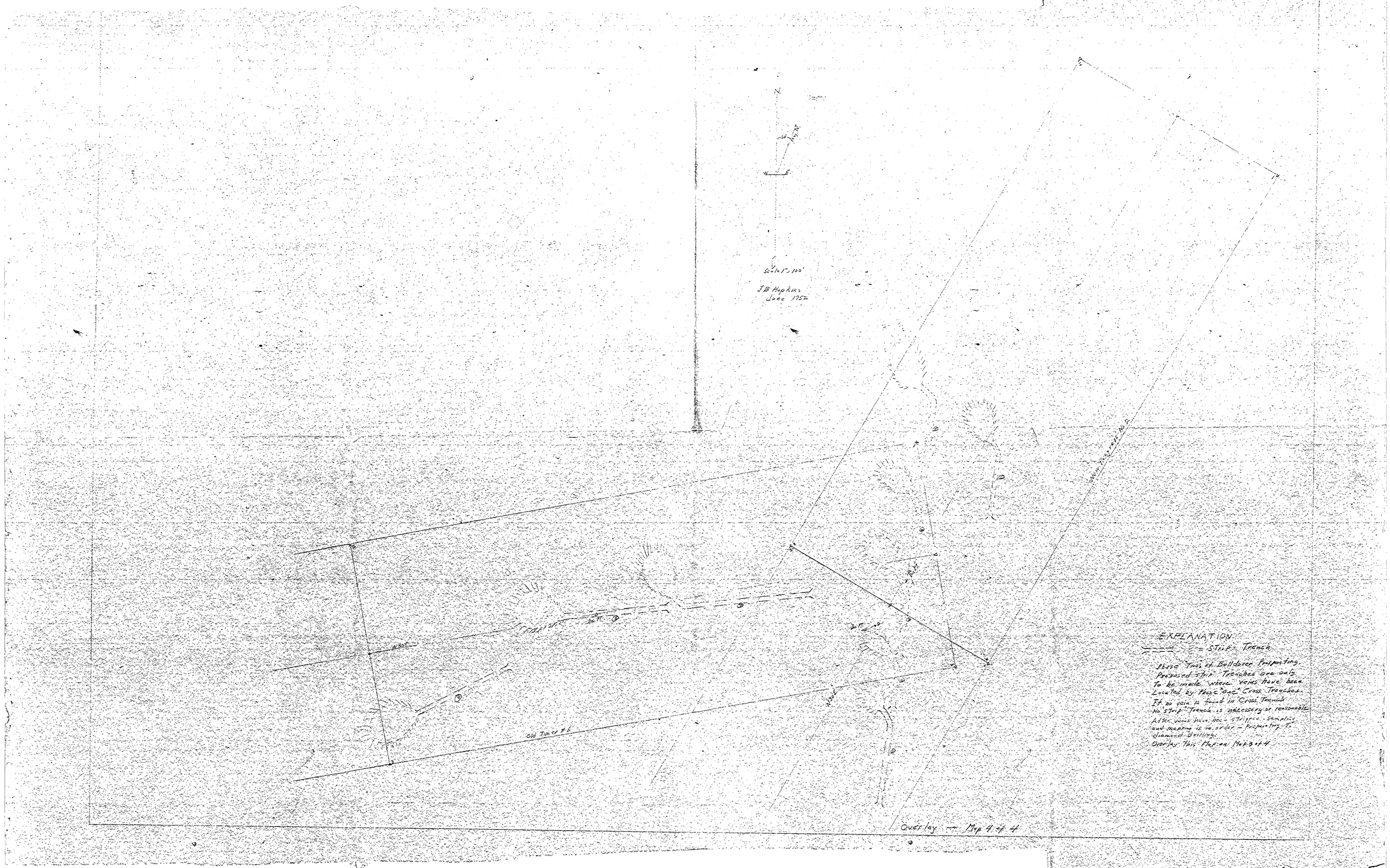
D.M.E.A. No. 2468

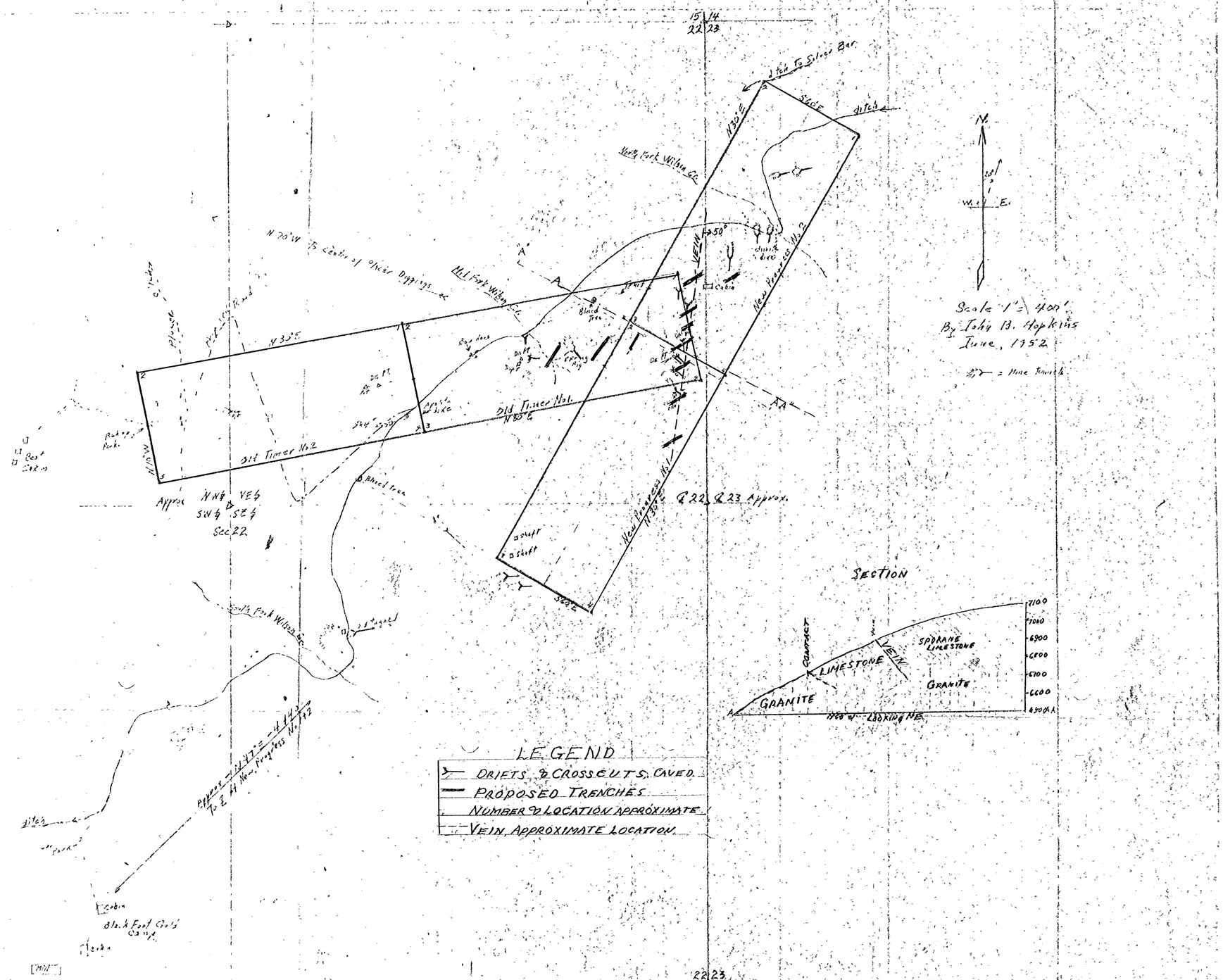
N
W
E
Scale 1" = 100'
J B Hopkins
June 1952
Old Timer #1
N30E
Dis. Pt.
New Progress No. 2
EXPLANATION
= Strip Trench
Phase "Two" of Bulldozer Prospecting.
Proposed "strip" Trenches are only
To be made where veins have been
Located by Phase "one" Cross Trenches.
If no vein is found in "Cross" Trench
No "strip" Trench is necessary or reasonable.
After veins have been stripped, sampling
and mapping is in order - Preparatory to
diamond drilling.
Overlay this Map on Map 3 of 4
Overlay → Map 4 of 4


12,200
11,500
11,200
10,800
10,400 ft.
10,000
Scale 1" = 100'
Planer ditch to Sluice Box
New Project No 2
Middle Fork Wilson Cr.
Planer Ditch
Test Pit
Test Pit
Trail
West Fork Wilson Cr.
Test Pit SW 11-11
Test Pit
Test Pit
Test Pit


Scale 1" = 400'
By John B. Hopkins
June, 1952
= Mine Shaft
N
W
E
S
15 14
22 23
ditch to Silver Bar
S60°E
ditch
N30°W
North Fork Wilson Cr.
N70°W to center of placer workings
Mid Fork Wilson Cr.
"A"
Trail
Cabin
New Progress No 2
placer
placer road
N80°E
Cabin
Dump
Old Timers No 1
N50°E
"AA"
Old Timers No 2
N10°W
Best Cabin
Approx NW¼ NE¼
SW¼ SE¼
Sec 22
Q 22 Q 23 Approx.
New Progress No 1
S60°E
Section
Granite
South Fork Wilson Cr.
Cabin
Ditch
Cabin
Black Fork Gold Camp
Cabin
Mill
22 23
27 26
T13N, R10W, Montana
Map No 3 of 4
Sc. 6" = 400'


N
Scale 1" = 100'
J. B. Hopkins
June 1962
12,000
11,600
11,200
10,800
10,400
10,000
9,600
9,200
8,800
8,400
8,000
Mine Payroll No. 2
North Fork Wilson Cr.
Mine Payroll No. 1
SWAMP
Old Timers No. 1
EXPLANATION
Granite-Lime Contact
Pine Timber
Stream
Probable Main Stope & Pit
Pacific Dikes
Proposed Bulldozer Cut, Cross Tram
Pitman Pits
Survey Line & Station


N
E
Scale 1" = 100'
J B Hopkins
June 1952
Old Timer #1
EXPLANATION
= Strip Trench
Phase Two of Bulldozer Prospecting.
Proposed Strip Trenches are only
To be made where veins have been
Located by Phase "One" Cross Trenches.
If no vein is found in Cross Trench
No Strip Trench is necessary or reasonable.
After veins have been stripped - sampling
and mapping is in order - Preparatory to
diamond drilling.
Overlay This Photo on Map 3 of 4
Overlay — Map 4 of 4

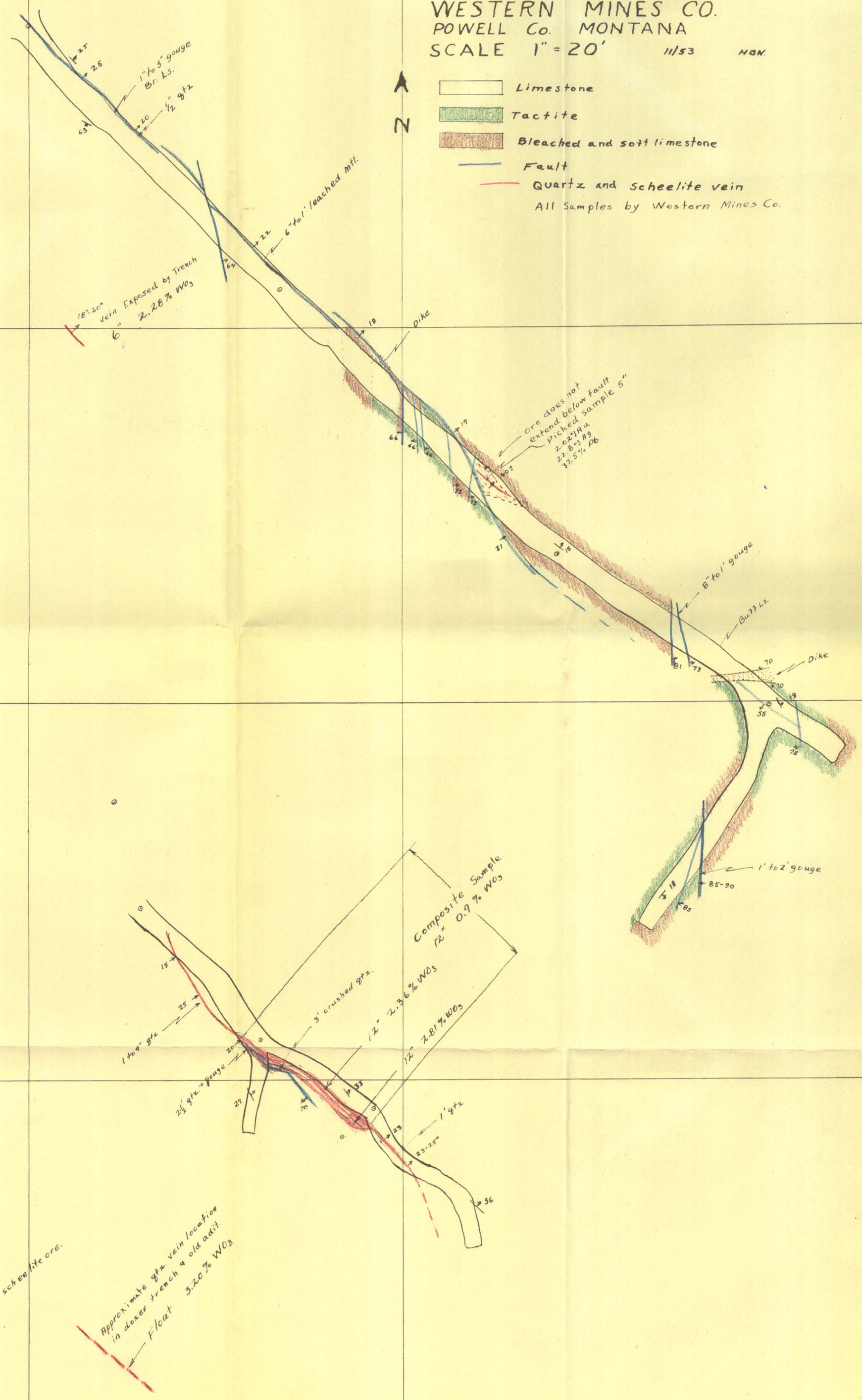

15 14
22 23
Path To Silver Bar
N 30° E
S 60° E
Ditch
North Fork Wilson Cr.
N 70° W To Center of Placer Diggings
Mid Fork Wilson Cr.
N 30° E
Old Timer No. 1
N 80° E
Old Timer No. 2
N 80° E
Approx. NW¼ NE¼ SW¼ SE¼ Sec 22
Blazed Tree
Shaft
Cabin
New Prospect No. 2
New Prospect No. 1
N 30° E
Sec 22 Sec 23 Approx.
Sec 22
South Fork Wilson Cr.
Pipeline To Z H New Prospect No. 2
Ditch
Black Foot Co's Camp
Cabin
Mill
N
W
E
Scale 1" = 400'
By John B. Hopkins
June, 1952
= Mine Timber
SECTION
7100
7000
6900
6800
6700
6600
6500
COMPACT
LIMESTONE
VEIN
SPRANE LIMESTONE
GRANITE
GRANITE
N 60° W LOOKING NE
LEGEND
DRIFTS & CROSSCUTS, CAVED.
PROPOSED TRENCHES
NUMBER & LOCATION APPROXIMATE
VEIN, APPROXIMATE LOCATION.
22 23
27 26
T 13 N, R 10 W, Montana
PLAT No.
Scale 1" = 400'

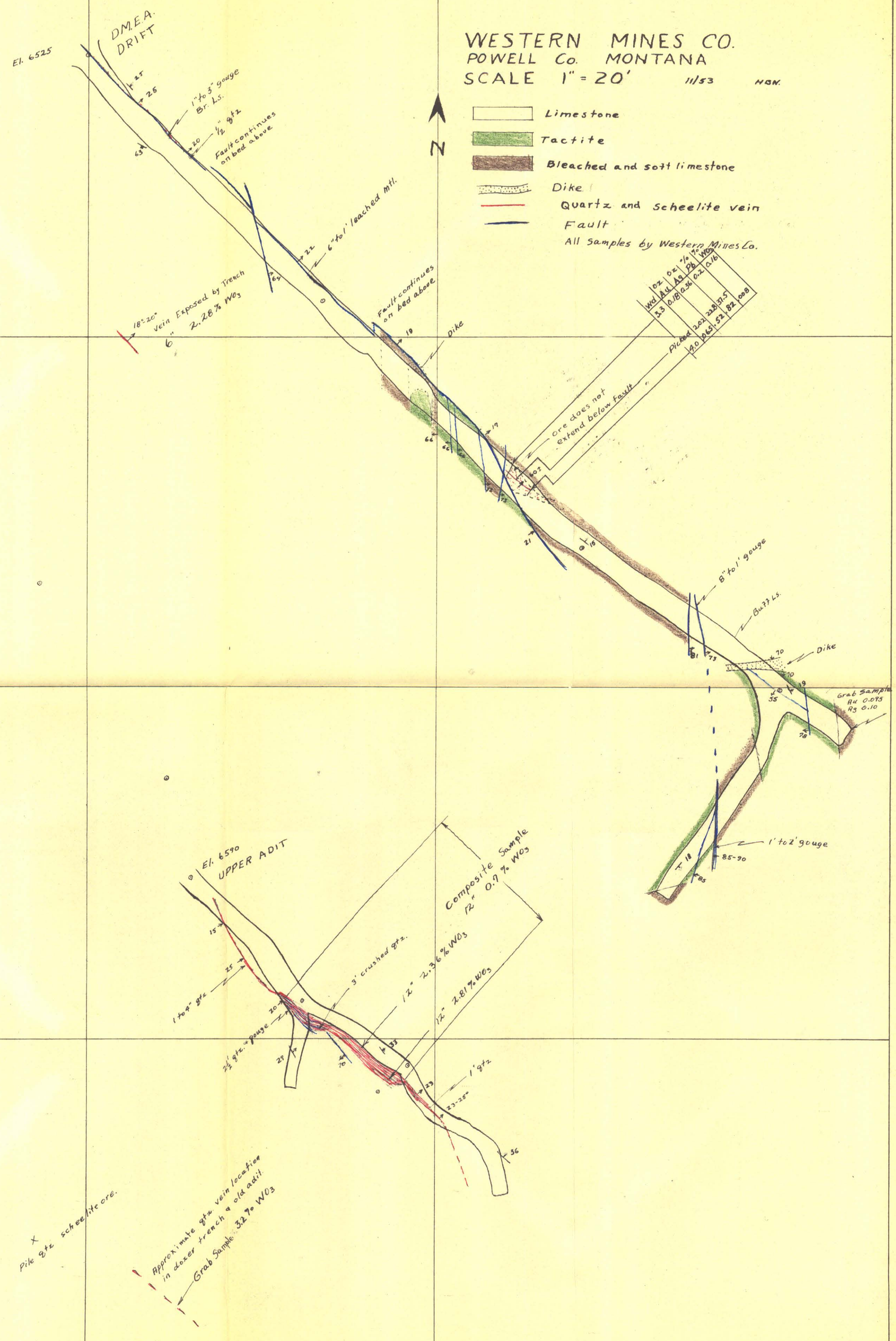
DMEA 2468

WESTERN MINES CO.
POWELL Co. MONTANA
SCALE 1" = 20' 11/53 HBN.

N

Limestone
Tactite
Bleached and soft limestone
Fault
Quartz and Scheelite vein
All Samples by Western Mines Co.



DMEA 2468

WESTERN MINES CO.
POWELL Co. MONTANA
SCALE 1" = 20' 11/53 HGN.