~~Yes~~ Audited

~~No~~ Certified

WO[illegible] ANALYSIS SHEET - DMEA PROJECT [illegible]

Analysis as of
Incl. Voucher for ~~12/14/1954~~

~~Yes~~ Actual Cost

Agreed Unit Costs

Name Western Mines Company

State Montana

Commodity Tungsten

Docket No. ~~DMEA-2468~~

Idm-E No. ~~414~~

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	375'	14,500.00	277'	11,948.00	11,990.88 43.29ft
Raising					
Shafts					
Winzes					
Drilling (Specify)					
Surface Excavation		~~4,905.00~~		~~2,250.00~~	~~2,276.25~~
Underground Excavation					
Roads and Trails		~~1,995.00~~		~~1,695.00~~	~~1,695.00~~
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		~~250.00~~			
Other (Specify) Assaying				69.13	
Totals		~~21,650.00~~		~~15,962.13~~	~~15,962.13~~

Prepared by ~~Keating TLC~~

71626

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DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

AUDIT CERTIFICATE

2468

I have examined the record and transactions of the:

WSM

Western Mines Company, a partnership
Helmville, Montana

pertaining to Exploration Contract Number Idm 8414, dated October 6, 1952, Docket Number DMEA 2468, including amendment number 1, Annex I, Annex II, and Annex III, covering a project of exploration for tungsten located in Powell County, Montana, commonly known as the Hopkins mine, for the period of October 6, 1952 to December 2, 1953.

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

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

Total Cost as billed by Contractor		$15,997.42
Less: Salvage Proceeds on Property		None
Net Claimed Cost		$15,997.42
Exceptions (See audit Report for details):		
Prior to this audit	-0-	
During this audit	$35.29	35.29
Total Accepted Cost		$15,962.13

The Contract calls for a 75 per cent participation of exploration expense by the United States Government. Therefore, payment to the Contractor by the Government in the amount of Eleven thousand nine hundred seventy one and 60/100 Dollars,

- $11,971.60-

is valid and proper.

This certificate is issued on the provision that the Region Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

G. A. Turner
Auditor

December 18, 1953

AUDIT REPORT

I. INTRODUCTION

During the month of December 1953, a final audit (covering operations for the period of October 6, 1952 to December 2, 1953) was made of the records and accounts pertaining to Exploration Project Contract Number Ida E414, dated October 6, 1952, Docket Number DMEA 2468, including amendment number 1, Annex I, Annex II and Annex III, with the:

Western Mines Company
(A Partnership)
Helmville, Montana

covering a project of exploration for tungsten located in Powell County, Montana, commonly known as the Hopkins Mine.

This partnership was made up of:

Pat T. Phalen	-	Spokane, Washington
John B. Hopkins	-	Grand Junction, Colorado
Frank C. Culver	-	Seattle, Washington
Milton T. Ruley	-	Spokane, Washington
Zilla Ruley	-	Reardan, Washington
John W. Phalen	-	Spokane, Washington

The accounting records were in the custody of Pat T. Phalen, Spokane, Washington. Mr. Phalen acted as manager of the project

II. GENERAL INFORMATION ON RECORDS

The accounting records of the partnership consisted of vender's invoices, cancelled checks, Unemployment Compensation Commission of Montana reports, Industrial Accident Board of Montana Premium Receipts covering Liability Insurance, work sheets upon which the contractor accumulated his costs and the correspondence file.

III. SCOPE OF AUDIT AND FINDINGS

The audit was limited to ascertaining the accuracy, propriety and validity of the costs shown in the "Totals to Date" column of Form MF-104, Operator's final monthly report and Voucher, for the month of October-November 1953. Since a preliminary review of the records indicated a considerable amount of improper distribution of charges to the "Items of Cost" shown on the Form MF-104, as well as some charges of questionable propriety, a detailed audit and analysis of costs was made. The findings, after correction of cost distribution follow:

(1) Independent Contracts

	STAGE I	STAGE II Alternate	Accepted Costs
Bulldozer - Access Roads 33 Hours @ $15.00 per Hour	$ 495.00	-	$ 495.00
Bulldozer - Trenching 83½ Hours @ $15.00 per Hour	1,252.50	-	1,252.50
Bulldozer - Road Building & Improvement 80 Hours @ $15.00 per Hour	-	$ 1,200.00	1,200.00
Drifting and Crosscutting 377 1/5 Feet @ $20.00 per Feet	-	7,544.00	7,544.00
Totals	$1,747.50	$ 8,744.00	$10,491.50

The above items of cost are all within the "allowable maximums" specified in the contract as follows:

Stage I	
Bulldozer - Access Roads	
33* Hours @ $15.00* per Hour	$ 495.00*
Bulldozer - Trenching	
150* Hours @ $15.00* per Hour	$ 2,250.00*
Stage II Alternate	
Bulldozer - Road Building and Improvement	
80* Hours @ $15.00* per Hour	$ 1,200.00*
Drifting and Crosscutting	
400* Feet @ $20.00* per foot	$ 8,000.00*

(2) Labor and Supervision

The basic record for this item of cost was the monthly payroll which gave the classification of labor, days worked, rate of pay, total earnings, payroll deductions, net amount due employee and the number of the check which paid the employee. The cancelled checks, Unemployment Compensation Commission of Montana reports and the Industrial Accident Board of Montana reports were also available for audit.

The audit findings are as follows:

	Stage I	Stage II Alternate	Accepted Costs
Labor			
26 days @ $14.00 per day	$ 364.00	$ -	$ 364.00
60 days @ $14.00 per day	-	840.00	840.00
Supervision			
S. H. Fairweather June 1 to July 15,1953 1½ Months @ $450.00 per Mo.	675.00	-	675.00
S. H. Fairweather Aug.1 to Nov. 10,1953 3 1/3 Months @ $600.00 per Mo.	-	2000.00	2000.00
Totals	$ 1039.00	$2840.00	$ 3879.00

The above items of cost are all within the "allowable maximums" specified in the contract as follows:

Stage I

Labor	30 Days @ $14.00 per day	
Supervision	1½* Months @ $600.00* per Mo.	$ 900.00*

Stage II Alternate

Labor	60 Days @ $14.00 per day	
Supervision	5 Months @ $600.00* per Mo.	$ 3000.00*

(3) Operating Materials and Supplies

The costs chargeable to this category were determined by a detailed audit and analysis of the vender's invoices and the cancelled checks. The following listing summarizes the audit findings:

	Stage I	Stage II Alternate	Accepted Costs
Timber	$ -	$ 60.00	$ 60.00
Explosives	18.55	-	18.55
Pipe	-	154.78	154.78
Track	-	383.61	383.61
Gas and Oil	-	91.14	91.14
Small Tols and Supplies	11.18	25.29	36.47
Totals	$ 29.73	$ 714.82	$ 744.55

(4) Operating Equipment

Equipment Rental and Purchase does not apply to this contract.

Depreciation on Equipment was found by this audit to be:

	Stage I	Stage II Alternate	Accepted Costs
Truck June 1 to July 18, 1953			
1 15/40 Month @ $25.00 Mo.	$ 40.00	$ -	$ 40.00
Truck and Chain Saw			
August 1 to November 1, 1953			
3 1/3 Months @ $32.00 per Mo.	-	106.70	106.70
Totals	$ 40.00	$106.70	$146.70

The above items of cost are all within the "allowable maximums" specified in the contract as follows:

Stage I
Truck 1½ Months @ $25.00* per Month $ 40.00*

Stage II Alternate
Truck and Chain Saw 5 Months @ $32.00* per Month $160.00*

(5) Initial Rehabilitation and Repairs

This item of cost not applicable to this contract.

(6) New Buildings, Improvements, Etc.

This item of cost not applicable to this contract. The contract, however, provided a Tool and Core Shed, and fuel rack to cost $250.00 which was not built by the contractor. The cost of $250.00 was an "allowable Maximum" divided $125.00 to Stage I and $125.00 to Stage II Alternate.

(7) Miscellaneous

The findings of the audit as to the costs chargeable to, and allowable under, this item are summarized as follows:

	Stage I	Stage II Alternate	Accepted Costs
Repairs to Equipment	$ -	$ 88.70	$ 88.70
Sampling and Analysis	42.88	26.25	69.13
Payroll Taxes	43.64	84.00	127.64
Liability Insurance	83.12	227.20	310.32
Bookkeeping	-	83.25	83.25
Office	-	21.34	21.34
Totals	$169.64	$ 530.74	$ 700.38

Repairs to Equipment were found by the audit to be ordinary truck operating repairs required during the course of the operation. The acceptable costs were $88.70 all charged to Stage II Alternate of the contract.

Sampling and Analysis was found by the audit to be assaying costs. The accepted costs chargeable to this item are as follows:

	Stage I	Stage II Alternate	Accepted Costs
Assays Made			
11 Tests	$ 31.50	$ -	$ 31.50
13 Tests	-	26.25	26.25
Sample Bags	9.75	-	9.75
Transportation on Samples	1.63	-	1.63
Totals	$ 42.88	$ 26.25	$ 69.13

Sample Bags and transportation on samples apply to Stage I only.

Payroll Taxes applicable to the project were determined to be:

Federal Insurance ContributionsAct	1.5%
Montana Unemployment Compensation	2.7
Total	4.2%

Taxes under the Federal Unemployment Tax Act were not applicable since the contractor had less than 8 employees. Payroll Taxes were determined by this audit to be:

Stage I			
Labor	$364.00		
Supervision	675.00		
	$1039.00	@ 4.2%	$43.64
Stage II Alternate			
Labor	$ 840.00		
Supervision	2000.00		
	$2840.00		
Less Wages of Partner John W. Phalen	840.00		
	$2000.00	@ 4.2%	84.00
Accepted Costs:			$127.64

Payroll taxes claimed on the partner, John W. Phalen in the amount of $35.29 were disallowed by the audit.

Liability Insurance chargeable to this project consisted of premiums paid to the Industrial Accident Board, State of Montana, at the rate of 8% on the total payroll.

A detailed audit and analysis of the payrolls, Industrial Accident Board of Montana premium receipts and cancelled checks disclosed the following charges to the project to be acceptable:

Stage I	
Labor and Supervision $1,039.00 @ 8%	$83.12
Stage II Alternate	
Labor and Supervision $2,840.00 @ 8%	227.20
Accepted Costs	$310.32

Bookkeeping Services was determined by the audit to be accounting expense in the amount of $83.25 for 3 1/3 months @ $25.00 per month performed by Mrs. Pat Phalen on the project records Stage II Alternate. This cost was allowed as being fair and reasonable.

Office Expense was determined by the audit to be long distance telephone calls in the amount of $21.34 all pertaining to the project. This cost was allowed as being fair and reasonable.

IV CONCLUSIONS

This audit disclosed that all costs charged to this project, with the exception of the disallowances itemized under (7) Miscellaneous of the preceding sections of this report, are reasonable and proper under the terms of the contract.

The adjustments between "Items of Cost" as shown on the October-November 1953 Form MF-104, the disallowance, and the accepted costs are summarized as follows:

	Totals Oct.-Nov. 1953 [illegible]	Distribution Corrected	Disallowed By Audit	Accepted Costs
1 Independent Contracts				
Bulldozing - Access Roads	$ 1,695.00	$ 495.00	$ -	$ 495.00
Bulldozing - Trenching	1,252.50	1,252.50	-	1,252.50
Bulldozing - Road Building	-	1,200.00	-	1,200.00
Drifting and Crosscutting	7,544.00	7,544.00	-	7,544.00
2 Labor and Supervision				
Labor	1,204.00	1,204.00	-	1,204.00
Supervision	2,675.00	2,675.00	-	2,675.00
3 Operating Materials & Supplies				
Timber	60.00	60.00	-	60.00
Explosives	18.55	18.55	-	18.55
Pipe	138.72	154.78	-	154.78
Track	399.67	383.61	-	383.61
Other (Black Light)	46.22	-	-	-
Gas & Oil	91.14	91.14	-	91.14
Small Tools and Supplies		36.47	-	36.47
4 Operating Equipment				
Depreciation	146.70	146.70	-	146.70
5 Initial Repairs and Rehabilitation	-	-	-	-
6 New Buildings and Improvements	-	-	-	-
7 Miscellaneous				
Repairs to Equipment	88.70	88.70	-	88.70
Sampling and Analysis	57.75	69.13	-	69.13
Payroll Taxes	58.19)	162.93	35.29	127.64
Unemployment	104.74)			
Liability Insurance	310.32	310.32	-	310.32
Bookkeeping	83.25	83.25	-	83.25
Office - Telephone	22.97	21.14	-	21.14
	$15,997.42	$15,997.42	$ 35.29	$15,962.13

The "Allowable Maximums" under this contract are as follows: (1) Independent Contracts, (2) Labor and Supervision, (4) Operating Equipment, and, (6) New Buildings, Improvements, Etc., all of which are discussed in the preceding sections of this report.

The "Accepted Costs", "Allowable Maximums" and "Balances of Allowable Maximums" are summarized as to Stage I and Stage II Alternate as follows:

	Accepted Costs	Allowable Maximum	Balance
Stage I			
1. Independent Contracts			
Bulldozing - Access Roads	$ 495.00	$ 495.00	$ -
Bulldozing - Trenching	1,252.50	2,250.00	997.50
2. Labor and Supervision			
Labor	364.00	364.00	-
Supervision	675.00	900.00	225.00
3. Operating Materials & Supplies			
Explosives	18.55		
Small Tools and Supplies	11.18		
4. Operating Equipment			
Depreciation	40.00	40.00	-
6. New Buildings, Improvements, Etc.	-	125.00	125.00
7. Miscellaneous			
Sampling and Analysis	42.88		
Payroll Taxes	43.64		
Liability Insurance	83.12		
Total - Stage I	$ 3,025.87	$4,174.00	$1,347.50
Stage II Alternate			
1. Independent Contracts			
Bulldozing Roads	$ 1,200.00	$ 1,200.00	$ -
Drifting and Crosscutting	7,544.00	8,000.00	456.00
2. Labor and Supervision			
Labor	840.00	840.00	-
Supervision	2,000.00	3,000.00	1,000.00
3. Operating Materials & Supplies			
Timber	60.00		
Pipe	154.78		
Track	383.61		
Gas & Oil	91.14		
Small Tools & Supplies	25.29		
4. Operating Equipment			
Depreciation	106.70	160.00	53.30
6. New Buildings, Improvements, Etc.	-	125.00	125.00
7. Miscellaneous			
Repairs	88.70		
Sampling and Analysis	26.25		
Payroll Taxes	84.00		
Liability Insurance	227.20		
Bookkeeping	83.25		
Office	21.34		
Total - Stage II Alternate	$12,936.25	$13,325.00	$1,634.30
Totals Stages I and Stage II Alternate	$15,962.13	$17,499.00	$2,981.80

The findings of this audit were discussed in detail with Mr. Pat T. Phalen, partner, and manager of the exploration project.

December 18, 1953

C. A. Turner, Auditor

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

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OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Oct. & Nov., 1953 Docket No. DMEA 2468 Contract No. IDM-E 414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana
Contract Amount, $20,130.00 Government Participation: 75 % Amount, $15,097.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						WSM
Bulldozing		1,695.00	1,695.00			
Crosscutting						
Drifting 157.71	3,154.00	4,390.00	7,544.00			
Dozer Trenching		1,252.50	1,252.50			
(2) Labor and Supervision:						
Labor	294.00	910.00	1,204.00			
Supervision	800.00	1,875.00	2,675.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber		60.00	60.00			
Explosives		18.55	18.55			
Pipe		138.72	138.72	16.06	138.72	154.78
Track	69.96	329.71	399.67	53.90	329.71	383.61
Other		46.22	46.22	9.25	46.22	36.47
Gas & Oil	36.63	54.51	91.14			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	42.70	104.00	146.70			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	19.65	69.05	88.70			
Sampling and Analysis	20.25	37.50	57.75	31.63	37.50	69.13
Payroll Taxes S. S.	16.41	41.78	58.19	3.81	41.78	45.59
Liability Insurance	227.20	83.12	310.32			
Bookkeeping	33.25	50.00	83.25			
Unemp. Comp.	29.54	75.20	104.74	6.85	75.20	82.05
Office Exp. (Phone)	4.94	18.03	22.97	3.31	18.03	21.34
(8) Contingencies (specify):						
TOTALS	4,748.53	11,248.89	15,997.42	473.24	11,248.89	15,962.13

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 12, 1953 *Payee Western Mines Company

Per Pat T. Shaler Title Manager.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

3534.91
2300.00 12/3/53
$ 1234.91 12/30/53

Signature
(Authorized Certifying Officer)

Date 12/30/53 Vou. No. 1003
(See other side)

Partial payment of $2300.00 made 12/3/53. Final payment of 1234.91 made 12/30/53 as per audit.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 474 in accordance with the terms of the contract.

Signature /S/ John D. Bardell Title Metallurgist Date December 1-1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ M. E. Volin Title Member Field Team Date Dec 1-1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Oct. & Nov. 1953 Docket No. DMEA 2468 Contract No. 1DM-E 414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	4748.53	157.7	11,503.12	377.2	30.49+		
Crosscutting								
Raising				11,503.12		30.49		
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hour			2,149.68	83½	25.74+		
Test Pits								
Roads and Trails	Hour			2,344.62	113	20.75-		
TOTAL DISTRIBUTED COSTS		4748.53		15,997.42				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4748.53		15,997.42				

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

Date Nov. 12, 1953 Operator Western Mines Company

Per Robt. T. Blake Title Manager

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

400

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.

WSM

Re: Docket No. DMEA-2463 (tungsten)
Western Mines Company
Powell County, Montana
Contract Idn-2414 (Completed)

Dear Mr. Selfridge:

Enclosed are the original and two copies of a report by Mr. Pat T. Whelan, 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

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

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

Enclosures
cc: USBM (2)
Nickelson

Oper's Final Rept

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. $6.30	Ag.	WO3	Pb.
3.3'	0.180	0.36	0.016	0.20
4.0'	0.065 $2.28	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, 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.

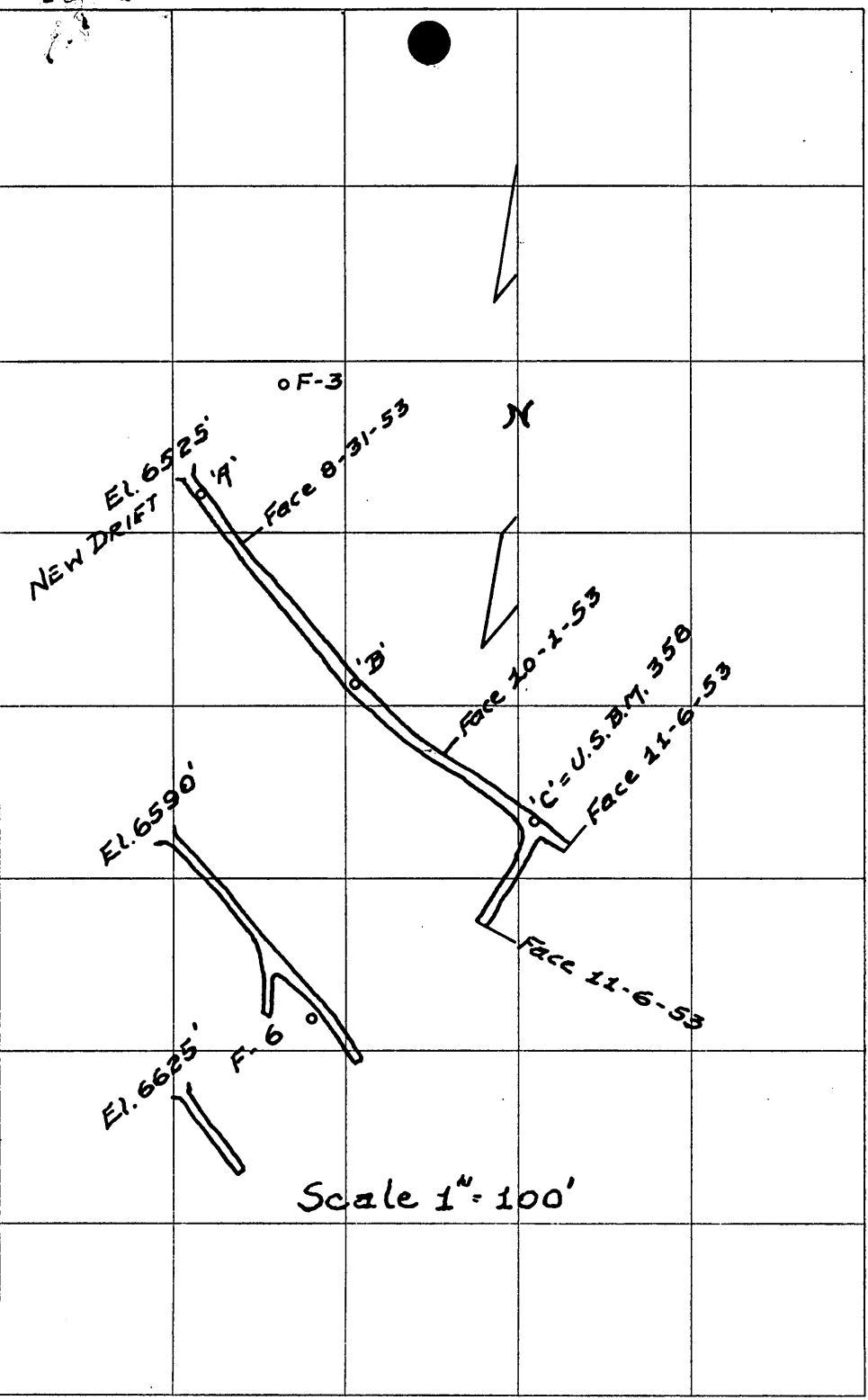
In consultation with engineers from the Bureau of Mines and the U. S. Geological Survey, it was decided that results of present development did not warrant further expenditures on the part of either party to the Exploration Project, and even tho the project lacked 22.8' of the distance authorized, it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



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

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 22-R1036.3
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
OCT 19 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1953 Docket No. DMEA 2468 Contract No. DM-E414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana
Contract Amount, $20,130.00 Government Participation: 75 % Amount, $15,097.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						WSN
Bulldozing		1695.00	1695.00			
Crosscutting						
Drifting 168.0'	3360.00	1030.00	4390.00			
Dozer Trenching		1252.50	1252.50			
(2) Labor and Supervision:						
Labor	280.00	630.00	910.00			
Supervision	600.00	1275.00	1875.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	6.00	54.00	60.00			
Explosives		18.55	18.55			
Pipe		138.72	138.72			
Track	92.07	237.64	329.71			
Other (Black Light)	5.00	41.22	46.22			
Gas & Oil	17.32	37.19	54.51			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	32.50	72.50	105.00	31.50	72.50	104.00
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	20.30	48.75	69.05			
Sampling and Analysis	6.00	31.50	37.50			
Payroll Taxes S. S.	13.20	28.58	41.78			
Liability Insurance	81.07	18.54	99.61	64.58	18.54	83.12
Bookkeeping	25.00	25.00	50.00			
Unemployment	23.76	51.44	75.20			
Office Expense (Phone)	9.31	8.72	18.03			
(8) Contingencies (specify):						
TOTALS	4571.53	6694.85	11266.38	4554.04	6694.85	11,248.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 5, 1953 *Payee Western Mines Company

Per Gat. T. Shaler Title Manager.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 3415.53

Signature
(Authorized Certifying Officer)

Date 10/12/53 Vou. No. 934
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 414 in accordance with the terms of the contract.

Signature John Bardill Title Metallurgist Date 10/12/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S. P. E. Howard Title M. Eng. Date 10/12/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third-party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September, 195 3 Docket No. DMEA 2468 Contract No. DM-E 414

Operator's Name Western Mines Company Minerals Tungsten

Address Helmville, Montana

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	4571.53	168	6772.08	219.5	30.854		
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hour			2149.68	83½	25.744		
Test Pits								
Roads and Trails	Hour			2344.62	113	20.75		
								TOTAL COSTS AUTHORIZED BY CONTRACT
TOTAL DISTRIBUTED COSTS		4571.53		11266.38				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4571.53		11266.38				

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

Date Oct. 5, 1953 Operator Western Mines Company

Per [signature] Title Manager

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO. DMEA-2468

SUBJECT: Progress Report for Month of September, 1953.
Amendment No. 1, Stage 2 (Alternate)

The drift was advanced a distance of 168 feet for the month. This makes the present face a total of 219.5 feet from the portal. The entire distance was driven on the vein structure which showed a width varying from two inches to several feet. The black light indicated scheelite in most of the distance driven, the amount being small, no attempt was made to determine the values by assay. A few samples were taken to determine silver and gold values where such metals appeared to be present. With one exception the samples showed very minor values. The one exception was a sample taken across 5 inches of a high grade lead stringer. This sample assayed Au.2.02, Ag.22.80, Pb.37.35%. At the point this sample was taken the vein structure widened to about 4 feet of mixed quartz and limestone. This width continued for about 15 feet between 33 and 48 feet south east of station 'B', shown on accompanying progress sketch.

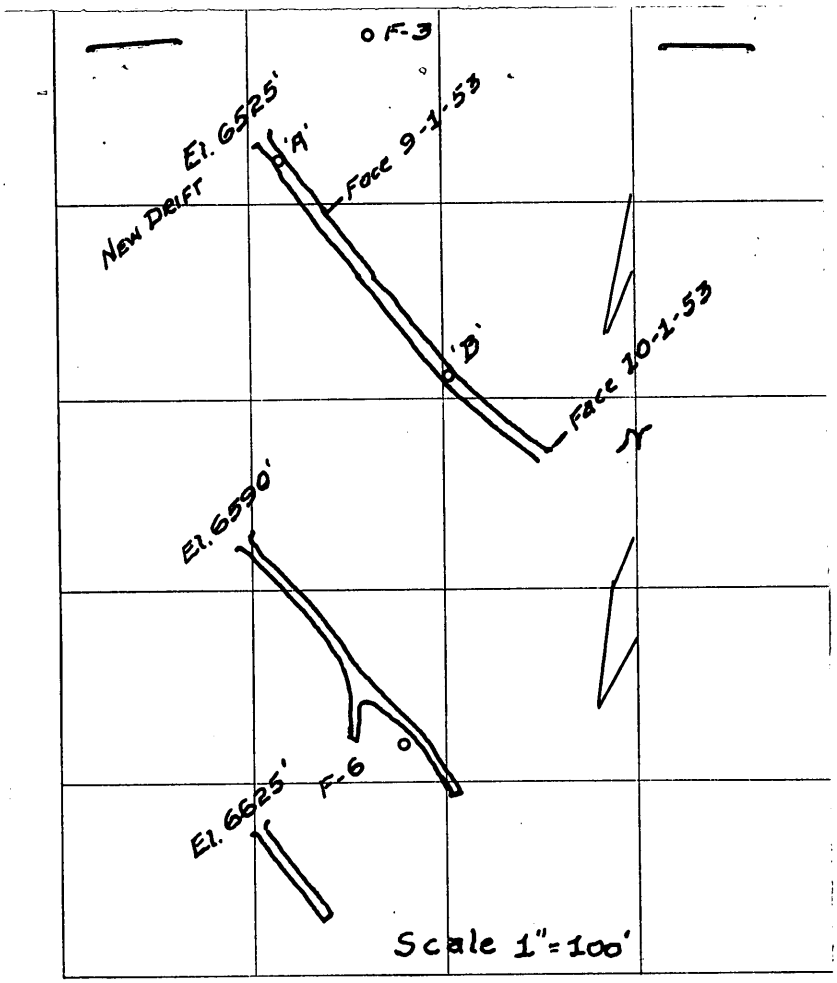
For greater detail, as suggested before, this progress sketch may be placed upon the Brunton survey map attached to Stage 1, Completion report.

Respectfully submitted,

WESTERN MINES COMPANY

BY Pat T. Phalen

Pat T. Phalen, Manager.


F-3
El. 6525'
'A'
Face 9-1-53
New Drift
'B'
Face 10-1-53
El. 6590'
F-6
El. 6625'
Scale 1"=100'

Form MF-104 (Rev.)
(April 1952)

SUPPLEMENTAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1953 Docket No. DMEA 2468 Contract No. Idm-E 414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana
Contract Amount, $20,130.00 Government Participation: 75 % Amount, $15,097.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						WSM
Drilling						
Bulldozing 80 hrs.	1200.00		1200.00	1200.00	495.00	1695.00
Crosscutting						
Drifting						1030.00
Dozer Trenching						1252.50
(2) Labor and Supervision:						
Labor						630.00
Supervision						1275.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						54.00
Explosives						18.55
Pipe						138.72
Track						237.64
Other						41.22
Gas & Oil						37.19
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						72.50
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						48.75
Sampling and Analysis						31.50
Payroll Taxes S. S.						28.58
Liability Insurance Ind. Acc						18.54
Bookkeeping	25.00		25.00	25.00		25.00
Office Expense						8.72
(8) Contingencies (specify): Unemployment Comp.						61.44
TOTALS	1225.00		1225.00	1225.00	5469.85	6694.85

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 24, 1953 Payee Western Mines Company

Per [signature] Title Manager.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 918.75

Signature [signature]
(Authorized Certifying Officer)

Date 9/30/53 Vou. No. 928
(See other side)

See MF-104 + MF-104A for Aug. 1953 Paid 9/17/53.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 414 in accordance with the terms of the contract.

Signature S/ E. S. Erickson Title M. Eng. Date 9/30/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S/ M. E. Volin Title Member Field Team Date 9/30/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 25 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage #II

Month of August, 1953 Docket No. DMEA 2468 Contract No. 1DM-E 414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana
Contract Amount, $20,130.00 Government Participation: 75 % Amount, $15,097.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						WSC
Drilling						
Bulldozing 80 hours *	1200.00		1200.00	-0-	495.00	495.00
Crosscutting						
Drifting 51.5'	1030.00		1030.00	1030.00		1030.00
Dozer Trenching					1252.50	1252.50
(2) Labor and Supervision:						
Labor	266.00		266.00	266.00	364.00	630.00
Supervision	600.00		600.00	600.00	675.00	1275.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	54.00		54.00	54.00		54.00
Explosives					18.55	18.55
Pipe Small tools, etc.	144.11		144.11	138.72		138.72
Track	237.64		237.64	237.64		237.64
Other	100.84		100.84	20.29	20.93	41.22
Gas + Oil				37.19		37.19
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation	32.50		32.50	32.50	40.00	72.50
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment				48.75		48.75
Sampling and Analysis					31.50	31.50
Payroll Taxes S. S.	36.37		36.37	12.99	15.59	28.58
Liability Insurance Ind. Acc. See note					18.54	18.54
Bookkeeping *	25.00		25.00	-0-	-0-	-0-
Office Expense (Phone)	7.09		7.09	7.09	1.63	8.72
(8) Contingencies (specify): Unemployment Comp.				23.38	28.06	51.44
TOTALS	3733.55		3733.55	2508.55	2961.30	5469.85

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 5, 1953 *Payee Western Mines Company

Per [signature] Title Manager.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1881.44

Signature [signature]
(Authorized Certifying Officer)

Date 9/17/53 Vou. No. 911
(See other side)

* Deletion due to inadequacy of invoices.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 414 in accordance with the terms of the contract.

Signature S/ John Bandoll Title Metallurgist Date 9/14/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S/ P. E. Howard Title M. Eng. Date 9/9/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF–104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF–104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF–104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF–104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF–200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF–200; and delete word "Independent" if the contract reported is on Form MF–200 (A). Also, report work paid for on a unit basis under contract Form MF–200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF–104 when submitted for reimbursable expenses incurred under contract Form MF–200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF–200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF–104 is required to be documented. The four copies of Form MF–104 are not to be thus supported.

Form MF–104 submitted for reimbursement under fixed price contracts on Form MF–200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF–104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

No 104A's submitted

with this Supplemental

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 25 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1953 Docket No. DMEA 2468 Contract No. 1DM-E 414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Foot	2200.55	51.5'	2200.55	51.5'	42.77		
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Hour	1533.00	80	1533.00	80	19.16¼		
TOTAL DISTRIBUTED COSTS		3733.55	131.5	3733.55				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Sept. 5, 1953 Operator Western Mines Company

Per [signature] Title Manager.

REMARKS: Drifting Unit costs are of necessity out of line for this period as some supplies have been purchased for future use as work progresses.

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

(Instructions on reverse)

(For Government use only)

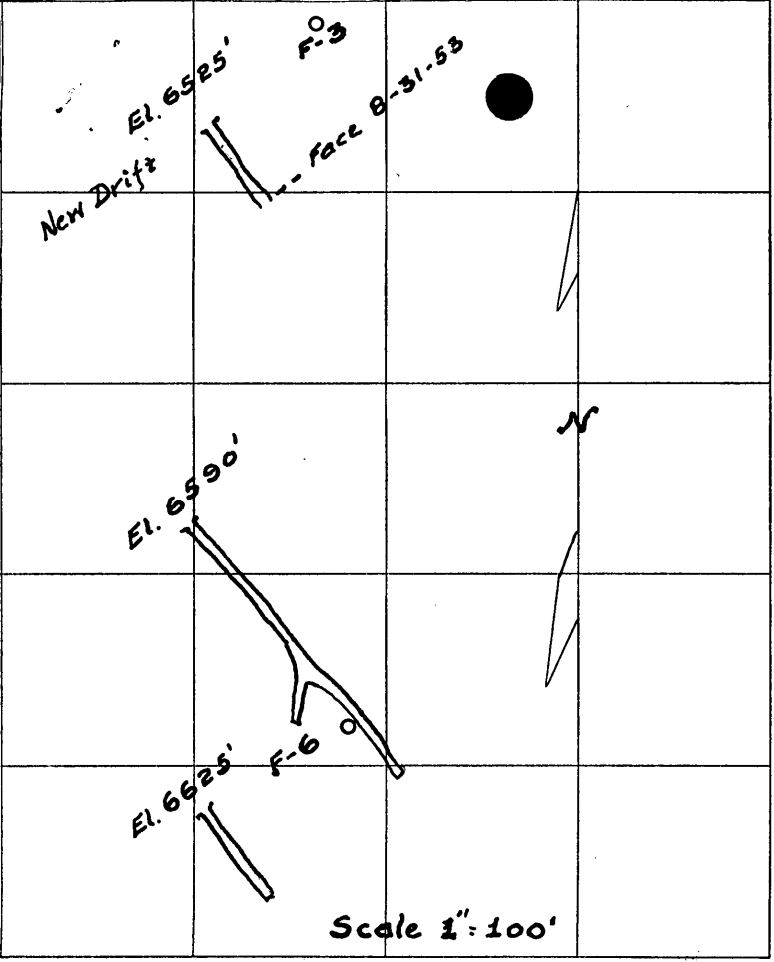
INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475



"ALBANENE" No. 196M K&E CO., N.Y.
REG. U.S. PAT. OFF

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO. DMEA-2468

SUBJECT: Progress Report for Month of August, 1953.
Amendment No. 1, Stage II (Alternate)

A considerable portion of the access road built under Stage 1 was passable only by tractor. It was necessary to build some new road with lighter grade to get equipment and keep supplies delivered for the development authorized under Stage 2. Leveling of suitable ground for tunnel site was also required. We are still improving grades and installing culverts so development work may continue when weather conditions impair road surfaces, even though all of our alloted dozer hours have been used.

The drift has been started at the point indicated on the attached sketch. This sketch, for purposes requiring greater detail, may be superimposed upon Brunton survey map attached to Stage 1, Completion Report. The drift has been driven a distance of 51.5' on the vein structure. Little, if any, improvement has as yet been shown, which is quite understandable, as due to the rather gentle slope of the hill we are only a very few feet below the surface. The wall rock for the most part is a rather blocky hard blue limestone.

The contractors should make much faster progress from now on as obtaining a portal brow and timbering for some 25' was a slow process. While the ground is rather hard, it breaks good.

Respectfully submitted,

WESTERN MINES COMPANY

By [signature]
Manager.

400

DMG Field Team, Region 11. 8/18/53

R. J. Hindman, Certifying Officer

Western Mines Company, Contract Idm-6414, July, 1953 MP-104.

The above MP-104 was processed this date for payment. Some of the expenses had to be redistributed also deletions were made. They are as follows:

Item 5, black light batteries; Item 7, sample sacks were redistributed to Item 3, Misc. Supplies. The $15.00 charge under Item 4, Rental, was redistributed to Item 4, Depreciation. $1.63 charge shown under Item 7, Sampling was redistributed to Office Expense. A deletion of $225.00 was made under Item 2, Supervision. The contract set a maximum of 1½ months for supervision for stage 1. Social Security & Unemployment insurance was adjusted to the approved payroll. The Industrial Accident insurance totaling $70.72 was deleted in its entirety as the operator did not show the rate or how it was computed.

The operator may reclaim the Industrial Accident Insurance on his next MP-104 if he will support the correct charges by showing the rate or percentages and how he arrived at the total. I must again request the operator to submit the required 5 copies of the MP-104, MP-104A, Narrative & maps if any. In future reports if insufficient copies are not received, the report will be returned to the operator.

R. J. Hindman

Wash

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1953 Docket No. DMEA 2463 Contract No. DMI- 8414
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana
Contract Amount, $ 21,600.00 Government Participation: 75 % Amount, $ 16,200.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Access Road Bulldozing 33 Hours		495.00	495.00		495.00	495.00
Crosscutting						
Drifting						
Dozer Trenching 38 Hours	570.00	682.50	1252.50	570.00	682.50	1252.50
(2) Labor and Supervision:						
Labor	196.00	168.00	364.00	196.00	168.00	364.00
Supervision	450.00	450.00	900.00	225.00	450.00	675.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		18.55	18.55		18.55	18.55
Pipe						
Track						
Misc. Supplies		6.60	6.60	14.25	6.68	20.93
(4) Operating Equipment:						
Rental	15.00	25.00	40.00	-0-	-0-	-0-
Purchase						
Depreciation				15.00	25.00	40.00
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Postage Sampling and Analysis	33.13		33.13	31.50	-0-	31.50
Payroll Taxes O.A.B.	9.69	9.27	18.96	6.32	9.27	15.59
Liability Insurance (Ind.Acc)	70.72	18.54	89.26	-0-	18.54	18.54
Unemployment Comp.	16.23	16.69	32.92	11.37	16.69	28.06
Sample Sacks	9.75		9.75	-0-	-0-	-0-
Office Expense				1.63		1.63
(8) Contingencies (specify)						
Black Light Batteries	4.50		4.50	-0-		-0-
TOTALS	1375.72	1890.23	3265.95	1071.07	1890.23	2961.30

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 31, 1953 Payee Western Mines Company

Per Pat T. Shaler Title Manager.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 803.30

Signature [illegible]
(Authorized Certifying Officer)

Date 8/18/53 Vou. No. 879
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 414 in accordance with the terms of the contract.

Signature S. John Barnell Title Metallurgist Date 8/3/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S/ P. E. Howard Title M. Eng Date 8/17/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

RECEIVED
BUREAU OF MINES
JUL 31 1953
DOR-WASH

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1953 Docket No. DMEA 2468 Contract No. [illegible]
Operator's Name Western Mines Company Mineral [illegible]
Address Helmville, Montana.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hour	1375.72	38 hrs.	2451.33	83½ hrs	29.39¢		
Test Pits	Hour			817.62	33 hrs	24.53¢		
Roads and Trails								
Total Distributed Costs		1375.72	38 hrs.	3268.95				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date July 31, 1953 Operator Western Mines Company

Per [signature] Title Manager.

Remarks:

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

(Instructions on reverse)

(For Government use only)

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.

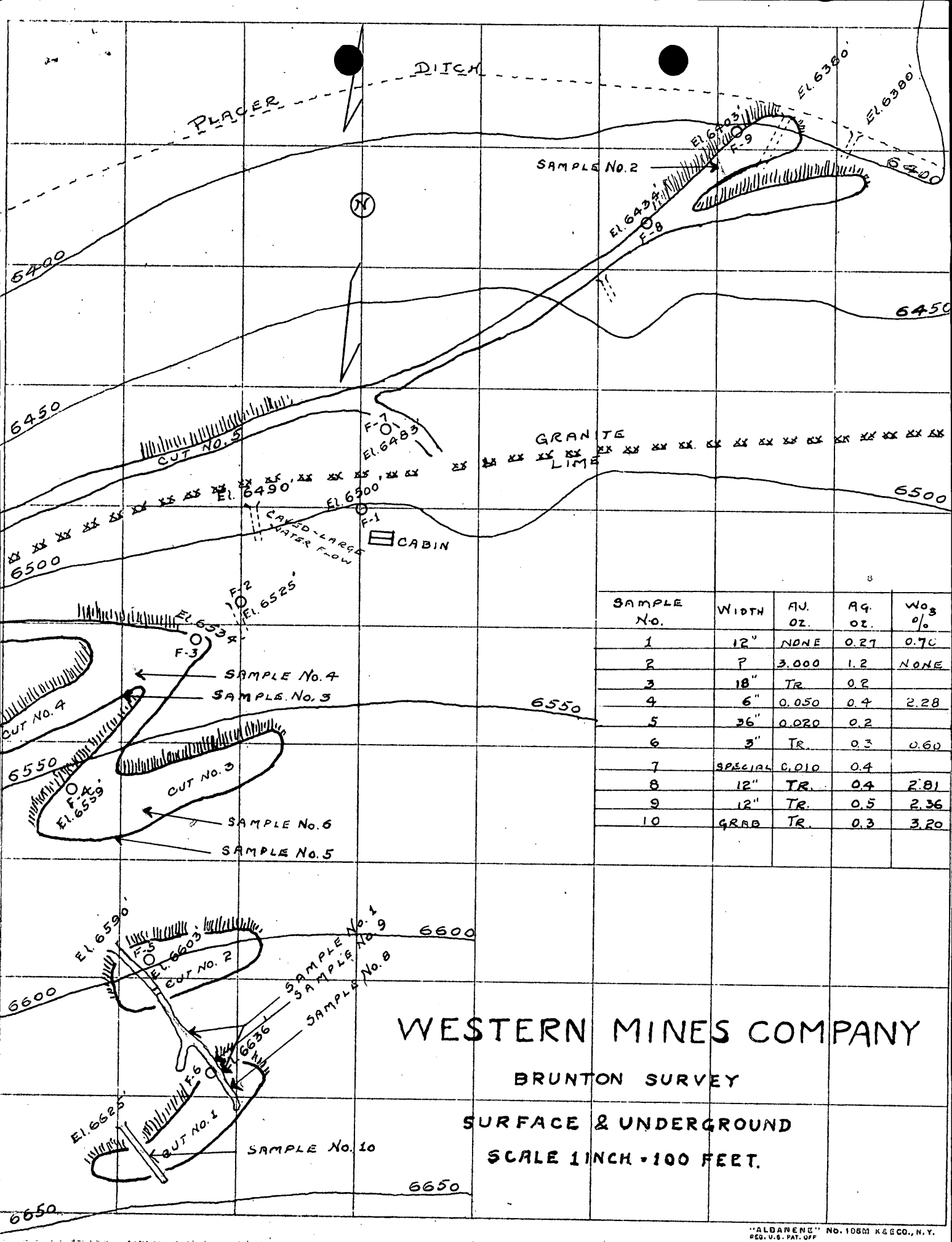
The width, strike and dip of this vein is typical of the productive veins of adjoining properties and of the district with the exception of the tungsten content, which seems to be appreciably greater in this vein with but one exception. This exception is the Flutare Mine and it is the only other property whose vein occurs in the upper Newland formation. The Flutare 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 boranza, 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 concentration at any point in the drift, might be later decided upon in consultation with the engagement engineer.

Respectfully Submitted,
WESTERN MINES COMPANY

Ralph T. Shaker
Manager.



SAMPLE No.	WIDTH	AU. OZ.	AG. OZ.	WO_3 %
1	12"	NONE	0.27	0.70
2	P	3.000	1.2	NONE
3	18"	TR.	0.2	
4	6"	0.050	0.4	2.28
5	36"	0.020	0.2	
6	3"	TR.	0.3	0.60
7	SPECIAL	0.010	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

BRUNTON SURVEY

SURFACE & UNDERGROUND

SCALE 1 INCH = 100 FEET.

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

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1953 Docket No. DMEA 2168 Contract No. 121 - D 144

Operator's Name Western Mines Company Minerals Tungsten

Address Helmville, Montana

Contract Amount, $ 21,600.00 Government Participation: 75 % Amount, $ 16,200.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Access Road Drilling						
Bulldozing 33 hours	495.00		495.00			
Crosscutting						
Drifting						
Dozer Trenching 15 hrs.	682.50		682.50			
(2) Labor and Supervision:						
Labor	168.00		168.00			
Supervision	150.00		150.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	18.55		18.55			
Pipe						
Track						
Misc. Supplies	6.68		6.68			
(4) Operating Equipment:						
Rental	25.00		25.00			
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes O.A.D.	9.27		9.27			
Liability Insurance Ind. Acc.	18.54		18.54			
Unemployment Comp.	16.69		16.69			
(8) Contingencies (specify):						
TOTALS	1890.23		1890.23	1890.23		1890.23

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 10th, 1953 Payee Western Mines Company

Per Pat. T. Sholes Title Manager

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1417.63

Signature [illegible]
(Authorized Certifying Officer)

Date 7/27/53 Vou. No. 848
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief, the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Jun E414 in accordance with the terms of the contract.

Signature [illegible] Title [illegible] Date July 22, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1st Thomas E. Howard Title Mining Engr Date 7/23/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1953 Docket No. DMEA 2468 Contract No. 1DM-E114
Operator's Name Western Mines Company Minerals Tungsten
Address Helmville, Montana

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hour	1078.61	45½hrs.	1078.61	45½hrs.	23.704		
Test Pits								
Roads and Trails	Hour	811.62	33 hrs.	811.62	33 hrs.	24.594		
TOTAL DISTRIBUTED COSTS		1890.23	78½hrs.	1890.23				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1890.23		1890.23				

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

Date July 10th, 1953 Operator Western Mines Company

Per D. T. Shalen Title Manager

REMARKS:

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

(Instructions on reverse)

(For Government use only)

EXPLORATION PROJECT

WESTERN MINES COMPANY

DOCKET NO: DMEA-2468

SUBJECT: PROGRESS REPORT FOR MONTH OF JUNE 1953

Construction of approximately one mile of access road necessary to reach point of exploration, required time greatly in excess of that allotted under contract. This construction was made doubly difficult due to the fact that heavy rains for half of the month's working period, created swamplike areas in the extremely heavy overburden which were hard to make passable for rolling equipment.

Four of the five cross-trenches outlines in Stage I, were completed in June and three of them indicated vein structure. The other one was over an old tunnel which we broke into with the dozer and were subsequently able to enter for inspection. This tunnel was driven for a distance of about 150 feet, portions of which disclose a vein striking S. 35° E. and dipping approximately 35° easterly. The vein varies in width up to 12 inches and under the lamp indicates considerable scheelite.

Drifting on the vein structure from its lowest exposed point would not seem to be indicated.

WESTERN MINES COMPANY

By /s/ Pat T. Phalen

Manager

We should keep
an eye out for
map and sampling
results for the
old tunnel

WSM
8/7/53

/Yes/ Audited

/No/ Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/14/1954
Incl. Voucher for _____

/Yes/ Actual Cost

/ / Agreed Unit Costs

Name Western Mines Company

Docket No. DMEA-2468

State Montana

Commodity Tungsten

Idm-E No. 414

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	375'	14,500.00	277'	11,948.00	11,990.88 43.29ft
Raising					
Shafts					
Winzes					
Drilling (Specify)					
Surface Excavation		4,905.00		2,250.00	2,276.25
Underground Excavation					
Roads and Trails		1,995.00		1,695.00	1,695.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		250.00			
Other (Specify) Assaying				69.13	
Totals		21,650.00		15,962.13	15,962.13

Prepared by Keating- TLC

71626

400

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

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,

Administrator

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

JHopkins/ls
9-10-54

480

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. 6.

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

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

IN REPLY REFER TO:

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

402

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 Idn Mlk, 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. Nicholson.

The report notes that DMEA work was done in a competent manner but that, although, the initial bulldozing disclosed a vein containing sporadic 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

THKiilsgaard:hlm
G-9/2/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
R. W. Geehan

400

xxxxxxxxxxxxxxxxxxx
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-2414 (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

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

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

Enclosure (in quad.)

cc: USGM (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

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

Defense Minerals
RECEIVED
AUG 30 1954

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. 33 @ 15.00 = $495.00

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. $3530.87 ÷ 700 = 3.615 per foot

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

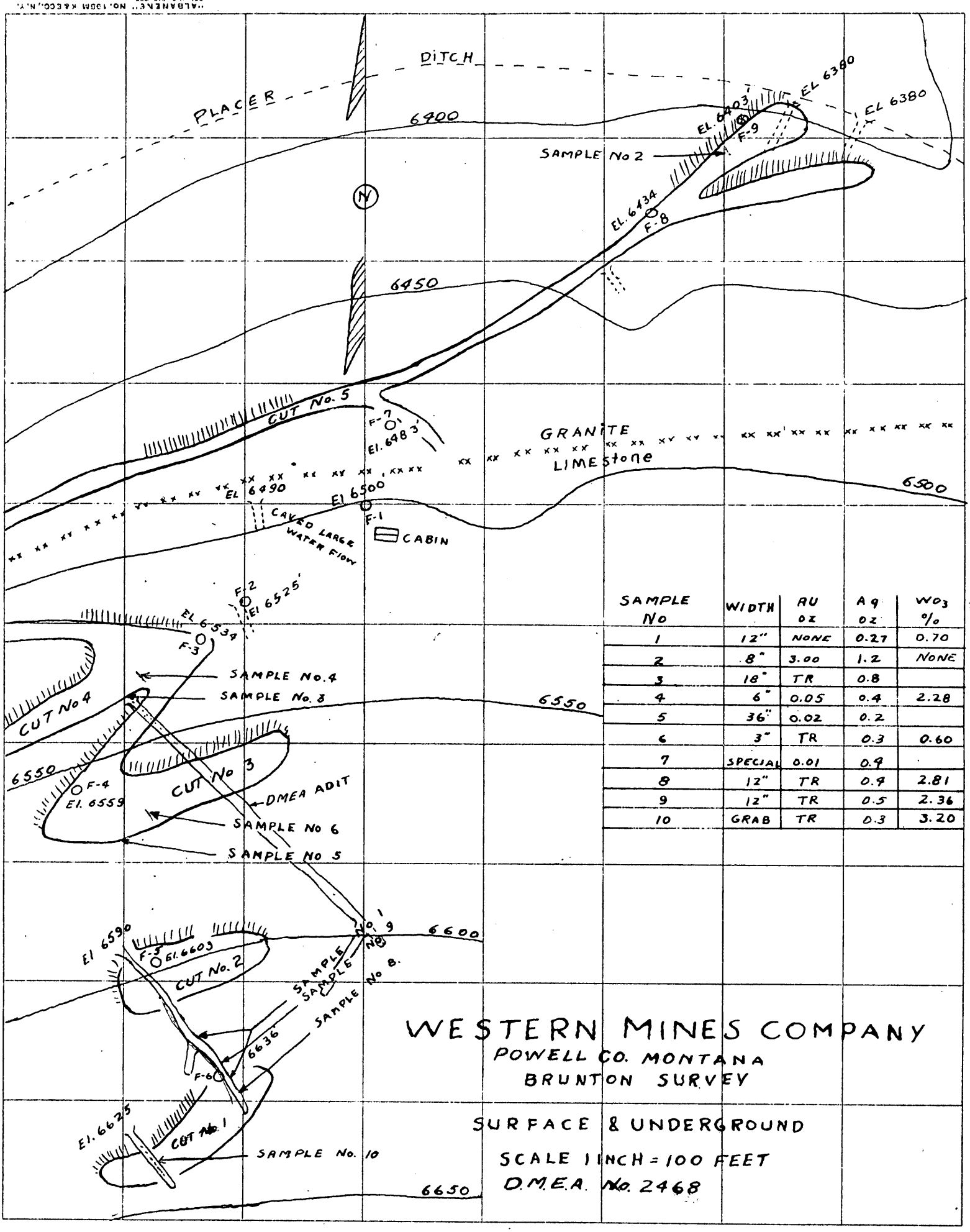
The following actual expenditures were for two stages of exploration at this project. Stage I consisted of a minor amount of access road and five trenches at the prospect site. Stage II consisted of approximately 1 mile of access road from the camp site to the portal of the new adit and 377.2 feet of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



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	0.9	
8	12"	TR	0.9	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

400

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 246B - Tungsten
Western Mines Company
New Progress & Old Timer Claims
Powell County, Montana
Contract No. Ida-Mib

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

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Barrabee

Member, Geological Survey

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

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 Pangborn & Old Timer claims
Powell County, Montana
Contract No. Idm-2424

Dear Mr. Weissenborn:

Reference is made to the subject docket and our letter of February 26, 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

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

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

FEB 15 1954

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region IX
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. Ipc-8414

Dear Mr. Weissenborn:

Reference is made to the above-docketed 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

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Philip W. Guild

Member, Geological Survey

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

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

400

file

2468

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

DEFENSE MINERALS EXPLORATION
ADMINISTRATION

5285 3538

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 Ida-4414. 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. Gaehan, USBM
T. P. Thayer, USGS

400

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. Mickelson, 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
		362.2

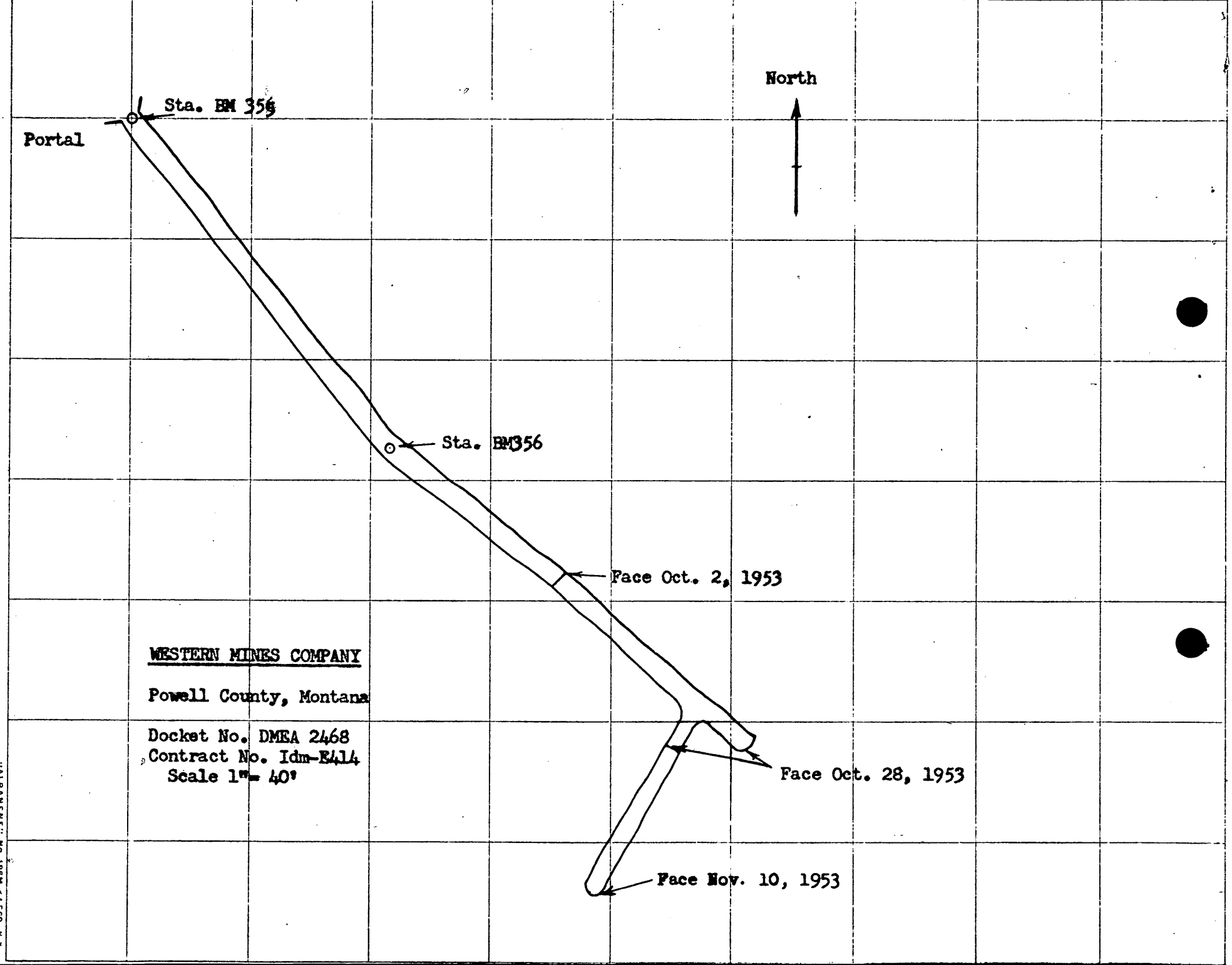
Amendment No. 1, Stage II (Alternate), allowed 400 feet maximum of drifting and crosscutting. The completed work lacked 22.8 feet of the maximum.

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. R. 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

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



"ALBANENE" REG. U.S. PAT. OFF. No. 188M K&E CO., N.Y.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
Rm. 117 Toward Street
Spokane 1, Washington

November 10, 1953

[illegible]

To: [illegible] Chief Geologist

From: Howard L. Nicholson, Geologist, U. S. Geological Survey

Subject: Final Inspection, Project No. [illegible]-216 (tungsten)
Western Tree Company, Powell County, Montana
Contract [illegible]

A final inspection of the Western Tree 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 in the upper adit 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 10- to 60-foot southwest crosscut was proposed after an inspection trip on [illegible], 1953. At that time, the upper level adit and the drift were mapped. Projection of the vein from the upper level adit and bulldozer cut above to the elevation of the [illegible] 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 and it was suggested to the operator to terminate the contract with 22[illegible] feet of drifting remaining to complete the 1,[illegible] 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 ELECTRIC POWER ADMINISTRATION
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

400

November 19, 1953

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination by mutual agreement
Contract No. Idr-3414
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. W. Weissenborn, Executive Officer, DMEA Field Team, Region II, dated October 17, 1953, is as follows:

"Request telegraphic approval to terminate by agreement Contract Idr-3414, Western Mines Company, Docket No. DMEA 2468, Tungsten. Project leaks 22.3 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. L. Killegaard for A. W. 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

ELChapman/ls

orig in Docket MDL

TELEGRAM

TELETYPE *

NOVEMBER 17, 1953
PHONED AT 2:55 pm

GEORGE C. SELFRIDGE, CHAIRMAN
OPERATING COMMITTEE, DMEA
WASHINGTON, D.C.

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

cc: Confirmation
USBM
Chronological
Nickelson

Copy

orig. in Docket

498 WA SP /I-GS-G/

SPOKANE 11-17-53 300P

GEORGE C. SELFRIDGE CHAIRMAN OPERATING COMMITTEE

DMEA, WA

Defense Minerals Administration
RECEIVED
NOV 18 1953

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.

WSM

T. H. KIILSGAARD

FOR., - A E WEISSENBORN

IDM-E 414 DMEA-2468 22.8 400

VA 301P

Copy
mds

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

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-R414, 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.

2 x 9 = 18
18 ÷ 3 = 6'/day
3 men
2 ft/man shift

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.
USBM (2)
DMEA
M/D
AD
JDB/he

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
No. 157 Howard Street
Spokane 4, Washington

September 14, 1953

Memorandum

W39

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-1414

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 min[redacted] drilled an 8 foot round the day before the visit and pulled about 8' 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.

400

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-2414

Dear Mr. Phalen:

Enclosed are six copies of Amendment No. 1 to your Exploration Project Contract Idm-2414 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

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

Not retained 600

SPECIAL

SPOKANE, WASH. 8/26/53 2546

MR. GEORGE SELFRIDGE
CHAIRMAN OPERATING COMMITTEE DMEA
DEPARTMENT OF INTERIOR - WASHINGTON

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

THOR H. KILLSGAARD FOR A E WEISSENBORN USGS SP

MR. GEORGE SELFRIDGE
CHAIRMAN OPERATING COMMITTEE DMEA DEPT INTERIOR

PLEASE DISREGARD OUR TT 279 WA SP 8/26/53 RE DOCKET DMEA 2468 /TUNGSTEN/ WESTERN MINING COMPANY POWELL COUNTY MONT. AMENDMENT RECEIVED.

THOR H. KILLSGAARD FOR A.E. WEISSENBORN

AB

400

August 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-8414

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

Chairman, Operating Committee

Enclosures 6

ACTING

Approved:

C. H. Johnson
Member, Bureau of Mines

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. Hoffland
Mr. Rubin
Chron.
Pending

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1953

XXXXXXXXXXXXXXXXXX
1201 N. Division St.
Spokane 2, Washington
August 11, 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 ICm-2414 (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 Killogard
Acting Executive Officer
DMEA Field Team, Region II

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

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

MF-[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/13/53

REFERRED TO:

1. ~~Hazel Berry Room 4624~~
2. Mr. Selfridge, Rm. 4624
3. Mr. Martin, Rm. 3538
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: Original of Field letter ret'd to R&R for docket file. Attached are 6 copies of proposed Am.#1 and cy of Field letter.
Hazel

Check (X) before the items needing attention. ilb

ROBERT E. ADAMS
Initials of sender.

GPO 16—63815-1

Defense Minerals Administration
RECEIVED
AUG 28 1953

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

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

Subject: Docket No. DMRA 2468 (tungsten)
Contract Idm-2414

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
DMRA Field Team, Region II

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

RE-WRITTEN BY LEGAL

400

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

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

Re: Docket No. DMEA 2468 - Tungsten
Western Mines Company
New Progress & Old Timer claims
Powell County, Montana
Contract No. Idm-E114

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, together with Exhibit "F" (2 pages).

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,

APPROVED:

Chairman, Operating Committee

Member, Bureau of Mines

Member, Geological Survey

400

FILE COPY
SURNAME:

Rutledge
Martin

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

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

Re: Docket No. DMEA 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, together with Exhibit "F" (2 pages).

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,

APPROVED:

Chairman, Operating Committee

Member, Bureau of Mines

Member, Geological Survey

FARutledge:foc 8-14-53
cc: Docket
Code 400
FT. Reg.2
Oper. Comm.
Adm. Reading File
R. W. Geehan, USBM
Mary Miller, USGS

RE-WRITTEN BY LEGAL

GOVERNMENT COPY

AMENDMENT NO. 1

It is agreed this 11 day of August 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and WESTERN MINES COMPANY Helmville, Montana

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 414 of October 6 1952 between the parties hereto be modified and amended as described in Exhibit "F" attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be August 7 1953.

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

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

Executed in sextuplicate the day and year first above written.

WESTERN MINES COMPANY (Operator)	THE UNITED STATES OF AMERICA
By _____	By _____

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 13 1953

WESTERN MINES COMPANY
Exploration Project Contract
Idm-E414

AMENDMENT No. 1

~~EXHIBIT "F"~~

In Exhibit "A" ~~under "Estimated Costs of the Project", on page 5 and 6 under Stage II (Alternate) delete everything 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* at $15.00/hour*		$1,200.00*
400 feet* of drifting and crosscutting at $20.00/foot* (includes all costs of direct labor at the face, ~~and~~ equipment, ~~rental or depreciation~~ except ~~for~~ trucks and chain saw; and all supplies ~~used~~ necessary for drifting and cross-cutting, except timber, ties, rail and pipe)		8,000.00*
2. Labor, Supervision and Consultants		
1 Supervisor-geologist at $600.00/month 5 months	$3,000.00*	
1 Roustabout 60 days at $14.00/day (including overtime)	840.00	3,840.00
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/month*, 5 months		160.00*

6. New Buildings, Improvements, Installations		
Tool shed and fuel rack		$ 125.00*
7. Miscellaneous		
Assaying, 50 samples at $4.00 each	$ 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 percent		$15,097.50*

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

So. 157 Howard Street
Spokane 4, Washington

August 5, 1953

WSM

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

Re: Docket No. DMEA-2465 (Tungsten)
Western Mines Co.
Powell County, Montana
Contract No. Idm-1414

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
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 203 hours of actual dozer operation, only 33 hours of which were allowed for government participation under Stage 1.

[illegible] as outlined in Stage 1 plans, were cut in a total of 83½ hours of dozing. [illegible] map of the property accompanies this report, showing with reasonable accuracy the location of cuts, cared and inaccessible tunnels, together with vein exposures and location and assay results of samples.

[illegible] 1. At an assumed elevation of 6625' is located the highest known tunnel on the property. This tunnel was cared and the cut was made through the center of the [illegible] length of 66'. A strong quartz vein of from 6" to 24" in width was [illegible] showing an [illegible] scheelite content. This showing is typical of some of the [illegible] quartz boulders are piled on the dump and which when placed under the black light [illegible] showed an indicated high tungsten values. The vein strikes [illegible] and dips about 24° westerly. Sample No.10 is a grab sample taken [illegible] and gave [illegible] Ag. 0.5 oz. WO3. 2.75%.

[illegible] Approximately 26' below Cut No.1, in trying to pick up the vein we cut into the [illegible] tunnel and made a [illegible] survey of the accessible distance. The vein [illegible] is clearly defined and exposed for approximately [illegible] surface the light shows a considerable scheelite in it and also in the [illegible]. The vein on these exposures 12" in width and conforms to the [illegible] Three samples taken across 12" gave the following [illegible]

[illegible]	[illegible]	Ag. 0.[illegible]	[illegible]	WO3. 0.20 %	Location on sketch.
[illegible]	[illegible]	[illegible]	[illegible]	WO3. 0.31 %	" "
[illegible]	[illegible]	[illegible]	[illegible]	WO3. 0.36 %	" "

[illegible] The vein was exposed in this cut about 4' vertically below Cut No.2 [illegible] which conforms to the strike and dip as shown in the [illegible] is badly broken and is surface showing only. [illegible] showing silver values if any in what appeared to be a sil- [illegible] zone. Values were negligible. Sample No.6 was cut across [illegible] Ag. [illegible] oz. WO3. 0.69%. Sample No.5 was taken across [illegible] in the shear zone and 30' westerly from Sample No.6. Testing [illegible] showed almost total blank.

[illegible] vein with same strike and dip as above and about 6" wide was shown [illegible] 22' vertically below Cut No.3. Sample No.4, taken across this 6" of [illegible] the following results: Au. 0.050 oz. Ag. 0.4 oz. WO3. 2.23 %. Sample [illegible] across 18" of mixed quartz and 20' westerly of Sample No.4 also in shear zone, [illegible] virtually a total blank. This Cut No.4 is made a short distance south of [illegible] 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.

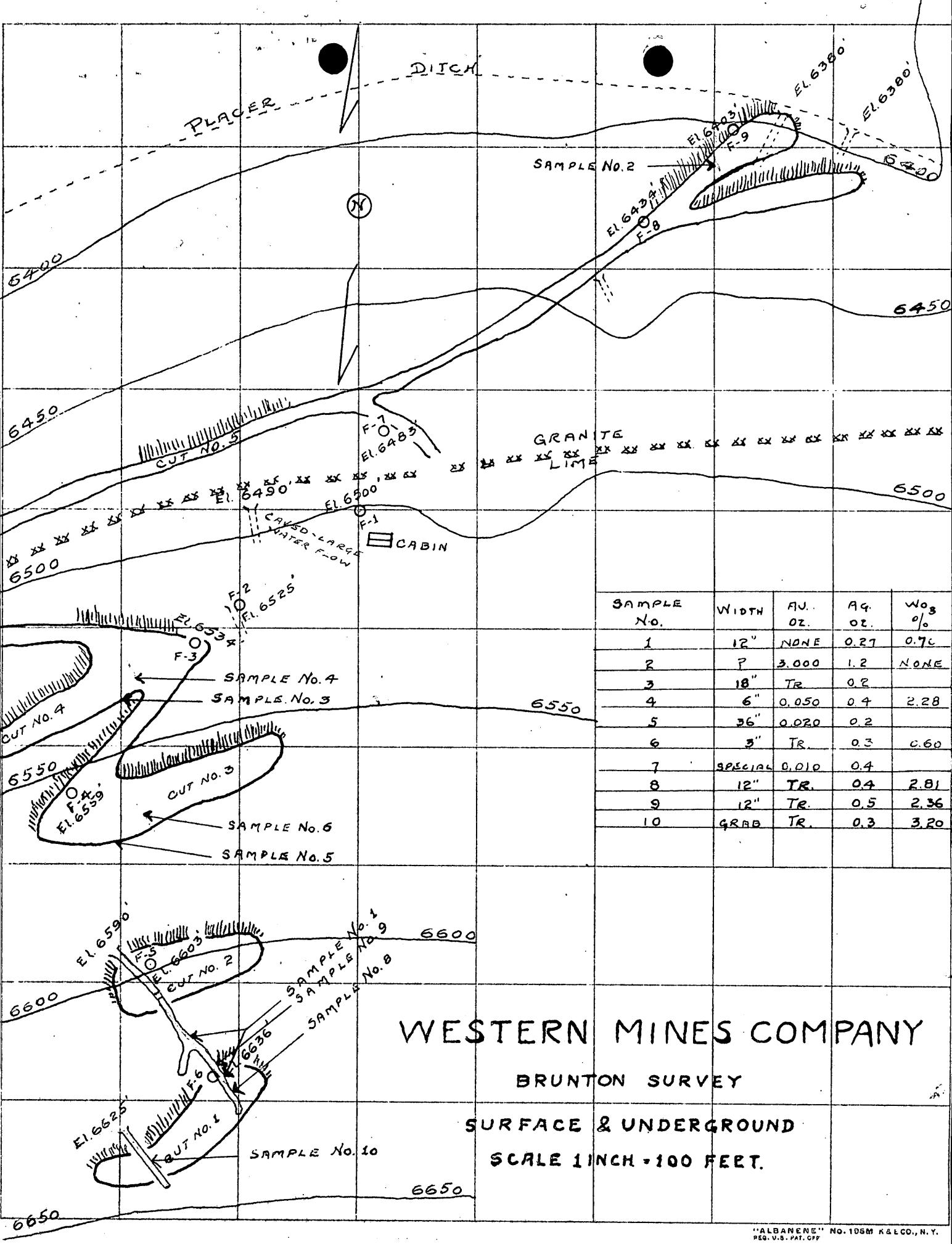
The width, strike and dip of this vein is typical of the productive veins of adjoining properties and of the district with the exception of the tungsten content, which seems to be appreciably greater in this vein with but one exception. This exception is the Futaro Mine and it is the only other property whose vein occurs in the upper Lockwood formation. The Futaro 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 amphibolite of the upper Lockwood formation to the south and through Indian 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 Two (Alternate). Drifting to be started on the vein at, or slightly below the exposure in Cut No.4, and to be continued to a point approximately under the [illegible] which point a depth of about 200' will be attained. Any deviation from [illegible] as crosscutting at any point in the drift, might be later decided upon with the government engineer.

Respectfully Submitted,
WESTERN MINING [illegible]

By [signature]
Manager.



SAMPLE No.	WIDTH	AU. OZ.	AG. OZ.	WO_3 %
1	12"	NONE	0.27	0.70
2	P	3.000	1.2	NONE
3	18"	TR.	0.2	
4	6"	0.050	0.4	2.28
5	36"	0.020	0.2	
6	3"	TR.	0.3	0.60
7	SPECIAL	0.010	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

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.

xxxxxxxxxxxxxxxxxx
No. 15, Howard Street
Spokane 4, Washington

August 5, 1953

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

WSM

Re: Docket No. DMEA-460 (Tungsten)
Western Mines Company
Powell County, Montana
Contract No. Idm-2414

Dear Mr. Phalen:

This letter will confirm your telephone conversation of August 4, 1953, with Mr. Thor H. Killsgaard 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.

xxxxxxxxxxxxxxxxxxxx
No. 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-5-414

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 large 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 1½ 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

400

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE [redacted]RATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

June 11, 1953

WSM

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

400

May 21, 1953

WSM

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

400

Defense Minerals Exploration
Administration

W. S. Martin
5285 3538

April 24, 1953

A. H. Weissenborn, DMEA Executive Officer, Region 2, South 157 Howard St.
Spokane, Washington
Docket DMA 2468 - Western Mines Company - Contract IGm-2-414

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

George C. Delfridge

G. C. Delfridge, 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

C
O
P
Y

DEPARTMENT OF ...
Defense Minerals Administration
APR 22 1953

292 WA SP /I-GS-G/

SPOKANE WASH. 4/21/53 150P

GEORGE C. SELDRIDGE, CHAIRMAN, OPERATING COMMITTEE, DMEA

WA/25/

RE DOCKET NUMBER 2468 /TUNGSTEN/ CONTRACT IDM-E-414 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

400

WSM

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 16 1953

DEC 1 1952

400

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.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

GCSelfridge:ls
11/25/52

Approved:

Member, Bureau of Mines

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

OCT 6 1952

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

Re: Docket No. DMRA 2468 - Tungsten
Western Mines Company
New Progress and Old Tiger 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.

cc: Admn. Reading File
Docket
R. W. Deehan, USBM
J. K. Lemmon, USGS
Field Team Reg. II
Operating Committee

Approved:

E. H. Hedges

Member, Bureau of Mines

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

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

G. R. Kinkel, Jr.

Member, Geological Survey

TLChapman'lm
10/3/52

AIR MAIL

SEP 15 1952

Mr. A. R. 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 A. 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,

S -

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

140 400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION 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

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.

John L. Hoffmund, Chief Counsel, DMEA Sept. 12, 1952

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.

S

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

140

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

August 28, 1952

2468

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

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" (MR-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
G. O. Mittendorf
Administrator's Reading File
J. L. Hofflund
chron.

SEP 11 1952

Mr. W. E. 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 F. 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 %

You are entirely correct in your understanding that only sections 1 and 3 of the Form MP-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,

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

Enclosures

WSMartin:ls 9/10/52
Copy to: Adm. Read. File
Docket
Field Team, Region 2
W. S. Martin
R. M. Lemmon, USGS
R. W. Geehan, USBM

400

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, 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 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 minerlight. The vein is reported to have been exposed in Cuts 3 and 4 before the banks sloughed.

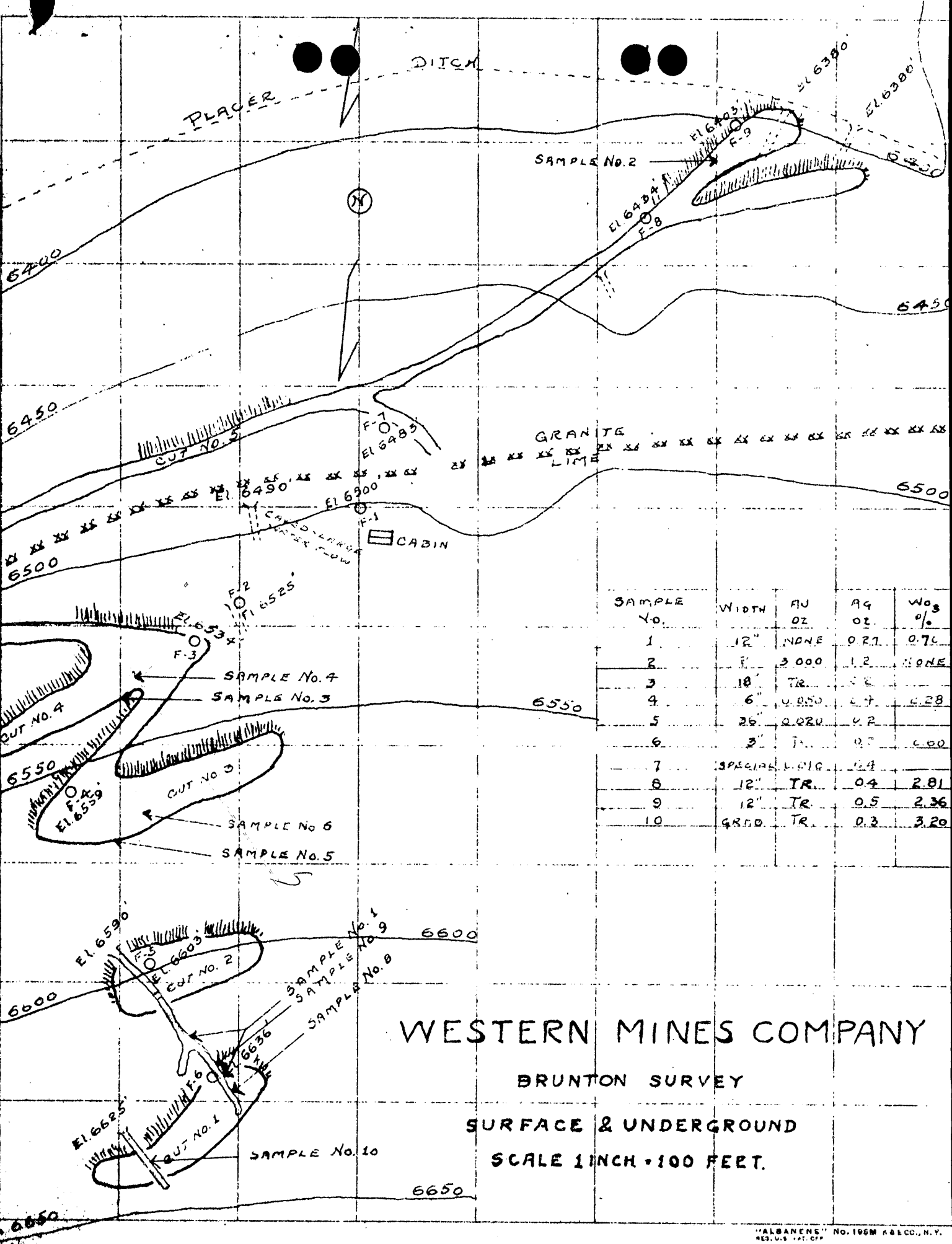
The Geological Survey approved Stage II of the contract so the Operator had completed the access road to the proposed adit site which is to be located at the point where Sample 4 on the map is shown. The drift adit on the vein will bear about S. 35° E.

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

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



SAMPLE No.	WIDTH	AU OZ	AG OZ	WO_3 %
1	12"	NONE	0.27	0.70
2	[illegible]	3.000	1.2	NONE
3	18"	TR.	[illegible]	
4	6"	0.050	0.4	0.28
5	26"	0.020	0.2	
6	3"	TR.	0.7	0.00
7	SPECIMEN	0.010	0.4	
8	12"	TR.	0.4	2.81
9	12"	TR.	0.5	2.36
10	GRND.	TR.	0.3	3.20

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

Western Mines Co. Helmville Montana DMEA 2468 Idm-E414

$21,600.00 Part $16,200.00 Access Roads - Bulldozing Trenches - Drifting

Month	Bulldozing Roads & Trails	Trenching	Wages	Supplies	Equipment	Sampling	Other	Total	
June	33 hrs @ $24.374 811.62	45½ hrs @ $23.704 1078.61	662.50	25.23	75.00		682.50	1690 23	
July		38 @ 28.78 1071.07						2961 30	
		Drifting							
August	[illegible]	51.5 @ 42.77 2200.55						5469 85	$42.77 per foot
August	80 hrs @ 15.00 1200.00	1225.00					25	6694 85	
Sept		168 @ 27.10 4554.04						11,248 89	$27.10 " "
Oct } Nov }		157.7 @ 31.06 4713.24						15962 13	31.06 " "

377.2 ft Drifting = $11,467.83 — $30.49 per foot

113 Hrs Roads } = $4495.30 — $22.08 per hour

83.5 Hrs Trenching

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

DOCKET No. DMI 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 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 $16,237.50, 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

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.

Total (1) $12,750.00

(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

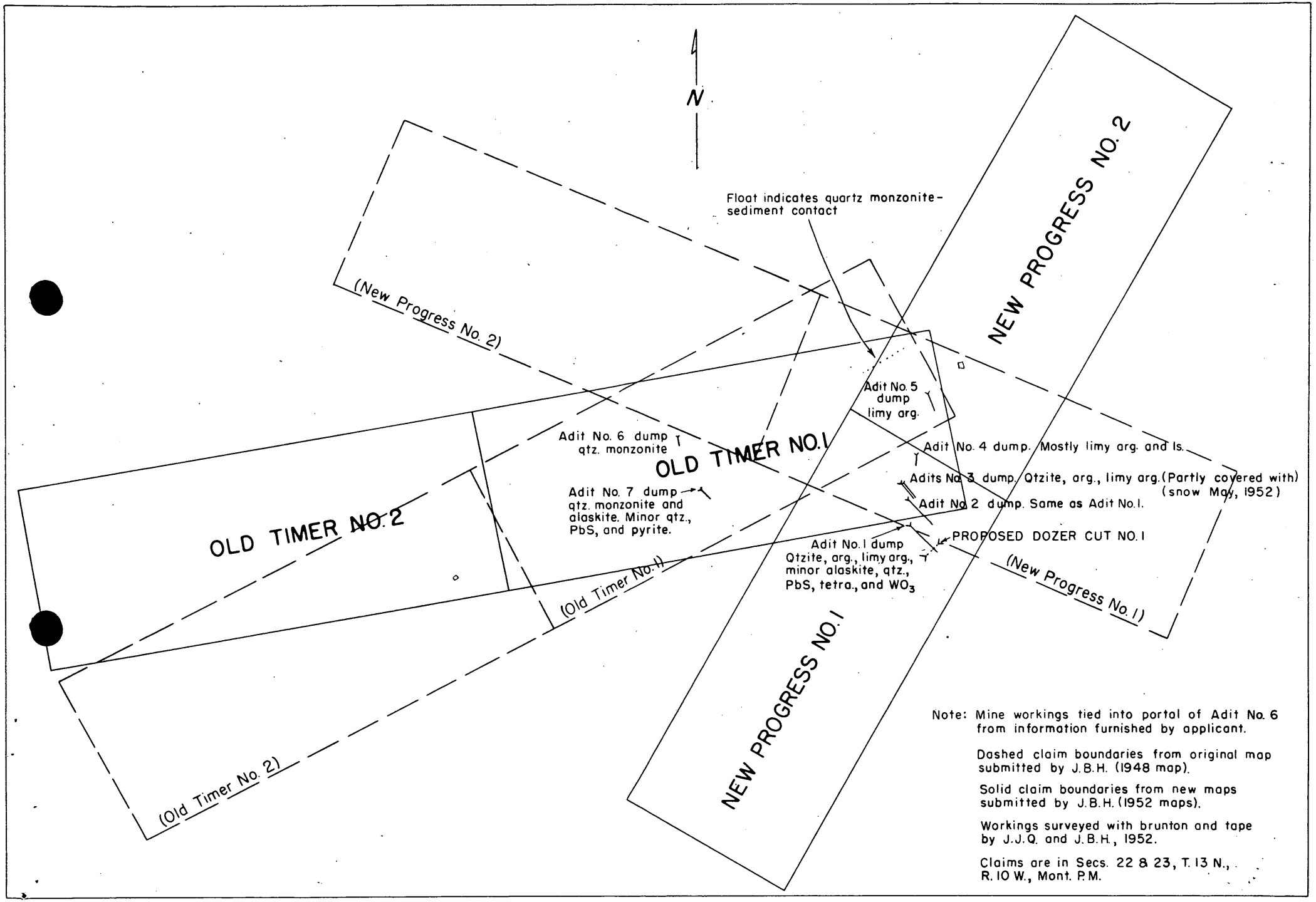
(6) New buildings, improvements and installations
None

(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

400

DEFENSE MINERALS EXPLORATION ADMINISTRATION
GCSelfridge
5284 3538

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

C. O. Mittendorf,
Acting Administrator, DMEA

GCSelfridge:ls 8/21/52

Copy to: Docket DMEA 2468
Admn. Read. File
G. C. Selfridge
~~Audit~~
Audits

AIR MAIL

AUG 7 1952

Western Mines Company
Helmville, 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

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

TLChapman'lm
8/6/52

cc: Admn. Reading File
Docket
R. W. Oechsn, USGS
D. M. Lemmon, USGS
Field Team Reg. II
G. C. Selfridge
T. L. Chapman

FILE COPY
Surname:

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

Attachment

Copy to Field Team

RWGeehan:lds
Copy to: Ferrous Metals
FILES
Mr. Geehan

IN REPLY REFER TO:

G-MD-CF

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

400 file

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.

DMLemmon:gt

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

July 11, 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. C. 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. S. 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. L. Weissenborn, Executive Officer
(U. S. Geological Survey)

W. J. Volin, Member
(U. S. Bureau of Mines)

cc: USBM-Albany
USBM-Spokane
USGS(SRO)

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

No. 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-2408X, 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.

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

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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

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)

402

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

Acting Administrator
Defense Minerals Exploration
Administration

TLChapman'lm
4/23/52

cc: Admn. Reading File
Docket
R. W. Gechan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
G. S. Selfridge
T. L. Chapman
Operating Committee

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

400

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

Copy to: Field Team

Copy retained 400

IN REPLY REFER TO:

G-MD-DML

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

April 9, 1952

400

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.

Don Lemmon

DMEA-2468

1201 N. Division St.
Spokane 2, Wash.

September 25, 1951

400

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.

Copy retained 200

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 Phelan, 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.

Phelan 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
(Date)
(JB)

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, cherty 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.

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

400

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

Attachment

Copy retained 400

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

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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 the Field Team, Region II, Spokane for examination of the property.

D.M. Lemmon

IN REPLY REFER TO:

G-MD-DML

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

April 9, 1952

Memorandum

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Recommendation: It is recommended that the application be referred to the Field Team, Region II, Spokane for examination of the property.

D. M. Lemmon

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

April 7, 1952

Memorandum

To: George C. Selfridge, DMFA

From: Robert W. Geehan, Bureau of Mines

Subject: Western Mines Company DMEA 2468, Tungsten
Helmville, Powell County, Montana

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Robert W. Geehan

Attachment

RWGeehan:lds

Copy to: Field Team
Ferrous Metals
Mr. Geehan
F i l e s

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.

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Robert W. Geehan

Attachment

RWGeehan:lds

Copy to: Field Team
Ferrous Metals
Mr. Geehan
F i l e s

DMEA-2468, Stm-E-414, Amend

400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
No. 157 Howard Street
Spokane 1, Washington

September 2, 1953

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

WSM

Re: Docket No. DMEA-2140 (Tungsten)
Western Mines Company
Powell County, Montana
Contract No. [illegible]

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 Step II be submitted to the Washington office. The requested map is attached to a routine inspection report prepared by John W. Cardill, 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 N. 35° E. direction for about 150 feet.

Sincerely yours,

Thor H. Hillegaard
for A. L. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: [illegible] (2)

Amendment #1

Division 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	3,840.00

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. Mc Ilhenny
Administrator, Defense
Minerals Exploration
Administration

Butler
Hoffman
Chandler

WESTERN MINES COMPANY

By Pat. T. Phalen

Div Copy

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 24 1952

November 21, 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-2414

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. Kilsgaard
For: M. E. Volin
Acting Executive Officer
DMEA Field Team, Region II

Enclosure

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 24 1952

DOCKET [redacted] DMEA [redacted]

COMMODITY [redacted]

Division 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] [redacted]

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 [redacted], County of [redacted], described as follows: [3] [redacted]

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: [redacted]

(*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] [redacted]

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,[illegible].00, which is 75 percent of $[illegible].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.* [illegible]

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
[illegible]

[illegible]
(Operator)

By [signature]
[signature]

I, [signature], certify that I am the secretary of the corporation named as Operator herein; that [signature], who signed this contract on behalf of the Operator, was then [illegible] 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. Bailey, Spokane, Washington	2%
Zilla Bailey, Reardon, Washington	1%
John W. Phalen, Spokane, Washington	5%

EXPLORATION PROJECT CONTRACT
WESTERN MINES COMPANY
DOCKET NO. DMRA-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	
Workman'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, 90* 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	- 14,000 + 12
Total Estimated Cost of Project		20,130.00*
Government Participation @ 75%		15,097.50*

Government Messenger Envelope

No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
[illegible]	RUN / STOP	[illegible]	RUN / STOP
[illegible]	RUN / STOP	ARLINGTON [illegible] Attn: Mr. A. L. [illegible]	RUN / STOP
[illegible]	RUN / STOP	Mr Buckey	RUN / STOP
[illegible]	RUN / STOP	[illegible]	RUN / STOP
[illegible]	RUN / STOP		RUN / STOP
[illegible]	RUN / STOP	[illegible]	RUN / STOP
[illegible]	RUN / STOP	[illegible]	RUN / STOP
[illegible]	RUN / STOP	[illegible]	RUN / STOP
[illegible]	RUN / STOP		RUN / STOP
[illegible]	RUN 17 / STOP 122	[illegible]	RUN / STOP
[illegible]	RUN / STOP	Miss Jefferson 5225	RUN / STOP

oes to ssue.

Use other side

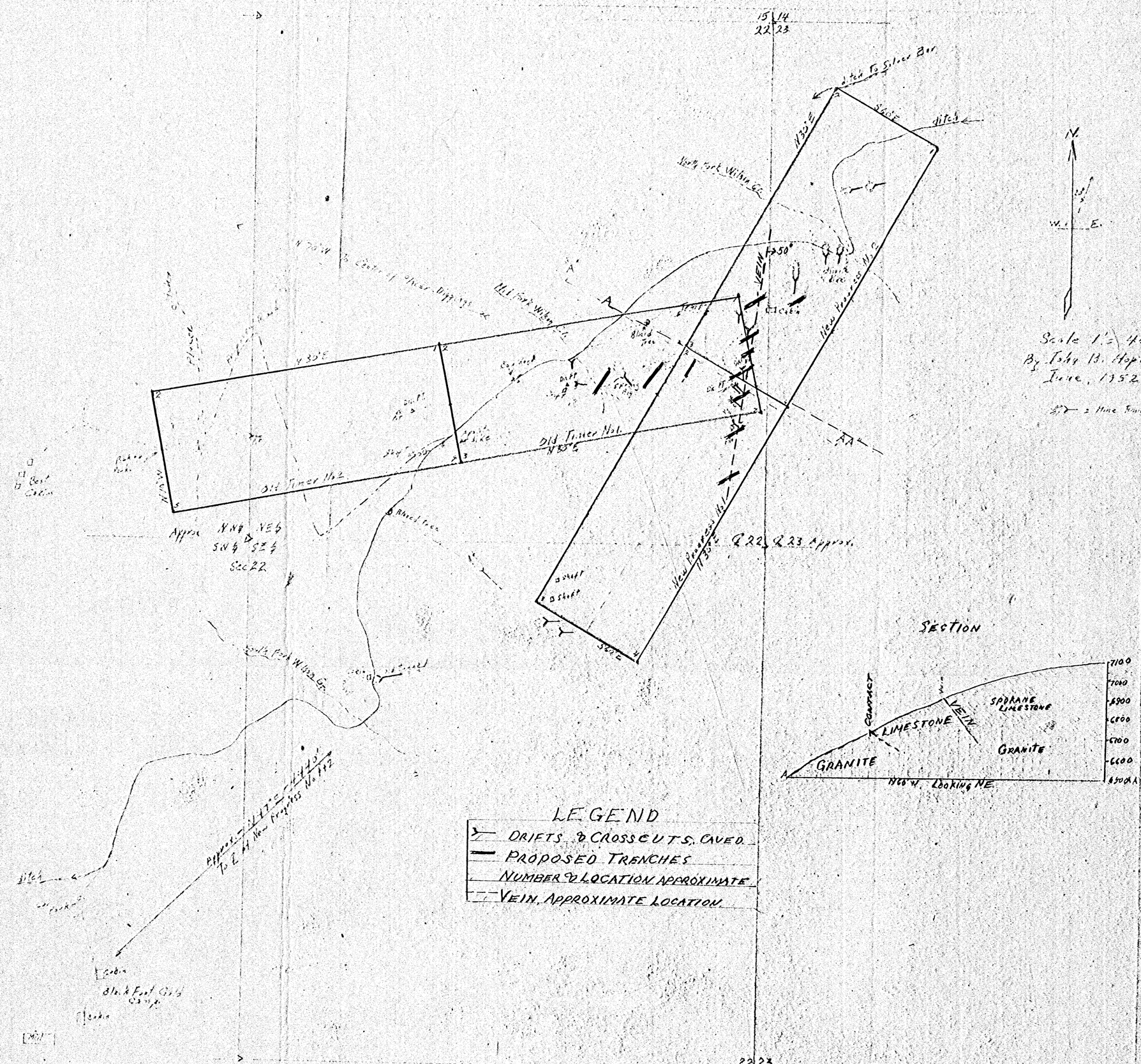
16—38949-2

Use RUN and STOP only when messenger service between Government buildings in Washington is required.
Your mail room has RUN and STOP information.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
~~Mr. Stern~~	RUN / STOP
~~Mrs. Scott~~	RUN / STOP
~~Mr. Scott~~	RUN / STOP
Mr. Irving Rm. 4241	RUN / STOP
~~Mr. Fitzwyman~~	RUN / STOP
Frank Stead Ed Kelley	RUN / STOP
Wayne Fitchett Geophysics Br.	RUN / STOP
Katie L. Garner Room 3208 GL & Reg.	RUN / STOP
P. Hazel Geophysics Br.	RUN / STOP
Placement Section Room 5345	RUN / STOP

Use other side first

NAME OR TITLE OF PERSON, DEPARTMENT, ADDI
~~Mr. Brinthen~~ ~~Transportation~~
Mrs. Yoemans Acct's. Branch
Mr. N. B. Roberts Room 4210
~~Mr. Thayer~~ ~~5214~~
Mr. Harl C. Self Rm. 3538 - Info

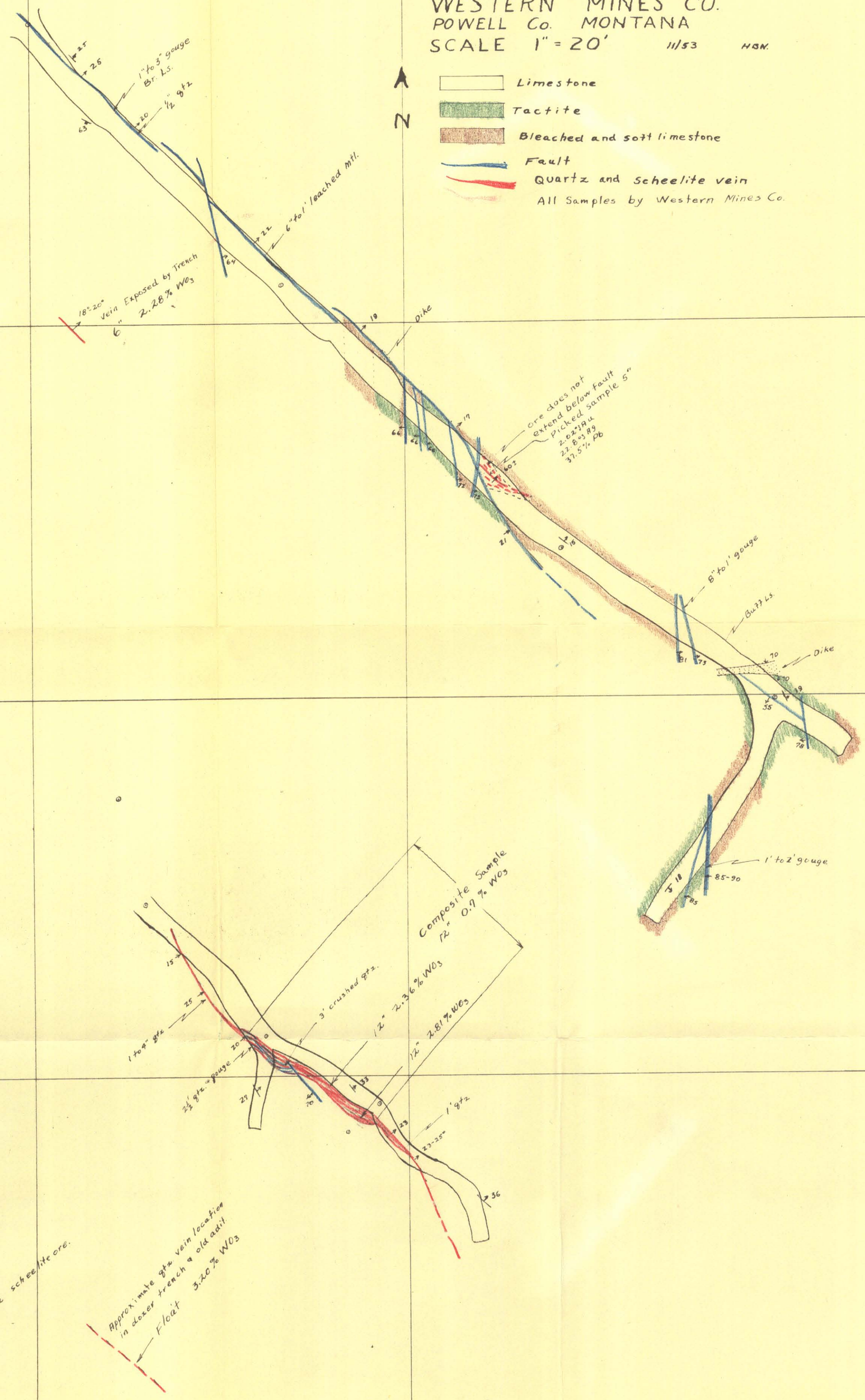

15 14
22 23
Ditch To Silver Bar
S 65° E
Ditch
N 30° E
North Fork Wilson Cr.
N 30° E
Old Fork Wilson Cr.
Cabin
New Progress No. 2
Old Timer No. 1
N 30° E
Old Timer No. 2
Approx. N½ & NE¼ SW¼ & SE¼ Sec 22
New Progress No. 1
N 30° E
Approx. Q 22, Q 23
S 60° E
South Fork Wilson Cr.
Approx. 1/4 mi. To L. H. New Progress No. 1 & 2
Ditch
Cabin
Black Foot Gold Camp
Cabin
Mill
Best Cabin
Scale 1" = 400'
By John B. Hopkins
June, 1952
= Mine Timber
SECTION
CONTACT
LIMESTONE
VEIN
SPOKANE LIMESTONE
GRANITE
GRANITE
N 60° W. LOOKING NE.
7100
7000
6900
6800
6700
6600
6500
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.
No. 1 of 4

DMEA 2468

WESTERN MINES CO.
POWELL Co. MONTANA
SCALE 1" = 20' 11/53 HGN.

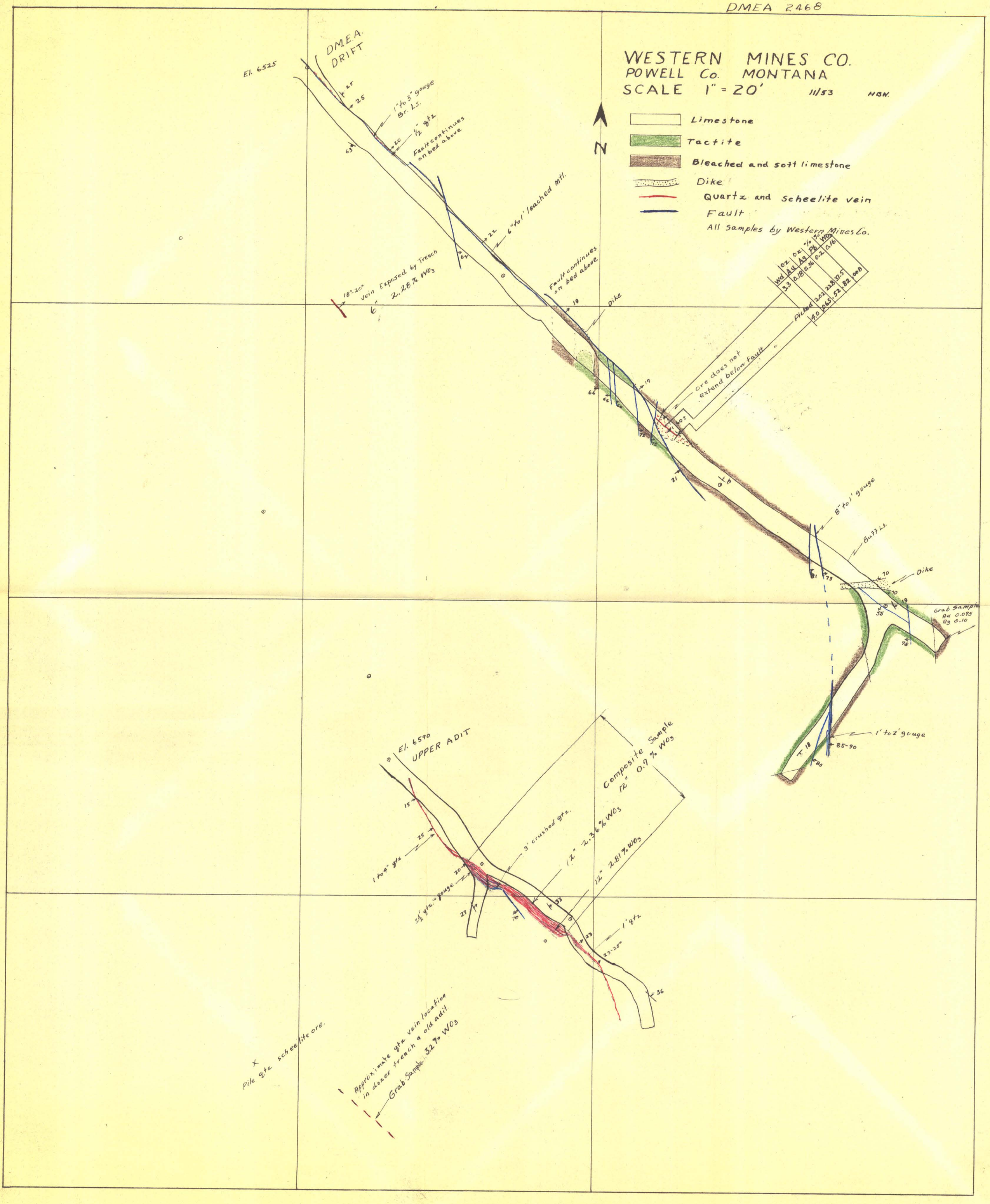
N

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.



Wd	Au oz	Ag oz	Pb %	WO3 %
3.3	0.18	0.36	0.2	0.16
Picked				
2.02		228	37.5	
4.0	0.65	.52	.82	.008