UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated [X] Cancelled [ ] Withdrawn [ ] DMEA No. 2137

This is the official contract file of a project closed without certification. It contains all official records of the project arranged in this manner:

Left Side

Certificate of Audit (Final).

Interim Audit(s).

✓ Report of Review.

Closing Letter

✓ Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

✓ Subordination Agreement.

✓ Leases and assignments of leases.

✓ Application and attachments.

Schedule of Collections.

✓ Operator's monthly reports and all attachments (latest on top).

Right Side

✓ Project summary.

✓ Work completed analysis.

✓ All other material is filed in chronological order with correspondence including the following reports as checked:

✓ Final Field Team Report. (Tab)

Operator's Final Report.

✓ Interim Reports.

✓ On-Site Exam Report(s). (Tab)

Settlement Sheets.

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

Maps in folder number ____

Operator's Monthly Reports in folder number ____

R.C.G. LV 1-24-57
Reviewer's Initials and Date

10390

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Department of the Interior
Defense Minerals Administration
1952

REPORT OF REVIEW

I have reviewed the Monthly Reports of

Baltimore Camas Mines, Inc.

601 Eastman Building

Boise, Idaho

pertaining to Exploration Project Contract No. Idm-E-281, Docket No. DMEA-2137X, for the period May 16, 1952, to June 15, 1952.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with Government representative who visited and examined the project, and a determination of the reasonableness and propriety of the cost.

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

a. the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder;

b. the Monthly Reports were supported by documentary proof of the costs incurred under the contract;

c. major portion ($3,490.00) of costs covered diamond core drilling under a sub-contract;

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

Total cost as billed by Contractor	$ 4,683.64
Exceptions	None
Total accepted cost	$ 4,683.64

The contract calls for a 75 per cent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Three-Thousand, Five Hundred Twelve and 74/100 Dollars.

- $3,512.74

is considered valid and proper.

Date: December 5, 1952

George Mavor
Auditor

To: Mr. G. P. Williams
Baltimore Cassas Mines, Inc.
601 Eastman Building
Boise, Idaho

Operator under Exploration Project
Contract I-dm-E 281, Docket No.
DMEA 2137X, dated March 31, 1952

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, under the terms of the above-mentioned contract, hereby terminates the contract on the following grounds:

> In the opinion of the Government, operations up to the time of this notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified.

Upon the receipt of this notice, as provided in said contract, you are required to dispose of any remaining materials, supplies, facilities, buildings, fixtures, equipment, or other items, in which the Government has an interest, for the joint account of yourself and the Government; and to render to the Government a full and final accounting of your operations under the contract and of your expenditures of money on account thereof.

Any work prosecuted or costs incurred by you after the receipt of this notice shall be for your sole account, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity, and (b) the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

Dated this sixth day of August, 1952.

UNITED STATES OF AMERICA

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

Termination

MF-200
(June 1951)

DMEA-2137X

Docket No. D~~XXX~~
Commodity tungsten
IdmE-281

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

GOVERNMENT'S COPY

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 31st day of March, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Baltimore Camas Mines, Inc., a corporation organized and existing under the laws of the State of Idaho, 601 Eastman Building, Boise, Idaho

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Nevada, County of White Pine described as follows: [3] The Schafer mine comprised of the unpatented lode mining claims Shoe String Extension, East and West Fisher, West Shoe String, Happy, Happy No. 1, Sunnyside, and Sunnyside No. 1, recorded in Mining Locations Record, Book 123, p. 312; Book 123, p. 311; Book 123, p. 310; Book 128, p. 423; Book 128, p. 423; Book 134, p. 133; and Book 134, p. 133, respectively. The claims are known as the Happy Group and are situated in the Cherry Creek Mining District in T. 24 N., R. 62 E., approximately 40 miles north of Ely, Nevada.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and the subordination agreement of the owner is attached.~~

Subordination agreement attached.

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

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

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

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

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

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

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

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

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

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

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

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 75 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $15,210.00, which is 75 percent of the agreed estimated total cost of this project, $20,280.00.

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

BALTIMORE CAMAS MINES, INC.
(Operator)

By G. P. Williams
President.

THE UNITED STATES OF AMERICA

By C. Whittendorf
Acting Administrator, Defense Minerals Exploration Administration

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

EXPLORATION PROJECT CONTRACT
BALTIMORE CAMAS MINES, INC.
THE SCHAFER MINE
DOCKET NO. DMEA-2137X

EXHIBIT "A"

Statement of the Work

Stage I[1]

Time Schedule: 0 - 1½ months.

1. Drill by contract a maximum of three near-horizontal EX diamond drill holes, aggregating not more than 810 feet, from a prepared drill station in the Huston adit, to explore at depth the Silver and Spud Patch veins to the east (see attached map). The holes are to be drilled approximately as follows:

Hole No. 1 — N 85° E, 300 feet maximum

Hole No. 2 — N 41° E, 210 feet maximum

Hole No. 3 — N 70° E, 300 feet maximum

Stage II[1]

Stage II will be undertaken only with the approval of the Government after completion of Stage I to the satisfaction of the Government. The approval will be dependent upon the results of Stage I.

Time Schedule: 1½ - 4 months.

1. Drive, if ore is found in D. D. Hole No. 1 in the Spud Patch and Silver veins, approximately 300 feet of crosscut following the hole to the ore and then drift 100 feet on each vein. If ore is intersected only in the Silver vein, then crosscut only to that vein, a distance of approximately 150 feet, and drift 100 feet on the vein.

If no ore is found in either hole No. 1 or No. 3 but is found in hole No. 2, drive along the hole for approximately 210 feet to the ore and then drift for 100 feet on the ore.

If ore is found only in hole No. 3 in one or both of the veins, crosscut to the ore and then drift for 100 feet on the one or both ore exposures.

1/ As indicated in section 4 of the contract, all subcontracts are subject to approval by the Government in writing.

The maximum crosscutting and drifting will be approximately 500 feet. The crosscut and drifts are to be approximately 5' x 7' in the clear.

Estimated Costs of the Project

Fixtures and improvements

Stage II

1000'--Mine rail 16#, 2.7 tons @ $150.00/ton	$405.00	
Splice bars, bolts, spikes	70.00	
500'--3" pipe for air line @ $0.40/ft.	200.00	
500'--1" pipe for water line @ $0.20/ft.	100.00	
250--Mine ties @ $0.60 each	150.00	$ 925.00

Operating equipment

To be purchased:

Stage II

500'--Ventube @ $1.00/ft.		500.00

To be rented:

None

To be furnished by Operator

Stage I

1--Compressor, 315 cfm., Diesel-driven with 600' of air hose, for diamond drilling, valued at $9,000.00, depreciation @ $150.00/mo., 1.5 months	225.00	
1--Chevrolet tank truck valued @ $950.00, depreciation @ $16.00/mo., 1.5 months	24.00	
1--Dodge truck, 4-wheel drive, valued at $600.00, depreciation @ $10.00/mo., 1.5 months	15.00	

1—Chevrolet pickup, 1950, valued @ $1,500.00, depreciation @ $25.00/mo., 1.5 months	$ 37.50	
Shop equipment valued @ $900.00, depreciation @ $15.00/mo., 1.5 months	22.50	$ 324.00

Stage II

1—Compressor, 315 cfm., Diesel-driven with 600' of air hose, for crosscutting and drifting, valued at $9,000.00, depreciation @ $150.00/mo., 2.5 months	375.00	
1—Chevrolet tank truck valued @ $950.00, depreciation @ $16.00/mo., 2.5 months	40.00	
1—Dodge truck, 4-wheel drive, valued at $600.00, depreciation @ $10.00/mo., 2.5 months	25.00	
1—Chevrolet pickup, 1950, valued at $1,500.00, depreciation @ $25.00/mo., 2.5 months	62.50	
Shop equipment valued @ $900.00, depreciation @ $15.00/mo., 2.5 months	37.50	
1—G-D Leyner with column and bar, valued at $750.00, depreciation @ $12.50/mo., 2.5 months	30.25	
1—Sullivan mucking machine valued @ $2400.00, depreciation @ $40.00/mo., 2.5 months	100.00	670.25

Labor and supervision

Stage I

1—Engineer-foreman 2/ @ $400.00/mo., 1.5 months	600.00	

2/ The engineer-foreman shall direct the operation and shall be responsible for securing representative samples of the deposit, where warranted, and their subsequent handling. He also shall prepare and keep up to date the mine and geologic maps ordinarily necessary for an exploration operation. If his time is divided between the exploration project and another activity, then his salary is to be divided in the same proportion between the former and the latter.

1—Bookkeeper @ $150.00/mo., 1.5 months	$225.00	
OAB, Social Security, etc., 10%	82.50	$ 907.50

Stage II

Contract labor for 500 feet of drifts and crosscut @ $12.00/ft. maximum 3/	6,000.00	
1—Engineer-foreman 4/ @ $400.00/mo., 2.5 months	1,000.00	
1—Bookkeeper @ $150.00/mo., 2.5 months	375.00	
OAB, Social Security, etc., 10%	737.50	8,112.50

Rehabilitation and Repairs 5/

Stage I

Repair of compressor and trucks @ $100.00/mo., 1.5 months		150.00

Stage II

Repair of all equipment @ $150.00/mo., 2.5 months		375.00

Materials and Supplies

Stage I

Fuel and lubricants @ $12.00/day, 33 days (two shifts daily)	396.00	
Core boxes	50.00	446.00

3/ Includes all labor costs for breaking, mucking, tramming, and placing of pipe and track.

4/ See footnote 2.

5/ The repair and maintenance items are to be charged against the project only as incurred and spent while the equipment is working on the project.

Stage II

Fuel and lubricants @ $12.00/day, 55 days (two shifts daily)	$ 660.00	
Powder, 125 boxes @ $10.00 each	1,250.00	
Blasting caps, 30 boxes @ $2.50 each	75.00	
Fuse, 25,000 feet @ $15.00/1000	375.00	
Drill bits, 2,750 @ $21.00/100	577.50	
Drill steel	250.00	$ 3,187.50
Contract Work		
810' of diamond drilling @ $5.00/ft.		4,050.00
Miscellaneous		
Assays, 50 @ $3.00 each	150.00	
Contingencies	482.25	632.25
Total Estimate		$20,280.00
Government participation, 75% of the above		$15,210.00

No additional building, installations, fixtures, equipment or improvements to be purchased, rented, repaired or rehabilitated, except as listed above, are to be allowed as costs under this contract.

Underground maps showing the monthly progress of the exploration with assays of samples taken concurrently with the advance when in mineralized ground are to be included in the progress report required under section 12 of the project contract. In case such maps are not submitted, the Government at its discretion may have the necessary work performed and charge the same to the contract.

"The exploration work shall be carried on, as far as practicable, with equipment, materials, crews, and supervision separate and distinct from any other operations of the Operator, to avoid confusion of costs under the contract with any other costs. To the extent economically advisable, equipment (such as compressor and shovel), incidental labor, and supervision used in other operations may be used for

exploration, and the direct costs arising out of such use prorated, but the basis of such proration shall be at all times subject to the approval of the Government, and the costs involved in such proration will be disallowed by the Government to the extent that it is dissatisfied therewith."

MF-202

DMA 2137

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of White Pine, State of Nevada, described in a certain Exploration Project Contract dated March 31st, 1952, between Baltimore Camas Mines, Inc., assignee of G. P. Williams, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 18, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 12 day of October, 1951.

Frank Schafer

U. S. GOVERNMENT PRINTING OFFICE 16—84582-1

ASSIGNMENT OF LEASES

KNOW ALL MEN BY THESE PRESENTS, That we, G. P. WILLIAMS and MURIEL WILLIAMS, husband and wife of Boise, Ada County, State of Idaho, for and in consideration of the sums of $6428.00, in connection with the Schafer lease; $3692.00 in connection with the Babick lease; and $5100.25 in connection with the Millick lease, said leases as hereinafter more fully described, said sums to us in hand paid by Baltimore Camas Mines, Inc. and Consolidated Smelting & Refining Corporation, both Idaho corporations, have this day sold and do hereby assign, sell, transfer and set over unto said Baltimore Camas Mines, Inc., and Consolidated Smelting & Refining Corporation, in equal undivided shares, the following described mining leases and options, to-wit:

(1) That certain mining lease and escrow agreement date the 18th day of July, 1951, by and between FRANK SCHAFER, also known as FRANK SCHAEFER, of Cherry Creek, White Pine County, State of Nevada, as party of the first part, and G, P. WILLIAMS of Boise, Ada County, Idaho, as party of the second part, which Lease and Agreement covers the following described lode mining claims, commonly known as the Happy Group, situated in the Cherry Creek Mining District, White Pine County, Nevada:

Shoe String Extension

East and West Fisher

West Shoe String

Nora

Happy

Happy No. 1

Nora Extension

Sunnyside

Sunnyside No. 1

(2) That certain mining lease and agreement made and entered into September 21, 1951, by and between R. Arnold Millick and Amelia W. Millick, husband and wife, of Ely, White Pine County, Nevada, as parties of the first part, and G. P. Williams of Boise, Ada County, Idaho, as party of the second part, which agreement pertains to and covers the following named lode mining claims, situate in the Minerva Mining District, Shoshone, White Pine County, Nevada, as follows:

Hill Top Lode

Tony Lode

Tony Lode No. 1

Tony Lode No. 2

Tony Lode No. 3

(3) That certain mining lease and agreement, made and entered into September 7, 1951, by and between Erna Lange Babick, wife of John S. Babick, and John S. Babick and Michael S. Babick, a partnership, all of Phoenix, Maricopa County, Arizona, as parties of the first part, and G. P. Williams of Boise, Ada County, State of Idaho, as parties of the second part, which lease and agreement pertains to and covers the following named lode mining claims, situate in Johnson Peak Mining District, Juab County, Utah, as follows:

The Mineral Lode Mining Claim

The Metal Lode Mining Claim

The Merry Lode Mining Claim

The Sun Lode Mining Claim

The Bear Unpatented Mining Claim

The Battle Unpatented Mining Claim

The Chief Lode Mining Claim

The Dandy Lode Mining Claim

The Final Lode Mining Claim

And we hereby transfer to the said corporations, in equal undivided shares, all of our right, title and interest in and to the above described leases and agreements, without any representation whatsoever as to the validity or effect of said leases; transferring

absolutely the said leases and agreements, and all the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining. To have to hold the same unto the Baltimore Camas Mines, Inc., and Consolidated Smelting & Refining Corporation, their successors, and assigns, forever, from this date forward.

IN WITNESS WHEREOF, We have hereunto set our hands and seals the 11 day of October, 1951.

/S/ G. P. Williams

/S/ Muriel Williams

STATE OF IDAHO,)
) ss.
County of Ada,)

On this 11 day of October, 1951, before, me, a Notary Public in and for said County and State, personally appeared, G. P. WILLIAMS and MURIEL WILLIAMS, husband and wife, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they execut d the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official notarial seal the day and year first above written.

/S/ CATHERINE L. SIVEY
Notary Public for Idaho
Residence: Boise, Idaho

Copy

ESCROW AGREEMENT

THIS AGREEMENT, made and entered into this 18th day of July, 1951, by and between FRANK SCHAFER, also known as FRANK SCHAEFER, of the Town of Cherry Creek, County of White Pine, State of Nevada, the party of the first part, and G. P. WILLIAMS, of the City of Boise, County of Ada, State of Idaho, the party of the second part,

W I T N E S S E T H:

That Whereas the party of the first part signed and acknowledged a Mining Grant, Bargain and Sale Deed to the party of the second part dated July 16th, 1951, and all the interest of the party of the first part in and to the following described lode mining claims known as the Happy Group, situated in the Cherry Creek Mining District, County of White Pine, State of Nevada, and more particularly described as follows, to-wit:

Shoe String Extension, Recorded in Book 123, Page 312, Mining Locations Record;

East and West Fisher (also called East and West Fissure), recorded in Book 123, Page 311, Mining Locations Record;

West Shoe String, recorded in Book 123, Page 310, Mining Locations Record;

Nora, recorded in Book 134, Page 53, Mining Locations Record;

Happy, recorded in Book 128, Page 423, Mining Locations Record;

Nappy No. 1, recorded in Book 128, Page 423, Mining Locations Record;

Nora Extension, recorded in Book 134, Page 134, Mining Locations Record;

Sunnyside, recorded in Book 134, Page 133, Mining Locations Record;

Sunnyside No. 1, recorded in Book 134, Page 133, Mining Locations Record.

Together with all the dips, spurs and angles, and also all the metals, ores, rock and earth therein; and all rights, privileges and franchises thereto incident, appendant, and appurtenant, or therewith usually had and enjoyed; and also all and singular the tenements, hereditaments and appurtenances, thereto belonging or in any wise appertaining and the rents, issues and profits thereof.

AND WHEREAS, the party of the second part has agreed to pay as consideration for the said property the sum of Twenty-five Thousand ($25,000.00) Dollars, lawful money of the United States of America, no part of which sum has been paid, except the sum of Two Thousand Five Hundred ($2,500.00) Dollars down, the receipt of which is hereby acknowledged.

NOW, THEREFORE, the purchase price of said mining claims is Twenty-five Thousand ($25,000.00) Dollars, lawful money of the United States of America, said purchase price is to be paid by royalties, except as herein otherwise provided, and said royalties to be calculated in the manner as hereinafter set forth. Said royalties shall be determined as follows, to-wit:

Royalties in the amount of ten percent (10%) of the net smelter or mill returns. All royalty payments to be applied on and in reduction of the purchase price herein provided; said royalty payments to be paid through the First National Bank of Ely at Ely, Nevada, as hereinafter provided for.

Said party of the second part agrees to pay to the said party of the first part a sum of not less than Two Hundred Fifty ($250.00) Dollars per month, which said sum of Two Hundred Fifty ($250.00) Dollars per month may be paid either through royalties in the amount of ten percent (10%) of the net smelter or mill returns, by direct money payments, or both, provided that until such time as the purchase price is paid in full the said party of the second part will pay to the said party of the first part, monthly, a sum of not less than Two Hundred Fifty ($250.00) Dollars, provided further, however, that all payments made hereunder, whether by royalties or otherwise, shall be applied upon and in reduction of the said purchase price.

It is mutually covenanted and agreed by and between the parties hereto, that the said party of the second part and his assigns shall have the right of and be entitled to the possession of all of the said

mining claims above-named and described from the date hereof and during the life of this agreement.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That a Mining Grant, Bargain and Sale Deed to the said mining claims shall be placed in Escrow with the First National Bank of Ely, at Ely, Nevada, to remain there until the said party of the second part shall have paid all of the said installments herein provided, by paying or causing to be paid all royalties and/or minimum payments hereunder required to the credit of the party of the second part, and fulfilling all the obligations of this agreement upon his part.

If the party of the second part shall fully pay and discharge said balance of the purchase price by paying or causing to be paid all royalties and/or minimum payments hereinabove required, and fulfill all the obligations of this Agreement upon his part the said Bank shall thereupon, and not otherwise, deliver the said Deed to the party of the second part.

That a Quitclaim Deed to the mining Claims shall be placed in Escrow with the First National Bank of Ely, at Ely, Nevada, by the party of the second part, conveying unto the said party of the first part all rights he may have in and to the said mining claims by means of this or any other contract of any nature whatsoever, and the Bank is instructed that in the event that the said party of the second part fails to make payments above-mentioned at the times or in the manner herein provided for, said Bank shall deliver to the said party of the first part, upon written demand by him the said Deed made and executed by the said party of the first part together with the Quitclaim Deed made and executed by the said party of the second part, and all copies of this or any other agreement made and entered into between the parties hereto.

TIME IS OF THE ESSENCE OF THIS AGREEMENT, and if the party of the second part, shall make default for a period of thirty (30) days in the payment of any installment when due, as herein provided, or in the fulfillment of any terms, covenants or conditions of this agreement upon

his part, the party of the first part may, at his option, declare this agreement void, thereupon demand and receive said Deed and Quitclaim Deed from said Bank; and thereupon the party of the second part agrees to promptly and peaceably surrender to the party of the first part, the possession of the above described premises, PROVIDED, however, that before the party of the first part shall default the party of the second part for breach of this Agreement, said party of the first part shall notify the party of the second part of said default by registered mail addressed to said party at 601 Eastman Building, Boise, Idaho, from which date said registered letter is received said party of the second part shall have thirty (30) days thereafter to make payment or correct the condition warranting default.

In case of such default and of such return of said Deeds, the party of the first part shall not be under any obligation to return any portion of the monies theretofore paid him by the said party of the second part, but the sum or sums so paid shall be deemed agreed as payment for the use and occupation of said premises, and as liquidated damages to be retained by the party of the first part for the breach of this agreement.

The provisions for a forfeiture of this agreement shall be deemed continuing ones, so that a waiver of the party of the first part of his right to enforce such forfeiture for one or more defaults shall not be construed to be a waiver of his right to enforce such forfeiture of any subsequent default.

In consideration of the premises, the said party of the second part hereby covenants and agrees as follows:

1. To pay, or cause to be paid, all royalties and/or minimum payments hereunder required to the credit of the said Second Party at the First National Bank of Ely, at Ely, Nevada.

2. To deliver to said First National Bank of Ely, at Ely, Nevada, true copies of all smelter or mill returns or receipts upon all ore shipped, which returns or receipts are to show the tonnage of said

ore shipped or milled.

3. To keep at Ely, Nevada, and/or the mine, a full, true and correct record of all ores mined and shipped and to permit said First Party, his agent or agents, to examine such record at reasonable times.

4. To cause all workmen employed and working in or upon the said above described mining claims to be fully insured under the Nevada Industrial Insurance Act, the Nevada Occupational Diseases Act, and all amendments thereto, and keep, during the life of this agreement, all such employees so insured.

5. That during the life of this agreement, they will not do any act or thing which would cause mechanic's or other liens to be placed upon said property or any part thereof, and said Second party further agrees to post and keep posted in a conspicuous place or places on said mining premises a notice in writing signed by said First Party, reading to the effect that work of development and mining the said premises, and the construction of improvements thereon, are being done wholly and solely at the expense of said Second Party, and that said First Party will not be responsible for any indebtedness for labor made or at all created by said Second Party; said Second Party further agrees to cause a duplicate original of said notice of non-responsibility to be recorded in the office of the County Recorder of White Pine County, and that said notice will be posted and recorded within the time provided for by law.

6. To permit the said First Party, his agent or agents, to inspect the said premises and the working thereon at reasonable times during the life of this agreement.

7. To well and sufficiently timber said mine at all points where proper and to perform all work upon said premises in a minerlike manner, keeping at all times the working drifts, shafts, tunnels, and other passages in working of said above described premises fairly clear of loose rocks and rubbish of all kinds.

It is mutually covenanted and agreed by and between the parties

hereto that all machinery, equipment and tools placed thereon by said Second Party may be removed by said Second Party within a reasonable time after the date of the expiration of this agreement, or if forfeiture in the event that it is forfeited prior to the completion of this Escrow Agreement, provided, however, that all such machinery, equipment or tools which are not so removed within a reasonable time period shall be left upon said premises for the benefit of said First Party.

It is further mutually covenanted and agreed by and between the parties hereto that the said Second Party will pay or cause to be paid all bullion taxes upon the net proceeds of said above described premises, which bullion taxes are levied by the State of Nevada, and/or the County of White Pine.

Said Second Party agrees to promptly pay any and all Social Security taxes levied by the United States Government or unemployment compensation taxes levied by the Unemployment Compensation Division of the State of Nevada, upon him as the employer and to permit no delinquencies to be created therein. Said Second Party further covenants and agrees to pay and all taxes levied by the State of Nevada, the County of White Pine, or any political subdivision of the State of Nevada against any and all improvements and equipment, mining machinery, or buildings or structures during the life of this agreement.

It is further mutually covenanted and agreed by and between the parties hereto that this agreement shall extend to and be enforceable against and binding upon the heirs, executors, administrators and assigns of the parties hereto.

The Party of the first part hereby consents to the party of the second part obtaining any Government Loan or assistance which the Second Party may deem necessary in furtherance of his mining operations.

The party of the second part hereby agrees to do all annual labor and assessment work on each and every claim and to fully protect the interests of the party of the first part in and to said claims.

It is further mutually agreed that the said Party of the Second Part may pay the entire purchase price or any balance thereof remaining at any time during the life hereof.

IN WITNESS WHEREOF, the parties have hereunto signed their names the day and year first above written.

Signed Frank Schafer
Party of the First Part.

Signed: G. P. Williams
Party of the Second Part.

STATE OF NEVADA)
: ss.
COUNTY OF WHITE PINE)

On this 18th day of July, 1951, personally appeared before me, a Notary Public in and for said County and State, FRANK SCHAFER, also known as FRANK SCHAEFER, known to me to be the person described in and who executed the foregoing instrument; who duly acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Signed: Nancy Miller
Notary Public

My Commission Expires: January 11, 1954.

STATE OF NEVADA)
: ss.
COUNTY OF WHITE PINE)

On this 18th day of July, 1951, personally appeared before me, a Notary Public in and for said County and State, G. P. WILLIAMS, known to me to be the person described in and who executed the foregoing instrument; who duly acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Signed: Nancy Miller
Notary Public

My Commission Expires: January 11, 1954.

AUTHORIZATION

I hereby delegate to D. E. Anderson, now acting as consulting mining engineer for Baltimore-Camas Mines, Inc., the authority to sign all forms and applications relative to mine loan requests on the SHAFER, HILLTOP , AND APEX*TUNGSTEN mining properties.

Such signature to be as follows:

By D. E. Anderson

for G. P. Williams , Pres.

BALTIMORE CAMAS MINES, INC.

G. P. Williams

G. P. Williams, Pres.

No date

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. dmea 2137-REVISED
Metal or Mineral
Date Received 2-4-52
Amount $
Participation (Government %)

Name and address of applicant

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

Date January 20, 1952

If you have already filed MF-100, give date filed Oct. 5, 1951, type of assistance requested Exploration loan

DMA Docket Number (if available) 2137

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Baltimore Camas Mines, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

January 20, 1952
(Date)

President
(Title)

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

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

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

1. (a) The real property involved in this project is the SCHAFER Mine consisting of the following unpatented lode mining claims: HAPPY; HAPPY No. 1; EAST & WEST FISHER; SOUTH SHOESTRING; WEST SHOESTRING. These claims, all adjoining, are located as follows: T. 24 N., R. 62 E., in the Cherry Creek Mining District of White Pine County, Nevada.

(b) Copy of purchase contract and transfer agreement was submitted previously and is on file under DMA Docket No. 2137.

(c) Exploration will be specifically on HAPPY and HAPPY No. 1 claims.

There are no loans or encumberances against the property and six (6) signed copies of Landlord's Subordination Agreement are on file under DMA Docket No. 2137.

2. (a) Tungsten (Scheelite)

(b) Complete engineering reports and maps were previously submitted and are on file under DMA Docket No. 2137. A short supplementary report and geologic plan and cross-section detailing new and proposed new development is included with this application.

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

3. (a) This company is presently driving a new heading (called the "Houston" Tunnel) as indicated on the attached map, this heading to be extended a distance of 340 feet on this company's own initiative, this distance having been calculated to place the drift face in the vicinity of the ore shoot already opened up on the SCHAFER vein in the upper level. From this new Houston Tunnel the following additional exploration is proposed:
(1) From stations on either side of the main haulage at 340 foot station core drill holes as follows; Due west, 65 feet, flat; N40 W, 90 feet, flat; N80E, 300 feet, flat; N41E, 210 feet, flat:
(2) Extend main Houston (lower level) drift 100 feet northward:
(3) Cross-cut 50 feet west from the 340 foot station to blue limestone contact: (4) Cross-cut 320 feet east from 425 foot station in main Houston haulage to cross-cut "Spud Patch" vein and all intermediate veins: (5) Drift 200 feet on "Spud Patch" vein in direction dictated by drilling and cross-cutting: (6) Carry out an additional 500 feet of core drilling from and to vantage points indicated by the foregoing exploration.

Extension of main drift to proceed simultaneously with core drilling, then west cross-cut will be driven while core drilling proceeds to east.

Total cost of project will be $27,424.16

(b) This project can be commenced immediately after approval and completed within three and one half months after that date.

4. See attached maps--Plan and Cross-section

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

5. 1--12 x 14 compressor building (wood)
   1--10 x 12 tool house and workshop (wood)
   1--10 x 12 slusher house (wood)
   1--40 ton mine ore bin at upper level

6. No additional major facilities required for this project.

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

7. (a) None

(b) 1340 ft. 16# rail @ 150.00/ton 402.00
670 ft. 3" air pipe @ 0.40/ft. 268.00
670 ft. 1" water pipe @ 0.20/ft. 134.00
670 ft. vent tube @ 1.00/ft. 670.00
Total $1474.00

(c)

Item	Unit cost	Monthly Rent	Total
1--315 cu. ft. I. R. compressor with 115 hp Buda Diesel power unit and 600 ft. air hose.	$9,000.00	150.00	$575.00
2--Lyners, G. D. & Cleveland with column and air bar @750	1500.00	25.00	87.50
1--Sullivan Mucker--3 mos.	2400.00	40.00	120.00
1--Chev. tank truck, 400 gal.	950.00	16.00	56.00
1--60 hp gas dragline slusher with cable and 2 buckets	900.00	15.00	52.50
1--4-wheel drive Dodge truck	600.00	10.00	35.00
1--1950 Chevrolet pickup	1500.00	25.00	87.50
Hoses, cars, shop equip.	900.00	15.00	52.50
Total rental or depreciation			$1,066.00

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

8. The following estimates of labor costs are based on actual cost of the drift now being driven by this company.

Headings will be driven on a two shift per day basis (25 days per month).

Day shift as follows:			
2 miners @ 13.80	27.60		
1 slusher operator @ 13.80	13.80		
1 rpr. and water haul man at 13.00	13.00		
1 foreman @ 14.00	14.00		
Total day shift labor		$68.40	
Night shift as follows:			
2 miners @ 13.80	27.60		
1 slusher operator @ 13.80	13.80		
1 foreman @ 14.00	14.00		
Total night shift labor		$55.40	2 shifts
Total labor cost both shifts			$123,80

Headings will advance at rate of 8 ft. per day with total of 670 ft. to be completed in 82 days or total project in 3½ months.

82 days @ 123.80/day	$10,151.60
Add 10% for comp., o.t., soc. Sec, etc.	1,015.16
Total labor cost for project	$11,166,76

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

5 X 7 drift.

9. Cost of expendable materials estimated as follows:

Item	Per foot cost		Total (670 ft.)
Powder	3.12	125 boxes - 10¢/box	
Caps	0.20	30 boxes	
Fuse	0.40	25,000 9 rolls 1000' @ ?	
Bits	0.25	22 bits/round 125 rounds	
Steel	0.50	X 500	
Fuel and lubricants	3.00	— 11 50 day 2 shifts	
Machinery upkeep & rpr.	0.75	- $375	
Misc.	0.50	- $250	
	8.72		$5,842.40

Engineering (part time) 3½ mos @ 250.00		~~875.00~~
Accounting, 3½ mos. @ 150.00/mo.		525.00
Assaying--50 samples @ 3.00		150.00
Core drilling (contract basis)		
1165 ft. @ 5.00/ft.	$5,825.00	
Cut two drill stations	500.00	
Total drilling		6,325.00
Total all items		$13,717.40

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

10. (a) $6,856.04 which represents 25% of the total cost and of which $1,066.00 will be paid by equipment rentals or depreciation.

(b) Yes

11. The foregoing project is designed to tap the scheelite ore bodies at upwards of 120 feet vertical depth below the present exposures and to thoroughly explore the favorable limestone bed in which the new heading is being driven. This company mined more than 250 units of WO3 from the upper level (a shallow adit) during November and the ore zone is shown to be continuing downward strongly from that level and projecting toward the favorable lime bed into which the exploration is now being directed.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMA-2137

Date received 10-9-51

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D.C.
OCT 9 3 08 PM '51 8 07 PM '52

Baltimore Comet Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

Name and address of applicant

Date Oct. 8, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following: Unknown
   (*a*) Linear feet of shafts. None
   (*b*) Linear feet of drifts and crosscuts. Shafer (formerly Happy)
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly). 0
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity. 250 3 open cuts No water
3. For each operation listed above supply the following: 250 Now producing 15 tons/day
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district. 40 miles N. of Ely, Nev.
   (*c*) Township, Section, Range. Cherry Creek
   (*d*) County, State. Ely, Nev. White Pine County, Nevada
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as: Property now operated by this company
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production ____
   If not in production or operation, estimated date when production will begin ____
6. Experience of operators: Production started Oct. 1, 1951
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: See attached sheet
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. See report.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

16—63792-2

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
G. P. Williamson, Ida.	Pres. (D)	6000	200,000	750,000	None	None	
C. E. Carver, [illegible] Canadian, Wal	Vice-Pres. (D)	—	150,000	350,000			
C. V. Stockton Caldwell, Ida.	(D)	—	400,000	400,000			
[illegible] McDonald, [illegible], Ida.	Sec-Treas.	4000	30,000	60,000			
[illegible] Bollaten, [illegible], Ida.	(D)	—	100,000	150,000			
[illegible] Taylor, [illegible], Ida.	(D)	—	300,000	300,000			
Clinton [illegible] Chatteller, Ida.	(D)	—	80,000	70,000			
Orville Joshua, [illegible], Ida	(D)	—		100,000			
	TOTAL	10,000	x x x x x	2,170,000		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 1,000,000	$ 680,000	$ 0.10	6,800,000	—
Preferred stock None	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	Approx. 500 tons tungsten ore mined and milled in 1948-49 at average				
2. Quantity of product processed (specify unit of measure and type of process)	1.05% WO3 recovered.				
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Expect to expand production to 500 tons/mo. with added development.

12. Ore or Mineral Reserves:

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

Scheelite as replacement and along fissures in quartz and calcitic limestone.

16—63792-1

Baltimore Comac Mines, Inc.
601 Sabeca Bldg.
Boise, Idaho

6. (a) Baltimore Comac Mines, Inc. has been actively operating in the Hailey, Idaho District for the past 10 years. C. P. Williams, President, has had 20 years experience in mining and milling operation.

(b) General superintendency of all operations is and will be handled by Loren Smith of Boise, Idaho. Mr. Smith has 20 years experience in mining and mine operation, including management of Texas-Cuyhee (Mayflower Mine) in the Boise Basin District, Idaho, Gateway Gold and Copper, Valley County, Idaho in 1947, and the Comac Mine at Hailey, Idaho in 1951.

A competent foreman will be employed to direct the labor and maintain adequate supplies for the project and engineering will be handled by S. L. Bida, B. S. (University of Idaho, 1939) and now employed by Baltimore Comac Mines, Inc. Additional engineering will be enlisted from competent consulting engineers as the need arises.

Metallurgical problems are in the charge of Mr. Murphy of Hailey, Idaho a recognized metallurgist of many years experience.

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

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

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

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	500	1%	$3.00	0.85	20.0
Indicated (probable)	6000	0.8%	$2.40	0.68	16.00

(*c*) If placer: Not applicable

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

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

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

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

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

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

13. Access Roads: 60 miles to shipping and supply. 6 miles to residence. last 6 dirt

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

14. Water Supply: Water must be hauled 6 miles by tank truck

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

15. Power: Diesel power used.

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

16. Labor: 1 foreman, 6 miners, 2 outside men.

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

17. Equipment and Facilities: Compressor house, workshop, ore bin (30 ton), 315 diesel comp., ore drifters, jackhammers, stopers, slusher, 4 cars—good cond.

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

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

Mining will continue on upper levels. Intermediate levels are being explored.

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

Baltimore Gulch Mines, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

October 6, 1961
(Date)

for G. P. Williams, Pres.
(Title)

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

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

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C. 8 7 PM '52 FEB

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

Not To Be Filled in by Applicant

Docket No. dma 21 39
Metal or Mineral
Date Received 10-9-51
Amount $
Participation (Government %)

Baltimore Camas Mines, Inc.
601 Eastman Building
Boise
Idaho

Name and address of applicant

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C. OCT 9 3 08 PM '51

Date October 5, 1951

If you have already filed MF-100, give date filed Oct. 5, 1951, type of assistance requested Exploration Loan,

DMA Docket Number (if available)

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Baltimore Camas Mines, Inc.
(Name of company)

By O. E. Anderson
(Signature of authorized official)

for G. P. Williams, Pres.
(Title)

October 5, 1951
(Date)

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

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

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

1. (a) The property entailed in this exploration is the SHAFER Mine consisting of seven unpatentend lode mining claims in the Cherry Creek Mining District of White Pine County, Nevada. Specific locations are T24N R63E and the area lies 40 miles north of Ely, Nevada and 5 miles west of the town of Cherry Creek, Nevada. Claim names are SUNNYSIDE, SUNNYSIDE NO.L, EAST AND WEST FISHER, HAPPY, HAPPY NO. 1, WEST SHOESTRING, and SOUTH SHOESTRING.

(b) Copy of purchase contract to be submitted.

(c) The exploration entailed in this application will be specifically on the HAPPY and HAPPY No. 1 claims.

There are no loans or encumberances against the property and purchase contract specifies that a Government Loan agreement may be entered into.

2. (a) Tungsten

(b) Complete engineering report and maps are submitted with this application (Report and maps need not be returned)

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

3. (a) The project will first entail the drilling of two-one hundred foot core drill holes from an underground location near the face of the present working drift to determine more fully the eastward and downward extent of the ore body now being worked. Then a 400 foot crosscut will be driven from a point on the west slope of the ridge (see claim map to intersect the presently exposed ore body at a 100 foot greater depth. Four hundred feet of drift will be driven along the ore zone from this lower level cross-cut.

In addition the drift already started on the Spud Patch vein will be continued 100 feet northward along the strike of this vein to explore the ore shoot indicated on the surface.

Total cost of this project will be $31, 313.00

(b) This project can be started within one week after approval and completed within ten months after that date.

4. Maps attached

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

5. 1--12x14 compressor house (wood)
   1--10x 12 tool house and work shop (wood)

   Both buildings recently constructed.

6. No additional major facilities required for this project.

7. (a) None

(b)900 feet of 3" air pipe	(used)	$500.00
1800 feet of 16# rail	(used)	500.00

(c)	Unit cost	Rental
1--315 cu. ft. compressorwith 115 hp Budda diesel power unit (stat.) and receiver	9,000.00	1500.00
2--Lyners, Gardner D. and Cleveland	700.00	116.60
1--Sullivan mucking machine	2400.00	400.00
3--mine cars	450.00	75.00
1--Tank truck	950.00	158.40
1--4 wheel drive Dodge truck	1000.00	166.60
Hoses, shope equipment, etc.	500.00	83.40
Total rental or depreciation		$2500.00

Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

8. Before entering a statement of labor costs it may be well to state that as much as possible of this program will be handled on a contract basis since past and recent experience in the area has shown that both from a standpoint of sppeed and efficiency the contract basis is more satisfactory and economical.

A maximum of $15.00 per foot for all drifts and crosscuts is allowed as labor cost.

Drifts and cross-cuts will be 5 x& 7 with little or no timber required.

900 feet of x-cut and drifts @15.00/ft. 14. $13,500.00

Spud Patch drift & main x-cut will be driven on a two shift basis requiring 4 miners @13.00/shift.

Main drift from x-cut will entail two headings to be driven simultaneously and requiring 4 miners on a single shift basis also @13.00/shift

At 25 shifts per man per month--labor cost	4 men	1300.00
Add 10% comp., etc.		130.00
Total per month		1430.00

Average rate of advance will be 95 feet per month

1--General Supt. @500.00/mo.
1--Foreman @15.00/day
1--Engineer @500.00/mo.
1--Project accountant @250.00/mo.
(Note: Superintendent, engineer, and accountant will serve three projects, hence only 1/3 of this cost is charged to this project.

Total supervisory, engineering, and accounting at 1/3 above rates $8,063.00

Baltimore Camas Mines, Inc
601 Eastman Bldg.
Boise, Idaho

9.ØØ Material and supplies, including explosives, steel, bits, fuel, hand tools, machinery upkeep and repair, and timber have been computed on a basis of $7.50 per foot against all cross-cuts and drifts.

The breakdown of this figure is as follows:

Explosives/ft.	4.15
Bits	1.15
Steel	0.25
Fuel	1.10
Incidental	0.85
	7.50

900 feet @ 7.50/ft. $6,750.00

200 feet of core drilling (to be contracted) $1,750.00
(Note core drilling at 5.00/ft., casing @ 2.50/ft. and $250.00 in and out)
Air will be furnished by company but since Spud Patch drift is to be driven simultaneously no cost has been added.

10. (a) $8,390.75 which is 25% of the total cost and of which $2500.00 will be met through equipment rental or depreciation.

(b) Yes

11. It should be pointed out that this project is pointed to the exporation of the downward extension of ore bodies which have already provided and are still providing tungsten ore production on the higher levels. At present, The Baltimore Camas Mines, Inc. is mining ten to fifteen tons of ore daily from the upper level of the main vein.

ENGINEERING

REPORT

on

SCHAEFFER PROPERTY

for

BALTIMORE CAMAS MINES, INC.

by

D. E. Anderson

&

S. L. Bida

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(Mr. Schaeffer usually spells his name Schafer)

MINE

The SCHAEFFER MINE consists of seven unpatented lode mining claims known as the HAPPY GROUP, in the Cherry Creek Mining District of White Pine County, Nevada. Claims have been named as follows: HAPPY; HAPPY NO. 1; SUNNYSIDE; SUNNYSIDE NO. 1; SOUTH SHOESTRING; WEST SHOESTRING; and EAST AND WEST FISHER.

Claim records are on file in the White Pine County Recorder's Office at Ely, Nevada and are located in the name of Frank Schaeffer of Cherry Creek, Nevada.

The property has recently been transferred to the Baltimore-Camas Mines, Inc. of Boise, Idaho, under a purchase agreement, and this organization, under the direction of G. P. Williams, will commence immediate operation of the newly acquired group.

LOCATION

The SCHAEFFER MINE is located in the Cherry Creek Mining District of White Pine County, Nevada and is five miles, by road, northwest of the town of Cherry Creek.

The Cherry Creek District is active with at least two mines consistently producing and several others in exploratory and development stages. Tungsten is the principal metal sought and produced at present, but substantial gold and silver production has been attained in the past.

HISTORY

The earliest recorded location in the district was in 1872, and several gold and silver mining operations were carried on in the District prior to 1916.

The first recorded operation on the SCHAEFFER group was in 1917-18, when the U. S. Smelting Co. conducted some exploratory work. Whether or not they brought the property into production is not known. The present owner, Frank Schaeffer, located the claims in 1922 and since has carried out exploration and high-grade mining operations on a small scale. All his work has been done without aid of mechanized equipment and silver was his chief objective although the tungsten has also been opened up primarily through his efforts.

The only important mining operation so far conducted on the HAPPY GROUP was while the claims were under lease to the Cherry Creek Mining Co., from September, 1947 to September, 1950. Mining was commenced

late in 1948 and continued until September, 1949, during which the present stoped area was mined. This lease arrangement was terminated when a dispute occured between mine owner and leasers. An interesting and unusual disclosure from inquiry of Mr. Boundy of the Cherry Creek Co. during our recent investigation, was that they considered the property to be a good one and would have continued operation had the aforementioned dispute not arisen. Final release on the lease contract was obtained in September, 1950, and this spring he placed the property for sale. In recent months numerous prospective operators have examined and sought to close a deal on the property. All engineers and operators who have seen the property, including Mr. Pothier of the Simplot Co. and Mr. Boundy of Cherry Creek Mining Co., are universally agreed that the property is highly promising,and numerous deals, several of them involving substantial cash payments, have been offered Mr. Schaeffer.

ECONOMIC ASPECTS

Before entering a technical description of the specific geologic, mineralogic, and metallurgical conditions peculiar to the HAPPY GROUP, it might be well to briefly discuss the general economic features of the enterprize. This is done in order to point out why such a property may be expected to assume increased economic importance and the detailed technical phases will then be introduced to show how and why the property measures up to these economic standards.

Certain fundamental principals must be adherred to in the search for mining property upon which to carry out an operation, if a reasonable assurance of success is to be attained. The prospective operator is primarily concerned with the questions (1) Does the property contain ore in commercial quantities? (2) Does the property offer sufficient possibility of a long range, productive operation to justify the initial expenditure necessary to bring it into that producing stage? (3) Is the metal sought for in keeping with current market demands and can it be expected to remain so over a reasonable period of time? (4) Can the contained metal be economically processed into a readily marketable product which can be converted into the cash necessary to operate at a profit?

With these fundamentals in mind the mine operator dispatches his engineers and geologists to examine and test properties for the purpose of finding just what those reported to be most promising have to offer. The responsibility of these engineers is to apply all available geologic and practical mining knowledge to the problem of determining not only what is presently in sight and available, but further and most important, to determine just what chance exists to develop any more extensive and presently uncovered ore bodies. Consequently, most mining properties and prospects fail to meet some or all of the standards set

forth and must be immediately rejected; others fall into a doubtful class and certain exploratory work must be carried out before they can be definitely catalogued. Only rarely does a property measure up to the requirements and can be labeled ready for operation with reasonable assurance it will realize a profit to the operator.

Application of these selective standards to the SCHAEFFER MINE brings to light the following observations; First, the property does at present contain exposed ore in commercial quantity (this deduction based on the fact that previous operators developed, mined, and milled ore at a profit and a comparable volume of equally good ore remains immediately available with the price of tungsten now three times what the 1949 operators received). Secondly, geologic and structural features have been carefully checked and give every indication that there is no valid reason to assume that the ore bodies should be limited to present exposed horizons but rather indicate that deeper, more extensive development should expose a much greater ore potential. Specific reasons for this assumption will be introduced in the forthcoming discussion of geology and ore reserves. Third, tungsten, which represents the chief metal yet found on the property, rates among the most sought for metals on today's markets. The price ($63.00, per 20 lb. unit of contained tungsten trioxide) is well in keeping with today's inflationary scale and has been guaranteed by government decree to maintain over a five year period or until the necessary unit quota has been filled. Fourth, an investigation of the metallurgical processing necessary to convert the scheelite bearing ore into a marketable concentrate shows that the problem has been and is being handled effectively. The ore is singularly free of impurities and a tour of the Cherry Creek Mill, where similar ore is now being treated and where the ore from the SCHAEFFER MINE was formerly treated, reveals that an exceptionally good recovery (85%) is being made and further that the concentrate, averaging around 65% in grade, is one of the most desirable produced in any known mining district.

Thus has the SCHAEFFER property been subjected to the requirements of a desirable mining venture and thereby has a promising economic outlook.

GEOLOGY & MINERALIZATION

The rocks of the region are the bedded limestones, dolomites, quartzites, slates, and argillites of Cambrian and later age as well as the monzonitic granites and gneisses of Jurassic (?) age which underlie the older sedimentary and metamorphic formations. The granites are exposed only in those areas where erosion has taken its greatest toll and in most cases are overlain by several hundred and in some places thousands of feet of the older formations.

For additional detail of regional geology, refer to Bulletin 648 by James Hill. This public [illegible] in Idaho.

The ore deposits [illegible] occur in the [illegible] and quartzite, quartzite and limestone, and in fissures which cut the tilted limestone beds. Series of bedding plane veins are also observed to occur in the Schaeffer property, [illegible] by quartzite, no inverse alteration in the area where they were cut by the flatter cross-fissures. These bedding plane fissures are pre-mineral and appear to have no relation to the source of the solutions, but do tend to localize the ore shoots near and at the intersections.

The general strike of the bedding on the [illegible] MINE is about N 10° W with a dip of 40° to 60° to the E. This corresponds closely with regional structure as disclosed in earlier reports.

An investigation of the exposed sections of granite in Logan Canyon, four miles to the south, revealed disseminations of scheelite and molibdenite in the granitic rock itself as well as in quartz fissures in the granite. While these tungsten showings were not in themselves commercially important, they do illustrate one vital factor, that is, the source rock (the granitic stock) was uncommonly rich in tungsten content, hence the overlying rocks which served as host rock to the ore minerals which separated out of the magma have a good chance of containing sizeable concentrations of such metal at spots where the chemical and structural conditions are favorable.

The ore deposits exposed on the Schaeffer property occur in comparatively flat fissures in banded limestone and the scheelite is found primarily in quartz and calcite and to a lesser extent in sections of the lime wallrock itself. The large nodules, locally termed "spuds," of high grade scheelite, appear to favor the calcite sections, while the quartz and lime appear to have more of a banded scheelite occurence.

Ore minerals noted were tungsten, silver (mostly in the chloride form), antimony, and lead. Tungsten, at least on the Schaeffer property, is the most abundant mineral, appears to have been the last deposited, and has shown little or no tendency to intermingle with the other ore minerals. Gangue minerals, as previously stated, are quartz, calcite, and limestone. The scheelite is said to have been a high temperature,* high pressure deposition and in some distance from the true confines of the fissure along which it traveled.

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* While tungsten deposition is quite universally accepted to be the

high temperature type, there is some evidence in such deposits as this that deposition may have rather been low temperature, low pressure (Epithermal) in type. This is indicated by the fact that a mineral segregation has been effected and further that much of the deposition occurs in calcite, both of which conditions point to lower temperatures than are normally calculated. This observation should be borne in mind, since it may eventually lead to some revision of the presently accepted theory.

It appears that nowhere in the district has a thorough analysis of ore genesis and complete correlation of mineral deposition with formation and structure been made, but it may be expected that with accelerated activity the true pattern will be evolved and subsequent developments can then be directed with added confidence and less initial probing.

ORE DEPOSITS AND ESTIMATED RESERVES

Since the property has been subjected to only a relatively small amount of development work, and that comprizing only a few hundred feet of drifts, and only one of these on the tungsten veins, no exact estimates of contained ore can yet be arrived at. However, one commercial ore shoot has been partially developed and partly mined from a shallow adit and at least one more promising ore shoot is indicated by surface cuts. The ore body now exposed in the main drift and stope has been opened up over a length of some seventy feet and at a depth of thirty feet below surface and shows an average width of good grade ore of close to three feet. Some sections in excess of ten feet in width have been mined but these sections represent zones where the mineralizing solutions have penetrated deeply into the limestone hanging wall and are continuous over only short distances. Good ore still remains in the north face of the stope and surface cuts show the shoot to extend at least another fifty feet beyond the present drift face, thus giving an overall length of 120 feet and possibly considerably more, since the surface has not been opened up by open cuts beyond the point mentioned.

The bottom of the mined section, near drift level, has been cut off by a minor slip but displacement appears to have been no more than six or eight feet and the lower section of the vein overlapped by the fault movement is exposed in the east wall of the drift and in the vein section thus exposed, the ore values appear to be continuing. Thus there is every reason to believe that in addition to the ore readily accessible above the main drift level, substantial tonnage can be expected in the downward continuation of the same ore shoot. We have previously estimated the tonnage immediatly available above the present main drift to be about equal

to that previously mined and this figure has been placed in the neighborhood of 600 tons. Estimates of what can be mined from the northward and downward continuation of this same ore shoot are to remain nebulous until such time as development allows for actual measurment of the length, depth and width of these undeveloped sections, but it can definitely be stated that the ore is continuing strongly both along strike and dip and may be expected to provide attractive stoping ground for some time. The as yet undeveloped ore shoot indicated by out-crops on the Spud Patch vein lies in a wide, highly altered zone and no estimate of its magnitude has been attempted. However, present observations show the ore to be predominatly of the high grade "spud" type and a short but reasonably wide ore shoot may be predicted in this section. A couple of other so far minor showings of scheelite in the area between the main and Spud Patch veins were noted as well as an outcrop on the South Shoestring, but insufficient exploration has been conducted on these spots to make any prediction of the importance or magnitude of these croppings.

It is felt that completion of development of ore shoots now exposed will allow a much more accurate picture of what overall potentialities the property has for sustained production, since, as previously stated, the host rocks in which the exposed ore shoots are encountered, do extend, from surface observation, several hundred feet, and additional ore bodies comparable in size and grade with these now in evidence can be expected along the strike and dip of the fissures which cut these beds.

As regards tenor of ore on the property, it has been previously stated that by averaging all figures quoted by both mine owner and previous leaser the ore that was mined must have averaged in excess of two percent. A dozen samples were cut during the course of our recent examination and sent to Black and Deason in Salt Lake City for assay. The results of this sampling are appended, and a few words of explanation are now offered to illustrate what these assays represent. Several samples were cut from the ore faces ready for mining in the stope. These samples represent a mining width of slightly less than three feet and gave an overall average of 1.53%. It might be well to repeat here that the average grade of all ore handled is considerably enhanced by the presence of "spuds" of high grade ore which run as high as fifty percent in grade and such "spuds" were not included in our sampling for the obvious reason that only in a bulk sample of several tons could a true criteria of these high grade chunks be shown. Other samples taken from slightly mineralized sections of the footwall and a wide lean area beyond the south end of the stope showed little value and were not included in the general average, since they do not represent ore to be mined but rather serve to add information as to extent of penetration away from the main channel of mineralization. Also a sample was taken from a known highgrade section

along the stope back. This sample ran in excess of 8% and was also discarded from the general average since it was taken for informative purposes only and was not considered to represent any minable volume. Thus the ore can be expected to fall into a reasonably high grade bracket (around $100.00 per ton) and to exist in minable widths which will not necessitate handling large amounts of waste rock.

TOPOGRAPHY

The region is one of broad, high valleys bounded by rounded mountain ranges which have more recently been dissected by sharper canyons formed by later erosion channels. Only the more resistant argillites and quartzites have maintained an angular topographic attitude and the area as a whole represents an old age erosion surface.

CLIMATE, ALTITUDE & ACCESSIBILITY

The climate may be termed moderate and will readily allow year around mining operations although snow and cold weather may be expected during winter months. Mid-February to mid-April is said to be the time when most weather hazards are to be encountered but roads can be kept passable by occasional plowing.

Average altitude of the region is 6200 feet while the SCHEMPER property ranges from 6500 to 7000 feet in elevation.

The property is accessible by five miles of unimproved country road from the town of Cherry Creek and Cherry Creek itself is reached from the Wells-Ely highway by traveling 12 miles in a northwesterly direction from the Schellbourne station over a good country road. The railroad passes within one mile of Cherry Creek and a siding for loading ore and concentrates has been built five miles south of Cherry Creek, thus placing the siding 10 miles distant from the SCHEMPER MINE.

TIMBER, WATER & POWER

No timber is available on or near the property and must be procured elsewhere. Sawed timber may be purchased at Ely, Nevada, some 40 miles to the south, but present timber needs, which will not be excessive, can be most economically filled by hauling from Idaho during the initial stages while machinery is being transported from Wiley.

Neither is water to be found on the property and must be hauled from Cherry Creek to handle the requirements of mine operation. For this purpose tanks must be procured to transport and store the required amount of water. The valley floor below Cherry Creek is underlain by water strata into which wells are drilled to provide local supply and it is understood that a mill

site location in this area is allowable and that well drilling would provide sufficient water to operate a mill if the need arises.

The nearest public utility power source is Ely, Nevada, and thus the power requirements of the SCHAEFFER MINE can be most economically filled through the media of diesel-electric or diesel engines.

MACHINERY AND BUILDINGS

No machinery is at present on the property but initial operations can be adequately supplied from the machinery inventory of the Baltimore Camas Company. This machinery is located at Bailey, Idaho, and arrangements are already underway to immediately transport and install the required equipment. Probably the only immediate machinery not on hand from the Bailey stock is the necessary water tanks and these can be procured second hand at a moderate cost.

No buildings are on the property and it will be necessary to construct at least one enclosure to serve as a compressor house and work shop. A small wooden ore bin of twenty or thirty ton capacity will also become immediately necessary. As regards housing for personnel, the town of Cherry Creek has sufficient vacant buildings to adequately care for such needs and a livable house to serve as crew's quarters has already been rented by the company.

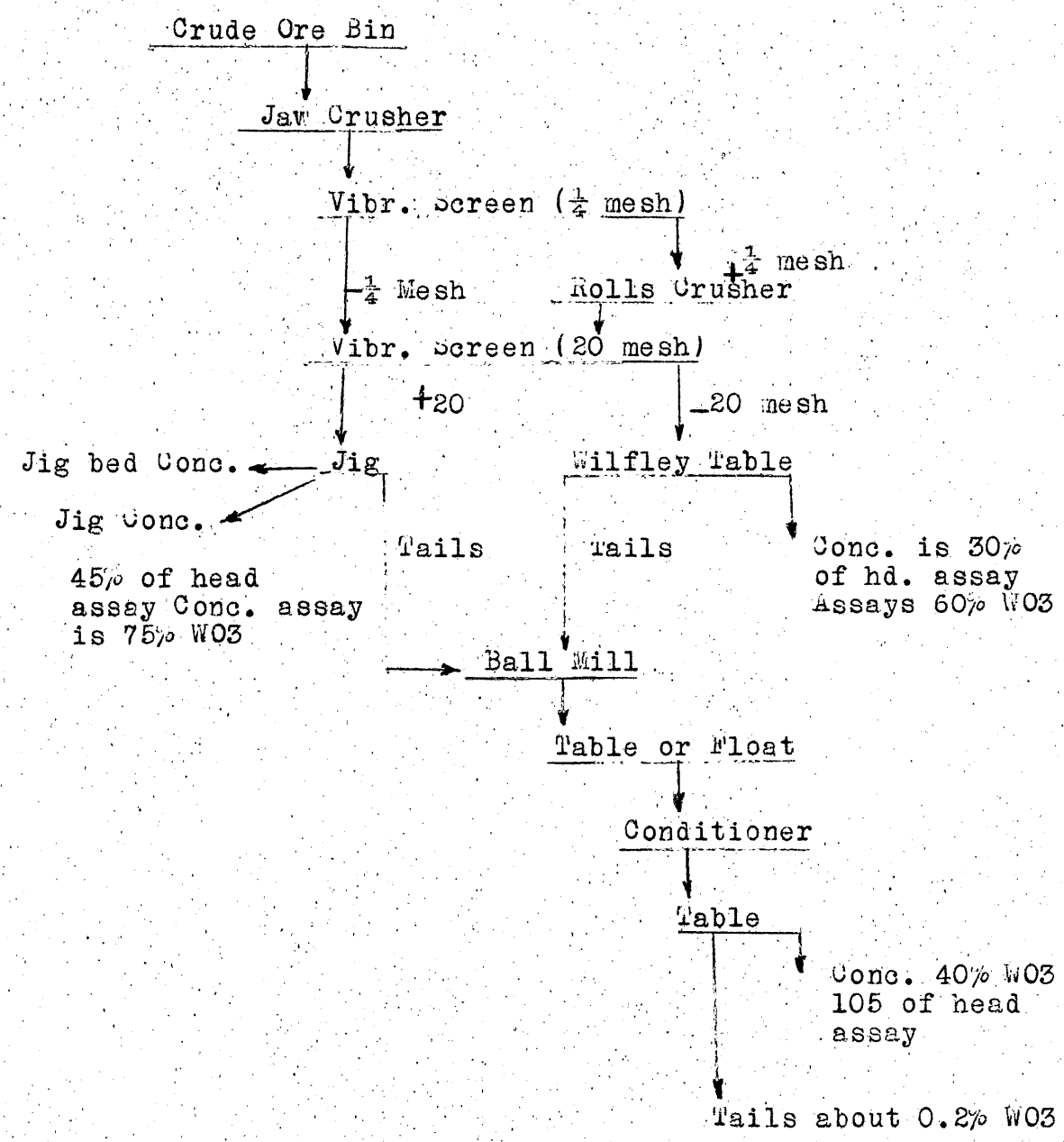
METALLURGY

No metallurgical research or laboratory work on the ore from the SCHAEFFER MINE was attempted in the course of the recent examination, but sufficient inquiry and observation was entailed concerning just what can be and is being done with similar ore to gain assurance that no complicated metallurgical problems are involved.

The ore itself represents one of the cleanest tungsten bearing ores available for treatment anywhere, with the result that the processing is much simplified from the usual tungsten concentrating operation and further, a highly desirable, readily marketable product is the result of this processing.

Several hundred tons of ore from the SCHAEFFER MINE were milled by the Cherry Creek Mining and Milling Company at their present plant. This same company is at present mining and milling ore of a similar character from their own TEACUP MINE and we were

invited by Mr. Boundy, one of the owners, to visit his plant and discuss the operation. A careful scrutiny of the plant set-up as well as Mr. Boundy's most cooperative explanations revealed that the ore thus treated was concentrated into a completely acceptable high grade concentrate (around 65% tungsten trioxide,) an unusually high percentage of recovery (85%) for tungsten is realized and no unduly expensive or complicated mill equipment is required to accomplish these results. A simplified flow sheet of this plant showing the fundamental processes involved and the results achieved is submitted to illustrate just what is being accomplished.



Overall recovery is approximately 85% of head assay.

Fig. 1

Cherry Creek Mill Flow Sheet

If, as contemplated, the ore is treated at the new Camas mill, no undue difficulty is anticipated in achieving equally good or better results than in the plant just outlined, since Mr. Murphy is a recognized and competent metallurgist and the plant boasts the most modern and efficient equipment. Some rearrangement of the present flow sheet will be required with additional gravity concentration units to be interposed into the circuit now set up for gold ore treatment.

The obvious reason why the ore can be treated with such comparative ease is that the ore itself is singularly free from objectionable metal impurities, Most tungsten ores are found associated with other mineral impurities which must be eliminated to avoid incurrence of penalties and each such elimation also carries away a part of the tungsten itself. Thus, as in this case, where little metallic impurity exist, about the only problem involved is the separation of the tungsten ore mineral from a non-metallic gangue and a consequent minimum loss can be expected.

CONCLUSIONS AND RECOMMENDATIONS

A careful study of all the facts relating to the SCHAEFFER property as previously detailed, leads to the following conclusions: (1) The property is definitely one of the most promising that can be hoped for in this day when mining properties are subjected to the most careful scrutiny by men thoroughly acquainted with the problems of mining and geology (2) Sufficient ore of proven grade and recoverability is immediately available to reduce the initial hazard to a minimum as far as mining ventures are concerned. (3) Geologic and economic factors definitely point to better than average chance for a sustained and profitable operation on the property which is the paramount issue in entering into any mining venture. (4) Regional geologic and geographical features render it advisable to conduct investigations on other mines and prospects in the district in order that additional property of potential value may be brought to light. (5) Careful correlation of all development and exploration is advocated to enable operators to avoid, as much as possible, dead development, since here as in all important mining districts faulting is common and all such tungsten deposits can be expected to have a somewhat erratic occurence. However, if this fact is fully recognized and treated with according caution and foresight by the engineers and geologists who advise the exploration and development, no undue difficulty should be anticipated from this problem.

The foregoing statements are made with full knowledge that the SCHAEFFER Property is, or rather has been, one of

the most sought for properties encountered in recent months and as such might very reasonably be assumed to be overrated. However, after a comprehensive "on the ground" check-up of all observable features and pointed inquiry of all available people including engineers and prospective and past operators of the property, we have been able to uncover no tangible evidence why this property should not be regarded as an important potential producer of tungsten. Certainly the presence of the high-grade "spuds" of scheelite, when observed visually, may tend to instill over-optimism, but when considered from the more practical standpoint of mining widths, the grade still remains far above the average and on such a basis must the final ovaluation be placed.

While no exact estimates of ore reserves can be made at this time, and it should be remembered that exact figures can be placed on any property only after extensive development or even final mining operations, it must be pointed out that such pods or shoots of ore as are now exposed can reasonably be expected to occur periodically as far as the same formation persists, and that can visually be observed to extend several hundred feet at least. No doubt as deeper development proceeds, faulting problems will be encountered, but these offsets can be recognized and careful geologic plotting can be utilized to avoid directional mistakes which are often costly to mining operations.

No appreciable metallurgical problems are foreseen on the ore in sight and to be expected and the past experience of operators on the same and similar ore in this district proves that a product of premium quality can be produced and that no undue difficulties should be anticipated in this process.

As regards general physical aspects of the property, timber and water are not available on the property but can be procured from outside sources without undue financial hardship. This is true of most properties of the region. Climatic conditions are such as to allow year around operation without much expense for winterizing. Labor problems are no more difficult here than in other mining camps of the area and since the present company has a nucleus of key men for the operation, a crew can be maintained from local sources such as Ely and Wells, Nevada.

It is recommended that operations be commenced immediately on the SCHAEFFER PROPERTY and that the work proceed along the following lines:

Since Mr. Smith, Baltimore Camas Superintendent, has already visited the property and made tentative estimate of equipment requirements, that phase of setting up can safely be assumed to be in capable hands. Baltimore Camas has already in possession sufficient mining equipment such as compressors, pneumatic hammers,

cars, track, and accessory tools with the possible exeeption of tanks in which to transport and store water to launch the operation without delay from that source.

While the equipment is being transferred from Hailey, Idaho, to Cherry Creek, it would be wise to gather up a ton or so of the already mixed ore which is scattered over the property and truck it to the Camas mill at Hailey so that Mr. Murphy, company metallurgist, can conduct the necessary mill tests and rearrange his mill set-up as necessary.

It will be necessary to construct a small wooden ore bin at the main level to store truck load lots of ore. Probably 20 to 30 ton storage capacity will be sufficient to care for the immediate needs. The only other structure required will be a combination compressor shed and work-shop also at the main adit level.

As soon as the equipment is set up and track laid in the present tunnel, mining operations can be commenced in the partly mined stope where a sizeable block of ore remains in the open south end and in the north back. A goodly portion of this ore can be dropped down the already existing south-west raise and sorted under a lamp when drawn from the chute at the bottom of this raise. It will be essential wherever possible to hand sort this ore under a mineralite and thus eliminate a great proportion of the waste rock that is certain to become mixed with the ore in blasting.

Simultaneously, the main drift heading should be extended northward along the strike of the vein and ore shoot to open up as expeditiously as possible the remainder of the ore in that direction and thus allow an additional stoping operation. Good ore is in evidence all up and down this north face and [illegible] indicate the ore body will continue at least [illegible] feet farther in that direction. As soon as this [illegible] [illegible] the next lower level.

The next development to consider as soon as operational conditions permit will be exploration and development of the ore shoot indicated on the surface outcrop of the [illegible] Vein. Surface indications just down the hill from the present "[illegible]"

strongly indicates that another important ore body may exist there and a drift driven along the strike of this vein from a point just below this outcrop would enter this indicated ore shoot within a few feet. Another outcrop across the creek on the South Shoestring Claim should be explored a little more thoroughly, at least with a deeper surface cut, but for the most part present development should be confined to the area where the major workings are in evidence. Periodic geologic observation and mapping as the foregoing operations proceed will be required to determine the most judicious course to follow in directing development of additional and deeper ore bodies.

Respectfully,

H. E. Anderson

H. E. Anderson, E.M.

L. L. Bida

L. L. Bida, E.M.

TABULATED ASSAY VALUES

No.	Description	% Tungsten Trioxide	Value
1-H	Blast hole check sample on downward extension of ore shoot-Main drift 15' back from face.	0.55	$ 34.65
2-H	32" across face of stope at north end 10' above main drift floor	0.55	$ 34.65
3-H	24" sample from stope face 17' above floor of main drift.	2.90	$182.70
4-H	34" sample from top north face of stope above main drift.	0.88	$ 55.44
5-H	12" sample from footwall ten feet back from north face near top of stope.	0.02	$ 1.26
6-H	30" sample from stope back above 5-H	1.85	$116.55
7-H	30" from pillar near top center of south stope	3.60	$226.80
8-H	46" near footwall at south face of last bench--stope open to surface above here	0.06	$ 3.78
9-H	36" center section next to 8-H	0.40	$ 25.20
10-H	120" sample across open cut at south end of mined area	0.08	$ 5.04
11-H	12" sample adross north face and brov of surface stope	8.00	$504.00
12-H	Grab sample from waste dump	0.04	$ 2.52

Note: All samples assayed by Black and Deason, Assayer and Chemists. Salt Lake City, Utah. Values calculated are based on the present market quotation of $63.00 per 20 pound unit of contained tungsten trioxide.

APPENDIX 1

DMA
2137

MF-164
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.
SF-DMCA-8
8/20/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No.
Idm-E 281

Name of Operator Baltimore Camas Mines, Inc.
Docket No. DMA DMA - 2137X
Total Contract Amount $ 20, 280.00
Government Participation: 75 % Amount, $ 15,210.00
Distribution of Expenditures for Month of June-1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 26 1952

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

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

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

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

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

CERTIFICATION

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

Baltimore Camas Mines, Inc. (Name of Company)

By Laurent Smith (Signature of Authorized Official)

July 8, 1952 (Date)

Superintendent (Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(a) Facilities	none	none	none			
(b) Buildings	none	none	none			
(c) Fixtures	none	none	none			
2. Operating Equipment:						
(a) Purchased[1]	none	none	none			
Depreciation: 315-cfm-diesel	75.00	75.00	150.00			
Tank truck-1/2 mo.	8.00	8.00	16.00			
Dodge truck-1/2 mo.	5.00	5.00	10.00			
Chev. pickup- "	12.50	12.50	25.00			
Shop equipt. "	7.50	7.50	15.00			
(c) Furnished by operator						
xxxxxxxxxxxxxxxx TOTAL						
3. Rehabilitation and Repairs:						
(a) Facilities none	none	none	none			
(b) Buildings none	none	none	none			
(c) Installations						
Compressor and truck repair- labor	47.25	45.50	92.75			

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3] (fuel etc. (to water hauling	216.00	130.00	346.00			
5. Supervision	151.25	151.25	302.50			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other fuel & lub.	123.52	62.87	186.39			
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work (Core drilling)	2240.00	1250.00	3490.00			
11. Other (specify)						
Assay		None (No commercial ore encountered) (All core was lamped)				
Core Boxes		50.00	50.00			
Total	2886.02	1797.62	4683.64			
Deletions	None					
Adjusted totals	None					
Totals previously reported	None					
Totals to date	2886.02	1797.62	4683.64			

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

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

FOR GOVERNMENT USE ONLY

Checked by *fh*
Entered by
Approved by *A. C. Johnson*
Amount approved for payment $2164.52
Remarks

AUG 20 1952

Lloyd L. Norvell
Authorized Certifying Officer

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF June - 1952

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress[4]				
	Wages[1] and salaries	Equipment[2] Depreciation	Supplies	Other[3] D. D. Contract	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes	414.50	108.00	123.52	2240.00	2886.02	ft.	534	276	810	810
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	414.50	108.00	123.52	2240.00	2886.06	ft.	534	276	810	810

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

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

BALTIMORE CAMAS MINES, INC.
ELY, NEVADA

July 11, 1952

From: S. L. Bida, E.M.
Baltimore Camas Mines, Inc.
Ely, Nevada

To: A. C. Johnson, Chief
Mining Division, Region 111
Bureau of Mines
Reno, Nevada

Subject: Final progress report on core drilling at Schafer Mine -Contract Idm.-E 281.

1. The Schafer core drilling contract was completed on June 14, 1952 with completion of 3 holes aggregating 810 feet of drilling. Complete maps and drill logs are submitted with this enclosure. Drilling was carried out on a two shift basis and the final 534 feet was completed during June with no difficulties encountered by the drillers. Core recovery was satisfactory other than in spots where vugs were encountered.

2. Overall results of this drilling was as follows: (a) No commercial ore was encountered in any of the holes. All core was lamped and traces of tungsten were detected on at least two veins with the most pronounced showing on the first major vein zone crossed in each hole; (b) A definite vein structure corresponding closely in strike and located in about the correct position to be the downward projection of the vein in the upper level was established by cross-cutting the formation with the 3 holes; (c) A second major break and some minor breaks were cut farther east but mineralization was notably weaker than on the first (west) vein; (d) The contact between white (west) and blue (easterly) limestone was cut in all 3 holes and the irregularity of this contact indicates either pre-vein faulting across the structure or the structure flattening. Veins appear to follow a fairly regular strike (northerly-southerly). No major cross-break (east-west) indicative of a mineralizer was encountered.

3. Since no commercial ore bodies were encountered by this core drilling, the obvious conclusion must be that the source of the upper level ore bodies lies farther northward and that any downward continuation of these ore bodies would also lie in that direction. Thus, the only avenues of further exploration via the Houston Level would be extension of the stub drift N-X along the line of D. D. hole #2 to the point where the first major vein was encountered thru drift northward along this vein, or (and) probably more expeditous) to probe the northward extension of this same vein with two additional drift holes.

Respectfully,

S. L. Bida

S. L. Bida

SLB/rm

encl.

BALTIMORE CAMAS MINES, INC. BOISE, IDAHO

SHAFER MINE. CHERRY CREEK, NEVADA

DIAMOND DRILL CONTRACT - TUNGSTEN

D. D. Hole Shafer No. 1
Location 46 ft. N 49° E of Sta 340
Direction S 77° E Dip Flat Distance 300 ft.

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
0-4	4'	2.67		Calcitic grey Limestone	Mottled SP Brown	Blocky
4-6	2'	1.5		"	"	"
6-11	5	4.85		"	"	"
11-11.5	0.5	.5		Gouge	Red Brown	
11.5-16.5	5.	4.75		Calcitic Grey Limestone	Grey Mottled	Blocky
16.5-22	5	4.1		"	"	"
22-27	5	4.9		"	"	"
27-31	4	3.9		"	"	Slight altered @ 28 ft. Water course @ 28 ft.
31-36	5	5		"	"	Blocky
36-41	5	4.7		"	"	"
41-46	4	3.9		"	"	"
46-51	5	4.9		"	"	" vugs
51-56	4	3.5		"	"	"
56-61	5	4.9		"	"	"
61-66	5	4.9		"	"	"
66-71	5	4.9		"	"	"
71-76	5	5		"	"	"
76-80	4	3.9		"	"	"
80-85	5	5		"	"	"
85-90	5	4.95		"	"	Slight alteration-vugs
90-95	5	4.6		"	Altered FE St.@ (92-97) TR (WO_3)	
95-98	3	1.8		"	" Lighter colored (97-104) TR (WO_3)	
98-104	6	4.7		"	" " color	TR (WO_3)

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
104-109	5	4.8		Calcitic Grey Limestone	Grey LS	Blocky
109-114	5	4.7		"	Blocky	Alt. Serm (109-109.3)
114-115	1	.9		"	"	" (114.2)
115-120	5	4.9		"	"	
120-125.5	5.5	5.25		"		(124-126.25) white calcitic limestone
125.5-131	5.5	4.9		"	"	Massive
131-136	5	5		"	"	"
136-141	5	4.9		"	"	"
141-146	5	4.7		"	"	" INCR. white LS (143-160)
146-150	4	3.3		"	"	"
150-155	5	4.75		"	"	" with calcitic SEAHS
155-160	5	2.1		"	Broken	(WO_3) TR
160-165	5	2.25		Grey blue Limestone	Contact 160	Breccia to 165
165-167	2	1.8		Grey blue Massive LS	Blocky	
167-171	4	2.75		"	"	Broken
171-175	4	2		"	Altered	Clear chnage to GR. BL. 171.5
175-177	2	1.5		Light Grey Limestone	Uniform color	Broken (WO_3) TR
177-180.8	3.8	2.9		"	Fine grained	
180.8-186	5.4	5.1		"	"	Iron stain
186-191.5	5.5	5.0		Grey blue Limestone	Light Alt. area 188-191.5	Recemented Limestone (187-188)
191.5-196	5.0	4.5		"	Massive	Few flat Calcitic stringers
196-201	5.0	5.5		"	"	Blocky
201-206	5.0	5.0		"	"	"
206-211	5.0	5.0		"	"	"
211-216	5.0	5.0		"	"	"
216-221	5.0	5.0		"	"	"
221-226	5.0	5.0		"	"	"

Continued-

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
226-230.5	4.5	4.0		Grey blue Limestone	Massive	Blocky slightly more calcitic
230.5-235.5	5.	5.4		"	Blocky	
235.5-240.5	5	5		"	"	
240.5-246	5.5	4.9		"	"	
246-248	2.0	1.2		"	"	
248-249	1.0	1.25		"	"	
249-254	5.0	5.0		"	"	
254-259	5.0	5.0		"	"	
259-263	4.0	4.0		"	"	Bedding very evident
263-268.5	5.5	5.0		"	"	
268.5-273.5	5.	5.0		"	"	
273.5-278.5	5.0	5.0		"	"	June 1st, 1952
278.5-283.5	5.0	4.9		"	"	
283.5-288.5	5.0	5.1		"	"	Breccia (289-292)
288.5-293.5	5.0	5.1		"	"	Slightly Broken
293.5-298.5	5.0	5.0		"	"	" "
298.5-300	1.5	1.5		"	"	Vugs No. Alt.

BALTIMORE CAMAS MINES, INC. BOISE, IDAHO

SHAFER MINE. CHERRY CREEK, NEVADA

DIAMOND DRILL CONTRACT - TUNGSTEN

D.D. Hole Shafer No. 2
Location - 46ft. N 49° E of Sta. 340 in Huston Level
Direction N 48½° E Dip Flat Distance 210 ft.

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
0-4	4.	1.9		Calcitic Gr. Limestone	Blocky	
4-8	4	2.0		"	"	
8-11	3	2.4		"	"	
11-15	4	3.9		"	"	
15-17.5	2.5	2.5		"	"	
17.5-22.5	5.0	4.5		"	"	
22.5-25	2.5	2.2		"	"	
25-28.5	3.5	3.2		"	"	28-28.5 Slightly Mineralized
28.5-33.5	5.0	4.3		"	"	
33.5-37	3.5	3.5		"	"	
37-40	3.0	2.4		"	"	
40-45	5.0	4.9		"	"	
45-50	5.0	5.0		"	"	
50-56	6.0	6.0		"	"	
56-60	4.0	4.2		"	"	
60-70.5	10.5	10.5		"	"	[illegible]
70.5-81.0	10.5	10.5		"	"	(77.5-78.5) MIN. TR(WO_3)
81-81.5	.5	.5		"	"	Slight Mineral to 81
81.5-92	10.5	7.0		"	"	Mineralized (82.5-85) TR (WO_3)
92-102	10.0	10.0		"	"	Altered 102-105 TR(WO_3)
102-109	7.0	4.0		"	"	
109-114	5.0	3.0		"	"	Altered TR (WO_3)
114-117.5	3.5	3.3		Grey Calcitic Limestone	Altered white	TR (WO_3) Brokern Gouge (114-115)

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
117.5-121	3.5	3.1		Grey Calcitic Limestone	Altered white	TR (WO_3) Broken
121-125	4.0	4.0		"	Slight Alteration	(121-121.5) Brown seam
125-131	6.0	4.5		"	" "	Broken 130-131
131-135	4.0	2.8		"	Blocky	
135-137	3.0	2.0		"	Slight Alt.	Blocky
137-140	3.0	3.1		"	Blocky	
140-149	9.0	8.3		"	"	Broken Slight Min. 147-148
149-159	10.0	9.3		"	Slight Alt.	Contact -Grey BL.Ls. 158
159-165	6.0	5.3		" Grey Blue Limestone (161-163)	"	(161-163) With grey blue Section
165-170	5.0	4.0		Grey Calcitic Limestone	Slight Alt.	
170-176	1.0	.3		"	Altered	
176-179	3.0	1.3		"	"	Water course (178-179)
179-181	2.0	1.0		"	"	" " Broken
181-188	7.0	7.0		"	Blocky	Vugs
188-193	5.0	4.0		Grey Calcitic Limestone	Altered pink	Vein (188-191) TR (WO_3)
193-199	6.0	5.0		"	Blocky	Alt.
199-205	6.0	6.0		"	"	Contact 192 Alt. Section
205-210	5.0	5.0		Grey Blue Limestone	"	TR (WO_3) (201.5-203)
						END HOLE 210

BALTI[illegible]E CAM S MINES, INC. BOISE, ID[illegible]

SHAFER MINE. CHERRY CREEK, NEVADA

DIAMOND DRILL CONTRACT - TUNGSTEN

D.D. Hole Shafer No. 3
Location 46 ft. N 49° E of STA 340 in Huston Level
Direction N 75 E Dip Flat Distance 300 ft.

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
0-5	5	1.9		Grey Calcitic Limestone	Blocky	
5-10	5	5		"	"	
10-15	5	5		"	"	
15-18.5	3.5	3		"	"	
18.5-19	.5	.5		Gouge Section		Vein
19-21.5	2.5	2.5		Grey Calcitic Limestone	Blocky	
21.5-25	3.5	2.9		"	"	
25-30	5.0	5.0		"	"	
30-35	5.0	3.9		"	"	
35-36	1.0	1.0		"	"	
36-38.5	2.5	2.5		"	"	
38.5-39.5	1.0	1.0		"	"	
39.5-44.8	5.3	5.3		"	"	
44.8-55	10.2	9.5		"	Slightly Altered	(44.8-49) Min TR(WO_3)
55-65	10.0	9.0		"	"	Blocky
65-70	5.0	4.8		"	"	"
70-75	5.0	3.8		"		Increasing Alterations
75-80	5.0	3.1		"	"	
80-85	5.0	5.0		"	Altered	Vein Zone (81-84) TR (WO_3)
85-95	10.0	10.0		"	"	Vugs
95-105	10.0	10.0		"	"	Vein (97-105) TR (WO_3) plus
105-113	8.0	3.0		"	"	Altered

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
113-118	5.0	5.0		Grey Calcitic Limestone	Altered	
118-123	5.0	4.8		"	Blocky	Slight Alteration
123-128.5	5.5	5.3		"	"	" "
128.5-133.5	5.0	5.0		"	"	" "
133.5-140	6.5	6.5		Calcitic Gr. to Grey BL.LS.	"	Contact @ 137 Ft.
140-145	5.0	4.9		Grey BL Limestone	"	141-142 Breccia Recemented LS
145-149	4.0	2.1		" "		
149-153	4.0	3.5		" "		Contact 152
153-161	8.0	6.9		Calcitic Grey Limestone	"	
161-165	4.0	4.0		" "	"	Contact (163-163.5)
165-170	5.0	5.0		Grey Blue Limestone	"	
170-175	5.0	4.9		" "	"	
175-185	10.0	10.5		" "	"	
185-186	1.0	.7		" "	"	
186-186.5	.5	.2		" "	"	
186.5-188	1.5	1.3		" "	"	
188-190	2.0	1.3		" "	"	
190-190.4	.4	.4		" "	"	
190.4-193	2.6	2.1		" "	Slightly Calcitic (191-192)	
193-200	7.0	4.4		" "	Blocky	
200-210	10.0	10.0		" "	"	
210-220	10.0	10.0		" "	"	
220-230	10.0	10.0		" "	"	
230-240.5	10,5	9.9		" "	"	(231 to 240.5) Altered Slightly
240.5-250.5	10.0	9.8		Gr. BL. LS. Unaltered(240.5-242.5) " (249-251)		
250.5-260	9.5	9.5		Gr. BL. LS. FE Stain	Alt. pink	Breccia (251-258)TR(WO_3)
260-270	10.0	8.5		Grey Blue Limestone	Blocky	
270-280	10.0	9.4		" "	"	

Continued-

DRILL DIST.	DRILL LENGHT	CORE LENGHT	% REC.	FORMATION	DESCRIPTION	REMARKS
280-290	10.0	9.9		Gr. Bl. Limestone	Blocky	Broken Vugs 281-289
290-300	10.0	5.5		"	SL Altered Broken to end Inor Calcitic	Slight Alterations 291-292

MF-104
(August 1951)

SF-D

Budget Bureau No. 4
Approval Expires 6-30-52.
8/20/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No.
Idm-E 281

Name of Operator Baltimore Camas Mines, Inc.
Docket No. DMA DMEA-2137X
Total Contract Amount $ 20,280.00
Government Participation: 75 % Amount, $ 15,210.00
Distribution of Expenditures for Month of May 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 26 1952

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

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

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

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

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

CERTIFICATION

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

Baltimore Camas Mines, Inc.
(Name of Company)

By Lauren Smith, Supt.
(Signature of Authorized Official)

June 14, 1952
(Date)

Supt.
(Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(a) Facilities	None	None	None			
(b) Buildings	None	None	None			
(c) Fixtures	None	None	None			
2. Operating Equipment:						
(a) Purchased[1]	None	None	None			
* (b) Rented[2] Diesle Comp	75.00	None	75.00	75.00		
Tank truck	8.00	"	18.00	8.00		
Dodge Fwd truck	5.00	"	5.00	5.00		
Chev. pickup	12.50	"	12.50	12.50		
Shop equip.	7.50	"	7.50	7.50		
(c) Furnished by operator						
3. Rehabilitation and Repairs:						
(a) Facilities	None	None	None			
(b) Buildings	None	None	None			
(c) Installations						
Compressor & truck repair labor	45.50	None	45.50			

*Depreciation on items of equipment furnished by operator as detailed in contract for a one half month period.

16—64068-3

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures	None	None	None			
4. Labor[3] *	130.00	None	130.00			
5. Supervision **	151.25	None	151.25			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other Fuel & lub.	62.87	None	62.87			
7. Power	None	None	None			
8. Transportation	None	None	None			
9. Insurance						
(a) Fire	None	None	None			
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work Drilling	1,250.00	None	1,250.00			
11. Other (specify)						
Core boxes	50.00	None	50.00			
Total	1,797.62	None	1,797.62			
Deletions	None					
Adjusted totals	None					
Totals previously reported	None					
Totals to date	1,797.62	None	1,797.62			

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

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

FOR GOVERNMENT USE ONLY

Checked by PR
Entered by
Approved by A. C. Johnson
Amount approved for payment $1348.22
Remarks

AUG 20 1952

Lloyd L. Norvell
Authorized Certifying Officer

16—64068-3

* Contract (copy submitted) for core drilling specifies that water and air be furnished by company. Above labor required to fullfill this clause.

**Engineer (Bida)--½ time, ½ month
Accounting (Smith), ½ time, ½ month plus 10% OAB, etc.

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF May 1952

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes	326.75	108.00	62.87	1,300.00*	1797.62	ft.	276	0	276	810
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	326.75	108.00	62.87	1,300.00*	1797.62		276	0	276	810

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

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

*Contract core drilling to Nichols and Thompson and core boxes
($1250.00 to Nichols and Thompson, voucher attached; and $50.00 to core boxes, see Bath Lbr. Co, voucher and payroll sheet)

BALTIMORE CAMAS MINES, INC.
ELY, NEVADA

July 11, 1952

From: S. L. Bida, E.M.
Baltimore Camas Mines, Inc.
Ely, Nevada

To: A. C. Johnson, Chief
Mining Division, Region 111
U. S. Bureau of Mines
Reno, Nevada

Subject: Progress report on Schafer core drilling contract - Idm-E 281.

1. Preparation, cutting drill station in east stub drift of Houston adit, for core drilling was commenced in late April. Negotiations to contract 810 feet of core drilling were begun and Nichols and Thonpson Core Drilling Co. of Boise, Idaho began the work on May 18, 1952. A total of 276 feet on hole No. 1 was drilled by the end of the month.

2. Direction and inclination of the hole core shown in accompanying log and formation was white limestone from 0 to 160 feet when the blue limestone contact was encountered. Weak tungsten mineralization was found at 92 feet to 104 feet, at 155 feet to 160 feet and at 175 feet to 177 feet. Core recovery was good except where vugs or cavities were encountered and no unusual difficulties accured.

Drilling will continue on a two shift basis until contract requirements are complete. It is estimated that this stage will be completed prior to mid-June.

Respectfully,

S. L. Bida

S. L. Bida

SLB/rm

encl.

FILE COPY
SURNAME:

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

Administrator, DMEA

Sept. 5, 1952

Rutledge
Newton

Iron and Ferro-Alloy Division, DMEA

Memorandum of Non-Discovery
Docket No. DMEA 2137 - Tungsten
Baltimore Ozman Mines, Inc.
The Schafer Mine
White Pine County, Nevada
Exploration Contract No. Idm-2281

This Division hereby concludes that the work done upon the subject property, as described under Stage I in the subject contract, has resulted in no discovery or development from which commercial production of ore may be made.

A description of the property, the work done, and the results obtained are as follows:

1. The property explored is known as the Schafer mine and is located in the Cherry Creek Mining District, White Pine County, Nevada.

2. The mineral sought was scheelite which, at the Schafer mine, occurs in calcite stringer zones cutting limestone of Cambrian age. The exploration under this contract was directed toward parallel-striking quartz veins carrying scheelite in a leached zone following a bedding fault at the Spud-patch adit and the middle adit, and also the downward extension of the Schafer calcite stringer zone.

3. The work done under Stage I of this contract consisted of drilling three diamond drill holes from the end of the east crosscut of the Hunton adit. The holes drilled were as follows:

   Hole No. 1 - S. 77° E.; horizontal; 300 feet
   Hole No. 2 - N. 48°30' E.; horizontal; 210 feet
   Hole No. 3 - N. 75° E.; horizontal; 300 feet

   A total of 810 feet was drilled under the subject contract. No ore, nor even any promising indications of ore, was found.

4. The project was started May 18, 1952, and completed in June, 1952. The amount expended was $4,683.64, which gave an overall drilling cost of $5.78 a foot. The Government's share of the exploration was $3,512.74 or 75 percent of the total expenditure.

5. Since the results of the diamond drilling under Stage I of the contract were negative, the proposed exploration under Stage II was not approved by the field team and the contract was terminated as of August 6, 1952.

6. There were no major items of equipment purchased under this contract.

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

FARutledge:lm
9/5/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
W. S. Martin
F. A. Rutledge

Audited

Certified

me

tate

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/10/1954
Incl. Voucher for

Baltimore-Camas Mines, Inc.

Nevada

Commodity Tungsten

Yes Actual Cost

Agreed Unit Costs

Docket No. DMEA-2137

Idm-E No. 281

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	500'	13,770.25			
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond	810'	4,050.00	810'	3,490.00	4.31 ft.
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Supervision, Rentals, Supplies		2,459.75		1,193.64	
Totals		20,280.00		4,683.64	5.78 ft.

No ore found in drill holes and contract was terminated.

Prepared by TLC

71626

FILE COPY 400
SURNAME:

Rutledge
Martin
Hedges
Thayer
Miller

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

SEP 8 1952

Mr. N. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMRA 2137 - Tungsten
Baltimore Gamma Mines, Inc.
The Schafer Mine
White Pine County, Nevada
Exploration Contract No. 1(m-2821

Dear Mr. Miller:

This is to inform you that this Administration concurs with the Field Team's conclusions that no significant discovery or development has resulted from the subject exploration work, and hence, no certification will be made.

Our records show that the above referenced contract was terminated on August 6, 1952, by the Government after completion of Stage I. A total of $4,683.64 was spent under the contract of which the Government's share was $3,512.74, as reported by your office.

Sincerely yours,

C. O. Mittendorf (fw) J.H. 9-8-52

Administrator

FARutledge:lm
9/5/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
W. S. Martin
F. A. Rutledge

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

Office of
Executive Officer
DMEA Field Team
Region III

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

August 7, 1952

Mr. G. P. Williams, President
Baltimore Camas Mines, Inc.
601 Eastman Building
Boise, Idaho

Re: Docket DMEA 2137X (Tungsten)
Contract Idm-E281
The Schafer Mine
White Pine County, Nevada

Dear Mr. Williams:

Our field examiners report that the first stage under Contract Idm-E281, which was diamond drilling, did not result in the exposure of commercial ore.

As approval to carry out Stage II of the contract is dependent upon the results of Stage I, and as the results of the first stage were negative, I regret that upon advice of our field engineers, it is necessary to terminate the contract. A formal notification to that effect, dated August 6, 1952, is attached.

Sincerely yours,

H. C. MILLER

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

Enclosure

Copy to DMEA, Interior Building, Washington 25, D. C. (with copy of notice)
E. H. Bailey, USGS (with copy of notice)
A. C. Johnson, Reno, Nevada (with copy of notice)

AUG 11 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

FINAL REPORT

SCHAFER MINE, CONTRACT IDM-2261

White Pine County, Nev.

L. F. Muller, Mining Engineer
U. S. Bureau of Mines

July 22, 1952

FINAL F.T. RPT.

FINAL REPORT

SCHAFER MINE, CONTRACT IDM-2281
White Pine County, Nev.

The Schafer mine, Contract IDM-2281, was inspected on July 8, 1952 by an engineer of the Bureau of Mines.

Stage I of the contract, consisting of 810 feet of core drilling, has been completed. Core was inspected and only traces of scheelite were observed; at 263 feet in hole 1, and at 282 feet and 298 feet in hole 3. These traces occurred in zones having thin calcite stringers, which association closely resembled that of the ore mined from the upper level stope. It might be assumed that the zones cut are the downward extensions of the upper ore bearing material.

Although these findings by core drilling are not conclusive, the fact that more traces of mineral were contacted seems to indicate either the zone (1) is not strongly mineralized, or (2) was mineralized in an area not intersected by drill holes.

Contract exhibit "A", Stage II, states: "(1) Drive, if ore is found in D.D. Hole No. 1 in the Spud Patch and Silver veins, approximately 500 feet of crosscut following the hole to the ore and then drift 100 feet on each vein. If ore is intersected only in the Silver vein, then crosscut only to that vein, a distance of approximately 150 feet, and drift 100 feet on the vein.

"If no ore is found in either hole No. 1 or No. 2 but is found in hole No. 3, drive along the hole for approximately 210 feet to the ore and then drift for 100 feet on the ore.

"If ore is found only in hole No. 2 in one or both of the veins, crosscut to the ore and then drift for 100 feet on the one or both ore exposures."

Since no ore was encountered in any of the three holes, it is recommended that Stage II of Contract Idm-1281 be abandoned, and the exploration program on the Schafer mine terminated.

The operators, in a conversation with Mr. A. C. Johnson, Chief, Mining Division, indicated that they wished to abandon the contract. However, at the time of last inspection, July 8, they wished to hold the contract in abeyance until further non-contract work by the operators, to consist of either crosscutting along hole No. 2 or core drilling to the north of hole No. 2, could be completed. It is recommended that no delay in concluding this contract be allowed.

All production from this property for 10 years hence is subject to royalty payments to the Government, so termination at this time will not endanger repayment. Stage II was to follow up the core drilling of Stage I by crosscuts and drifts if ore was found by drilling. Any further Government participation exploration would require new application with a program influenced by any significant discovery made by the operators on a non-contract basis.

A review of costs as reported on MF-104 forms for the months of May and June show that Stage I, 810 feet of core drilling, was completed at a cost of $4,688.64, or $5.78 per foot overall. Estimated costs of this stage were $6,509.75, or $8.04 per foot overall.

No permanent installations were made or equipment purchased for which a resale value could be established.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
P. O. BOX 1551
RENO, NEVADA

~~FERROUS METALS BRANCH~~

Rm 35-38

May 29, 1952

2137
E 2881

Mr. G. C. Selfridge, Chief
Iron & Ferro-Alloy Division
Bureau of Mines
So. Interior Bldg.
Washington 25, D. C.

Dear Mr. Selfridge:

In compliance with a request from Mr. H. C. Miller, Regional Director of Region III, the following information is being sent to you on the latest developments at the Baltimore-Camas Mines, Inc., (Schafer Mine), relative to this company's application for a loan under DMPA-2365, Ely, Nevada millsite.

In the original report that was made by George H. Holmes, Jr. and L. F. Muller, engineers of the Bureau of Mines and R. M. Smith and B. J. Sharp, geologists of the U. S. Geological Survey, the following estimates were made on ore reserves at the Schafer mine:

"There is no blocked out ore at the Schafer mine. The indicated reserves immediately below the existing workings, in the triangular block 90 feet long, 4 feet wide, and extending 30 feet down the dip, are 450 tons that may average 0.5 percent WO_3.

"Judging from the experience of miners in the district, it is inferred that the ore shoot in the Schafer mine may continue to considerably greater depths although it is likely to be lenticular and erratically mineralized. The inferred reserves in the block extending 100 feet below the present level and containing the downward extension of the ore shoot are, in addition to the indicated reserves, 2,000 tons containing 0.5 percent WO_3.

"Showings at other workings on the property do not appear promising, and no material of commercial grade is now exposed in them."

Since the original examination was made, the Baltimore-Camas Mines, Inc. have driven a new lower adit called the Houston Tunnel. This adit has been driven for a distance of 350 feet. From this adit the company has driven crosscuts east and west to pick up the downward extensions of the ore zone. No mineralization was encountered in either of the crosscuts.

Copy retained 400

Mr. L. F. Muller of my office has just returned from an inspection trip to the Schafer mine. He reports that work under their exploration contract Idm-E281 is the beginning of their diamond drilling program.

Hole No. 1 has been started due east and is a horizontal hole. This hole has reached a depth of 120 feet as of May 28. The core recovery has been 90 percent or better. Limestone formations cut are nearly uniform throughout the hole, consisting of brown-gray limestone with stained calcite crystals intermixed. Small solution voids were observed in the core from 11.5 to 16.5 feet, 46 to 46.5 feet and at 86.5 feet. Limonite vein filling was noted at 33.5 feet, intermittently from 93 to 98 feet and at 109 feet. Core from 89 to 90 feet, 100 to 104 feet, and 107 to 107.5 feet, bore a fine speckled appearance, suggesting an alteration of pyrite to limonite. No ore has been cut to date.

Approximately 60 linear feet of workings, extending northward, have been added to the north end of the upper level on company account. No ore was discovered by this work. Ore reserves as estimated by the Geological Survey in the preliminary report remain substantially the same.

Enclosed is fig. 5, Schafer mine workings, showing location of new adits and also a section along line AA, Schafer mine, Cherry Creek Mining District, White Pine County, Nev., that shows the possible targets of the downward extensions of scheelite found in the upper levels.

Sincerely yours,

A. C. Johnson

A. C. Johnson, Chief
Mining Division
Region III

Encls.

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

Office of
Executive Officer
DMEA Field Team
Region III

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

May 7, 1952

Mr. D. E. Anderson
Baltimore Camas Mines, Inc.
601 Eastman Building
Boise, Idaho

Re: Docket DMA-2137, Contract Idm-E281
(Tungsten) - The Schafer Mine,
White Pine County, Nevada

Dear Mr. Anderson:

Reference is made to your letter dated April 28. The Washington Office of the Defense Minerals Exploration Administration is not in favor of changing any contracts that have been written in the past. Some future contracts may be prepared on a unit basis, but the applicant would have to furnish a complete breakdown of his individual costs, thereby substantiating his ultimate unit cost.

We regret, therefore, that we cannot grant your request to convert your contract to one on a unit cost basis.

Sincerely yours,

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

Copy to DMEA, Washington, D. C.
A. C. Johnson, Reno, Nev.
E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 12 1952

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

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Bldg.
870 Market St.
San Francisco 2, Calif.

April 11, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator, DMEA,
Interior Bldg., Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-2137X - Contract Idm-E281 (Tungsten)
Baltimore Camas Mines, Inc.
The Schafer Mine, White Pine County, Nevada

Reference is made to your subject letter of March 31, to which were attached the original and five copies of subject contract, together with Exhibit "A" (6 pages), 1 Landlord's Subordination Agreement, and 1 map.

Mr. G. P. Williams, President of the Baltimore Camas Mines, Inc., signed the contract and retained their copy. The Field Team's copy has been retained by us, and the original and three remaining copies, together with pertinent enclosures mentioned above, are enclosed herewith. We shall expect to receive the Finance Officer's copy shortly.

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

Attachments

Copy to: E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 15 1952

FILE COPY
SURNAME:

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

Selfridge
Geehan
Thayer
Hedges
Johnson

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Bldg.
870 Market Street
San Francisco 2, California

MAR 31 1952

Re: Docket No. DMA 2137X - Tungsten
Baltimore Camas Mines, Inc.
The Schafer Mine
White Pine County, Nevada

Dear Mr. Miller:

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, 1 Landlord's Subordination Agreement, and 1 map).

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed by a duly authorized official of the Company. One copy is to be given to the Operator, one copy retained by your office, and the original and three copies returned to this office.

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

The present contract is based on an amended application submitted by the Baltimore Camas engineer while recently here in Washington and, therefore, the difference between the present $20,280 project and the $27,424.16 one submitted January 20, 1952.

Sincerely yours,

SIGNED

Acting Administrator
Defense Minerals Exploration
Administration

cc: Adm. Reading File
Docket
Field Team, Region 3
G. C. Selfridge
R. W. Geehan, USBM
D. M. Lemmon, USGS
Operations
Enclosures

FILE COPY
SURNAME:

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

March 11, 1952

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Baltimore Camas Mines, Inc. exploration project -- Docket No. DMEA-2137X

The attached seven copies of a draft of an exploration project contract in this case are in satisfactory legal form subject to the attachment of the requisite maps.

Your file in this case is returned.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

RRGuthrie/bjl

Copy to: Mails & Files
J. L. Hofflund
R. R. Guthrie
Chron.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 12 1952

BALTIMORE CAMAS MINES, Inc.

601 Eastman Building
BOISE, IDAHO

March 10, 1952

Mr. George Selfridge, Chief
Ferro-Alloys Division
Defense Minerals Exploration Admn.
Washington, D. C.

Reference: DMA Docket 2137, SCHAFER MINE
Telegram, March 7, 1952, from Administrator DMEA to
G. P. Williams, Baltimore Camas Mines, Inc.

Dear Mr. Selfridge:

This will verify that SHOESTRING EXTENSION is correct, recorded name of claim in question and is located where SOUTH SHOESTRING appears on our map. The latter was an earlier location on the same claim and is superceded by SHOESTRING EXTENSION.

With reference to telegram requesting copy of assignment of escrow agreement, it has been noted that a copy of this agreement was sent to Washington several months ago but probably has gotten into Dockets 2136 or 2138 both of which assignments are covered in the same document. Another copy, however is enclosed with this letter. This assignment and the original escrow agreement, of which you have a copy, are the only documents that have been executed relative to the SCHAFER lease and transfer. Mr. Hawley, the company's attorney, advises me that the only other possible legal document that could be submitted would be a Quit Claim Deed from Mr. Williams to the Corporation and that ~~his~~ in his opinion the assignment is entirely binding and completely covers the transfer. If, however, you find such a Quit Claim Deed necessary after studying the enclosed assignment you may notify us and such a deed will be made up and forwarded.

Respectfully,

D. E. Anderson

D. E. Anderson

C. O. Mittendorf

rior Department
Defense Minerals Exploration
Administration

FILE COPY
SURNAME:

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

Selfridge.
Huthwin

DMA 2137

STRAIGHT WIRE

MARCH 7, 1952

G. P. WILLIAMS
BALTIMORE CAMAS MINES, INC.
601 EASTMAN BUILDING
BOISE, IDAHO

RE SHAFER MINE. WE REQUIRE COPY OF ASSIGNMENT OF ESCROW AGREEMENT TO BALTIMORE CAMAS MINES. ALSO COPY OF AGREEMENT TO TRANSFER DEED TO BALTIMORE CAMAS MINES WHEN DELIVERED TO YOU.

C. O. Mittendorf (fw) cc 3/7

ACTING ADMINISTRATOR
DEFENSE MINERALS EXPLORATION
ADMINISTRATION

GCSelfridge:ls

cc: Admn. Reading File
Docket
G. C. Selfridge
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
Confirmation copy to Mr. Williams

FILE COPY
SURNAME:

Selfridge

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

March 5, 1952

Memorandum

To: Mr. John L. Hofflund, Chief Counsel, DMEA

From: Iron and Ferro-Alloy Division, DMEA

Subject: Preparation of contract
Baltimore Camas Mines, Inc.
Docket No. DMA 2137X - Tungsten
The Schafer Mine
White Pine County, Nevada

Attached hereto is the subject docket with a draft of a proposed contract. The applicant will be in Washington for several days and would appreciate the opportunity of signing the contract before his departure.

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

Attachments

GCSelfridge:ls

cc: Admn. Reading File
Docket
G. C. Selfridge

March 1, 1952

From: Baltimore Camas Mines, Inc. Inc of Idaho.
601 Eastman Bldg.
Boise, Idaho

To: DMA, Ferro Alloys Division
Washington, D. C.

Attention: Mr. Selfridge

Subject: DMA Docket 2137--SCHAFER MINE, Amended exploration proposal.

1. In view of recent underground developments at the SCHAFER Mine at Cherry Creek, Nevada and as a result of a recent discussion with DMA officials regarding this project an amended exploration proposal, dealing only with possible ore bodies to the east of the Huston adit is herewith submitted.

Most recent work on the property has been the cross-cutting of an ore zone some 70 feet west of the Huston adit and almost vertically below the ore body in the upper level. Baltimore Camas plans to develop this ore body and explore the northward extension of the same contact on its own initiative.

2. A drilling program has been laid out to probe the easterly veins as follows:

Hole #1--Flat, N85E, 300'
Hole #2--Flat, N41E, 210'
Hole #3--Flat, N70E, 300'

All holes will be collared from a station already cut on the east side of the Huston adit, on the hanging wall side of a cross-fissure thought to be a mineralizer which cuts the adit at Sta. 343.

Total of 810' to be drilled will be contracted at $5.00 per foot.

Total drilling cost $4050.00

3. Pending results of the foregoing drilling, the following cross-cutting and drifting programs are proposed:

1st Alternative

In event ore may be encountered on both the "Spud Patch" and "Silver" veins in either hole #1 or #3, cross-cut 300 feet along route of Hole #1, then drift 100 feet north on each vein.

2nd Alternative

If ore is encountered only in Hole #2, cross-cut diagonally northeast along line of Hole #2 for 210 feet then drift 100 feet along ore shoot.

3rd Alternative

If ore is found only on the Silver Vein in Holes #1 or #3, cross-cut to Silver Vein (150) along route of Hole #1, then drift 100 feet along vein.

Drifting and cross-cutting will be carried out on a contract basis allowing a maximum of $12.00 per foot for labor.

On the above scale the 1st alternative program entails a maximum of 500 feet combined drifts and cross-cut--
500 feet at $12.00/ft. $6,000.00

The 2nd alternative program involves a maximum of 310 feet of combined drift and cross-cut--
310 feet at $12.00/ft. $3720.00

The 3rd alternative program involves a maximum of 250 feet of combined drift and cross-cut--
250 feet at $12.00/ft. $3,000.00

The foregoing figures represent cost of face labor alone and the cost of supplies and materials, machinery depreciation etc. will be the same as recorded in the original application.

The only additional personell expense to be charged against the operation will be one book-keeper at $150.00 per month and an engineer-foreman at $400.00 per month.

Maximum time requirements will be 1½ months for drilling and 2½ months for drifting, that is a maximum of four months for the entire project.

Maximum total cost for foreman and bookkeeper $2,200.00

It is herewith understood that if any personnell or machinery serve other operation in addition to the foregoing project that costs will be apportioned in accordance with agreement between field team and operator.

BALTIMORE CAMAS MINES, INC.

by P. E. Anderson
Engineer

FILE COPY
SURNAME:

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

Regan
Selfridge
Matthewson

FEB 21 1952

Baltimore Camas Mines, Inc.
601 Eastman Building
Boise, Idaho

Re: Docket No. DMEA 2137, Revised - Tungsten
Shafer Mine
White Pine County, Nevada

Dear Sirs:

Your revised application pertaining to the subject docket, together with additional information available to us in Washington, is being reviewed by this office.

It is noted that you propose to explore an area from the face of the Huston adit by means of 4 diamond drill holes having a total length of 665 feet. Afterward, extend the Huston adit a distance of 100 feet northward and (a) crosscut 50 feet west from the 340-foot station in the Huston adit to the Blue Limestone contact, (b) crosscut 320 feet east from the 425-foot station in the Huston adit to intersect the Spud Patch vein, and (c) drift 200 feet on the Spud Patch vein. Also to carry out an additional 500 linear feet of core drilling from and to vantage points indicated by the foregoing exploration.

The above totals would be:
1165 feet of diamond drilling
300 feet of drifts
370 feet of crosscuts
Total expenditure in the amount of $27,424.16.

Recent information indicates that on February 12, 1952, the Huston adit had been driven a distance of 350 feet. The adit heading then is approximately at the location indicated in your application where the first crosscutting is proposed.

It is also apparent from the information that no scheelite has been found in the Huston adit, including the several gouge-filled faults that have been encountered.

In view of the lack of scheelite mineralization in the Huston adit, it is suggested that a limited amount of diamond drilling is the only exploration that appears justified as a first step

at this time. Subsequent exploration by means of diamond drilling, crosscutting and drifting would depend on the results obtained by the first step of the following suggested diamond drilling:

From at or near the face of the Huston adit--

1	D.D.	hole,	Flat,	due West	to	a	depth	of	65	feet
1	"	"	"	N 40° West	to	a	depth	of	90	"
1	"	"	"	N 80° East	"	"	"	"	300	"
1	"	"	"	N 41° East	"	"	"	"	210	"
4									665	"

If you are willing to consider the above-outlined program of diamond drilling as an initial step and will furnish us with a map showing the location of the proposed drill holes, together with an estimated cost of such a program, we shall be enabled to give further consideration to your application.

May we hear from you at your earliest convenience?

Sincerely yours,

George C. Selfridge E.L. 2/21/52

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

GGGentry & GCSelfridge:ls
2/19/52

cc: Admn. Reading File
Docket
Field Team, Region 3
R. W. Geehan, USBM
D. M. Lemmon, USGS
G. G. Gentry
G. C. Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
P. O. BOX 1551
RENO, NEVADA

February 15, 1952.

Mr. Glenn G. Gentry
Room 3538, DMEA
Bureau of Mines
S. Interior Bldg.
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 18 1952

Dear Glenn:

Enclosed are two copies of Figure 5, showing location of new adit of the Schafer Mine workings, DMA-2137.

The Schafer Mine, White Pine County, Nevada, of the Baltimore-Camas Mines, Inc., was visited on February 12 by L. F. Muller of this office and R. M. Smith of the U. S. Geological Survey.

The new lower adit (Huston) has been driven a distance of 350 feet to date. No ore has been found in this entry. Several small, gouge filled faults have been cut, but these show no scheelite (see attached sketch).

The operators plan to crosscut to the west a short distance to explore the area they consider most favorable for downward extension of the ore.

The Field Team agrees that the planned program of exploration with Government assistance as resubmitted is feasible, but that diamond drilling phase should precede exploration by drifting and crosscutting.

Weather conditions are severe in the area. The Field Team is indebted to Mr. Ken Cleghorn of the Cherry Creek Mining Company for his assistance in reaching the Schafer property.

I attended the meeting at Ely, when Mr. George B. Holderer of the DMPA outlined the functions of that office to the small mine operators.

The Baltimore-Camas Company have not moved their mill from Idaho but are planning on doing it within the next three months. The only work done to date is a small amount of clearing for the mill. However, there are no foundations but they are planning definitely to do this work and have the mill in operation by early summer.

Mr. Glenn G. Gentry Feb. 15, 1952.

It is my understanding that they are planning on obtaining a loan from the DMPA of $100,000. to move the mill into the Ely area. This mill will also be used to handle custom ores from the district.

This information is being furnished you in compliance with your telephone call of February 8.

Sincerely yours,

A. C. Johnson

A. C. Johnson
Chief, Mining Division
Region III

Encls.

IN REPLY REFER TO:

G-MD-DML

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 13 1952

February 12, 1952

Memorandum

To: George C. Selfridge, DMEA

From: D. M. Lemmon, U.S.G.S.

Subject: Field Report and new proposal $27,424.16 DMEA 2137 - Tungsten
Baltimore Camas Mines, Inc.
601 Eastman Bldg.
Boise, Idaho

Property: Schafer claims (Happy and Happy No. 1)
Cherry Creek District
White Pine County, Nevada

The area was examined November 1 and 29, 1951, and January 9, 1952 by engineers and geologists of the Field Team. It was recommended to the applicant that the best way to explore the Schafer deposit was to sink a winze on the ore. The applicant disagreed and started a 340-foot crosscut adit with his own funds.

The new exploration application proposes 665 feet of diamond drilling (4 holes) from the face of the new adit, followed by 670 feet of drifting and crosscutting and 500 feet of drilling.

The Field report states that the only known ore body is in the Schafer mine, and that showings at other workings on the property are not of commercial grade and do not appear promising. It is estimated that the Schafer ore body might contain 2,450 tons of 0.5 percent WO_3 in the block extending 100 feet below the present stopes. If 1,000 units could be produced from this ground as the result of a Government exploration loan, the royalty at 5 percent ($3.15 per unit) would repay a loan of $3,150, 75 percent of a $4,200 project.

The geologic setting of the deposit is not sufficiently clear to demonstrate the controls on mineralization or to permit projection of ore shoots any distance. It appears probable that tungsten mineralization will differ in value as the Schafer vein crosses beds down the dip. The applicant's suggestion that the mineralization will replace a

1 copy removed for file

specific bed may be valid, but no reason is apparent for the applicant's choice of beds.

Conclusions:

1) Only the Shafer vein warrants exploration. Possible downward extensions on the level of the new adit can be investigated from the face (340 feet from the portal) by less than 200 feet of additional drift and crosscut.

2) The proposed diamond drilling and the long crosscut to the east are not justified by the surface exposures. If the other outcrops are to be investigated shallow prospect shafts should first be sunk from the surface to determine trend and grade of mineralization.

3) The new Houston adit is poorly located, for it is directed midway between 2 possible targets.

4) The Field Team report (p. 3) states that the Cherry Creek Tungsten Mining Co. did some diamond drilling on the property. Information about this drilling should be obtained if possible.

5) The face of the new adit was at 89 feet on January 9, 1952, with 251 feet to drive before completion. If this work were vigorously carried on during the winter months, it should be completed in March.

Recommendation:

It is suggested that a proposal be considered to explore the downward extent of the Schafer ore shoot from the face of the new adit when this face is at 340 feet from the portal. It is also suggested that the field team be requested to examine the new adit when it is near completion, and prepare a recommendation as to what program, if any, should be considered in exploration of the Schafer vein below the stopes, either from the face of the new adit or from the level above. The cost of the program should be in keeping with the size of target.

The applicant should be told that the diamond drilling and long crosscut will be denied and the balance of the program on the Schafer vein will be considered when the new adit is complete.

Dwight M. Lemmon

Re: Docket No. DMEA 2137
Revised Application on Jan. 20-52

Feb. 8, 52 - 1:30 PM. - Telephone Conversation by Gentry to:
A.C. Johnson, Chief, Mining Division, USBM, Reno, Nev.
George H. Holmes, Mining Engineer " "
Re: the subject Docket:

Baltimore Canyon Co. - Now driving the Huston level.
89 ft. progress on Jan. 9-52
Inspection of Work will be made next week by USBM. Region IV
and Report of progress made.

Examining engineers would probably agree to the
4 holes (665 ft. of D.D.) from face of New Huston Level as the
- FIRST STEP -
Cross Cutting and drifting later, to depend on
Results of D.D. holes.

Exploration should proceed by steps -
Exploration and preparing for production should be kept
seperate -

Should Re-examine and submit opinion on Revised Program
after the Huston Level Reaches the 340 ft. mark.

The Company have cleared a mill site at Ely, Nev.,
but have not started to move the mill from Idaho.

Hold Revised Application in abeyance until after
Huston Tunnel Reaches its objective.

Baltimore Camas Mines, inc. - (DMA 2137 Revised on Jan. 20. 52)
Presently driving a new adit called
the Huston Tunnel. Schafer Mine

From stations on either side of the main haulage Level
at 340 Ft drill holes as follows;

1- hole, due West 65 ft. deep - Flat hole
1- " N40° " 90 ft. " - " "
1- " N80° East 300 ft. " - " "
1 " N41° " 210 ft. " - " "
4
665 ft.

Extend main Huston Level (Lower Level) 100 ft. Northward
X-cut 50 ft. West from 340 Sta. to Blue Ls Contact
X- " 320 ft. east from 425 Sta. to X-cut Spud Patch Vein
Drift 200 ft. on Spud Patch Vein

Carry out additional 500 ft. of Core drilling from and to
Vantage Points indicated by the foregoing exploration.

Totals Would be: 1165 ft. of DD
300 ft. of drifts
370 ft. of X-cuts
The Company estimates Cost @ $27424.16

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

Office of
Executive Officer
DMEA Field Team
Region III

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

January 29, 1952

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-2137, Baltimore Camas Mines, Inc. Schafer Mine, White Pine County, Nevada (Tungsten)

Reference is made to my subject memorandum to you dated January 28, 1952.

Attached are four copies of MF-103 form, Revised Application for an Exploration Project, submitted by the Baltimore Camas Mines, Inc. on their Schafer Mine, DMEA-2137, to our office at Reno, Nevada.

Revised Appl.

Form MF-100 on this property was filed on October 5, 1951.

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

Attachment

Copy to E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1952

OFFICE OF THE ADMINISTRATOR

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

Office of
Executive Officer
DMEA Field Team
Region III

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

January 28, 1952

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-2137, Baltimore-Camas Mines, Inc. Schafer Tungsten Mine, White Pine County, Nevada

Reference is made to subject memorandum to me dated October 31, signed by Tom Lyon, referring the subject application to this office. Reference is also made to letter dated December 29 from C. O. Mittendorf to H. C. Miller, and my memorandum reply dated January 3, 1952.

A field examination was undertaken and four copies of a report, "Docket DMA-2137, Baltimore-Camas Mines, Inc., Schafer Tungsten Mine, White Pine County, Nevada", by George W. Holmes, Jr. and L. F. Muller, mining engineers, U. S. Bureau of Mines, and R. M. Smith and B. J. Sharp, geologists, U. S. Geological Survey, dated January 22, are attached herewith.

According to the report by the examining engineers and geologist, the tungsten deposit at the Schafer Mine is in a calcite stringer zone which cuts limestone of Cambrian age. The ore shoot is exposed for 90 feet along the strike and is as much as 8 feet wide; it has been mined down dip for about 50 feet. Production to date has been 1700 tons of scheelite ore averaging 0.81 percent WO_3.

The examining engineers and geologists believe that exploration of the Schafer Mine may be justified although the work originally proposed by the applicant would not be good exploration practice.

A counter proposal was made by the engineers and geologists that the applicant sink a winze on the ore as it would be a more practical method of exploring the deposit. The applicant is not agreeable to the plan proposed by the DMEA team and are driving a new adit 339 feet to the northwest located about 220 feet southeast and 117 feet vertically below the Schafer workings to explore for the downward extension of the known ore bodies.

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

The applicant is withdrawing his original application and is planning on submitting a new application for crosscutting and doing some diamond drilling from the present adit that they are now driving. I believe that this would be a logical way of exploring the deposit.

The applicant has written in for a set of MF-103 forms, so it seems that he is planning definitely to make a new application.

The docket is being returned herewith.

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

Attachments

Copy to E. H. Bailey, USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

Reviewed by
DMEA OPERATING COMMITTEE
2-6-52
(date)

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

Docket DMA-2137, Baltimore-Camas Mines, Inc.

Schafer Tungsten Mine
White Pine County, Nevada

George H. Holmes, Jr., Mining Engineer
U. S. Bureau of Mines

L. F. Muller, Mining Engineer
U. S. Bureau of Mines

R. M. Smith, Geologist
U. S. Geological Survey

B. J. Sharp, Geologist
U. S. Geological Survey

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
FEB 4 8 07 AM '52

January 22, 1952

ON SITE EXAM.

Docket DMA-2137, Baltimore-Camas Mines, Inc.

Schafer Tungsten Mine
White Pine County, Nevada

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The tungsten deposit at the Schafer Mine is in a calcite stringer zone which cuts limestone of Cambrian age. The ore shoot is exposed for 90 feet along the strike and is as much as 8 feet wide; it has been mined down dip for about 50 feet. Production to date has been 1700 tons of scheelite ore averaging 0.81 percent WO_3.

The stringer zone is displaced by pre-mineral bedding faults that also contain scheelite, but the material is too low in grade to be mined.

It is concluded that the ore shoot in the Schafer Mine may continue to considerably greater depths although it is likely to be lenticular and erratically mineralized. Indicated ore reserves immediately below the existing level are estimated to be 450 tons averaging 0.5 percent WO_3; inferred reserves in the block containing the downward extension of the ore shoot and extending 100 feet below the existing level are estimated to be 2,000 tons averaging 0.5 percent WO_3.

The examining engineers and geologists believe that exploration of the Schafer mine may be justified, although the diamond drilling proposed by the applicant is not good exploration practice and the crosscut is too costly. It was suggested to the applicant that a 100-foot winze would be a more practical method of exploring the deposit at depth.

The applicant has withdrawn his original proposal and is now driving a 339-foot adit to the northwest located about 220 feet southeast of and 117 feet vertically below present mine workings. Exploration for the

downward extension of known ore bodies will be done from this adit and a new application for exploration aid will be submitted to cover this work.

The DMEA field team believes that an exploration program from this new adit will be feasible.

INTRODUCTION

The Schafer tungsten mine of the Baltimore-Camas Mines, Inc. was first examined on Nov. 1, 1951 by engineers[1/] of the Bureau of Mines accompanied by Loren Smith, superintendent and C. V. Almandinger, mine foreman. The property was re-examined on Nov. 29, 1951 and Jan. 9, 1952 by geologists[2/] of the U. S. Geological Survey and an engineer[3/] of the Bureau of Mines.

The property comprises 7 unpatented lode mining claims in T. 24 N., R. 62 E., M.D.B.&M., in the Cherry Creek Mining District, White Pine County, Nev., about 5 miles by road northwest of the town of Cherry Creek and 55 miles northwest of Ely, the nearest supply center and shipping point, which is on U.S. Highways 6, 50, and 93 and the Nevada Northern Railroad (fig. 1).

To reach the claims from Ely, travel U. S. Highway 50 and 93 north for 38 miles to Schellbourne Station; turn west and go 12 miles over a graded dirt county road to Cherry Creek; then northwest over an ungraded road 5 miles to the property.

1/ George H. Holmes, Jr. and L. F. Muller.
2/ R. M. Smith and B. J. Sharp.
3/ L. F. Muller.

HISTORY

Claims comprising the Schafer group were located by Frank Schafer in 1922 and intermittent exploratory work was done between 1922 and 1947, when the property was leased to the Cherry Creek Tungsten Mining Company. During 1947 to September 1950 when the lease was relinquished, this company produced and shipped to their mill at Cherry Creek a reported 1,000 tons averaging 1.0 percent WO_3. Production was from a northerly trending mineralized zone (fig. 2).

The legal dispute between Frank Schafer and the Cherry Creek Tungsten Mining Company has been settled. The company gave up the lease because of:

a. Unsatisfactory working relations with the owner.

b. Exhaustion of developed ore.

c. Drop in price of tungsten concentrates.

The Cherry Creek Tungsten Mining Company's work comprised driving a 185-foot adit, raising, stoping and diamond drilling. The ore body was stoped for a length of 80 feet and to a depth of 40 to 50 feet below surface.

The claims were transferred in 1951 under a purchase agreement to the Baltimore-Camas Mines, Inc. of Boise, Idaho. This company moved in equipment, constructed a compressor house and tool shop, and started exploration of the deposits. Work has consisted of extending the adit to the north, driving a short crosscut from this adit to the east, and mining ore left in the stope. An estimated 100 tons of ore averaging 1.0 percent WO_3 has been produced from this work and shipped to Hailey, Idaho, for metallurgical testing. An additional 500 tons averaging about 0.5 percent WO_3 was shipped to the Cherry Creek tungsten mill for concentration.

On December 12, 1951 a new adit was started 220 feet southwest of and 117 feet vertically below the Schafer workings to explore for downward extensions of known ore zones (fig. 5).

An adit was also started to explore the ore zone in the Spud Patch area.

PHYSICAL FEATURES

The claims are in an area of moderate relief on northerly trending foothills along the west slope of Egan Range of mountains at elevations ranging from 6500 to 7000 feet. The climate is temperate with warm, dry summers and severe winters. Heavy snows could impede work between December and April, although the road from Cherry Creek to the mine could be kept open by snow plows.

No water is available on the property and would have to be hauled by tank truck from the Cherry Creek Tungsten Mining Co.'s mill, 5 miles to the southeast. An adequate supply of water is available here during the entire year.

Vegetation comprises pinon pine and mountain mahogany. Timber for mine use would have to be imported from outlying supply centers.

No transmitted electric power is available. Compressed air is furnished by a Diesel-driven compressor. Lighting would have to be supplied by gasoline or a Diesel-driven generator.

The Nevada Northern Railroad, which extends north from Ely and connects with the Western Pacific Railroad at Shafter and the Southern Pacific Railroad at Cobre, maintains a station 4 miles east of Cherry Creek. A siding and loading ramp has been built near the intersection of the Nevada Northern Railroad and the Cherry Creek-Schellbourne county

road about 10 miles southeast of the mine.

LABOR AND LIVING CONDITIONS

Mine supervisory personnel and employees live at Cherry Creek as sufficient housing is available there. The houses are old and without modern facilities although a small amount of renovation would make them livable.

Efficient local labor is scarce and miners will have to be brought in from other camps. The Baltimore-Camas Co. states that it will be able to maintain a full crew for the proposed exploration.

Daily wages are currently $14; the company, however, proposes to contract the exploration which will provide an incentive basis and higher pay.

SAMPLING

Seven samples were taken from the open stope, adit level, and the main ore bin which will indicate the character and grade of ore existant along this mineralized zone (fig. 4).

Sample No.	Width/ft.	WO_3, percent	Location
1	1.5	1.14	North end, stope.
2	2.5	6.91	Do
3	4.0	0.39	South end, stope.
4	4.0	0.31	Crosscut, east side stope.
5	8.5	1.19	Crosscut, from adit.
6	3.0	0.28	North end, adit.
7	grab	0.36	Ore bin.
8	5.0	0.33	Normal to ore zone in bottom.
9	4.5	0.03	Normal to ore zone at end of stub drift.
10	4.0	0.53	Normal to ore zone at end of stope.
11	3.0	0.42	Vertical cut across ore zone.
12	4.0	0.21	Horizontal cut across ore zone.

GEOLOGY

The rocks in the area are limestone and shaly limestone of probable Cambrian[4] age which are steeply tilted. They are cut by west-dipping bedding faults and by an east dipping calcite stringer zone. The principal ore deposit is associated with the stringer zone.

The limestone in the mine area is massive and is commonly mottled blue-black; a thin bed of limestone containing shaly partings crops out about 100 feet west of the portal.

The sedimentary rocks strike north and dip 40°-65° W. They are cut by bedding faults of small displacement and by a shear zone that strikes north and dips 45°-70° E. The bedding faults commonly contain quartz and calcite veins in a highly leached zone as much as 10 feet wide. The shear zone is filled with narrow calcite stringers and a few quartz stringers in a zone about 8 feet wide. This zone contains most of the ore.

ORE DEPOSITS

The only known ore body on the property is now being mined in the Schafer mine (figs. 2 and 3). The ore occurs in a zone of parallel calcite stringers which strike north and dip 45°-70° E. The zone is exposed for 90 feet along the strike, and is as much as 8 feet wide; it has been mined from the surface 50 feet down dip to the existing level. The rake of the ore shoot is not known.

The ore mineral is scheelite which, at the Schafer mine, is associated

4/ Klepper, M. R., Tungsten deposits of the Cherry Creek District, White Pine County, Nevada: Strategic Minerals Investigations, Supplementary Report, pp. 9-10, 1943.

with the calcite stringers. Production has been about 1700 tons of ore averaging 0.81 percent WO_3. The stringer zone is cut by bedding faults that also contain scheelite. The width of the stringer zone is greater at fault intersections, and irregular masses of coarsely crystalline calcite containing small amounts of scheelite occur in the drag area near the faults. In addition to scheelite, a little stibnite and oxidized silver minerals are reported to occur in the area.

At the Spud-patch adit (figs. 2 and 3), scheelite is associated with quartz veins in a leached zone that follows a bedding fault. The zone is as much as 10 feet wide. Scheelite masses weighing 3 to 6 pounds have been sorted from the broken ore but the average grade of the material is too low to mine. Surface exposures above this adit contain only traces of scheelite.

ORE RESERVES

There is no blocked out ore at the Schafer mine. The indicated reserves immediately below the existing workings, in the triangular block 90 feet long, 4 feet wide, and extending 30 feet down the dip, are 450 tons that may average 0.5 percent WO_3.

Judging from the experience of miners in the district, it is inferred that the ore shoot in the Schafer mine may continue to considerably greater depths although it is likely to be lenticular and erratically mineralized. The inferred reserves in the block extending 100 feet below the present level and containing the downward extension of the ore shoot are, in addition to the indicated reserves, 2000 tons containing 0.5 percent WO_3.

Showings at other workings on the property do not appear promising, and no material of commercial grade is now exposed in them.

PROPOSED EXPLORATION

The applicant has proposed that the downward continuation of the ore shoot in the Schafer mine be explored as follows: (1), drill two 100-foot diamond drill holes within the ore shoot to determine the downward extent of the ore, (2), drive a 400-foot crosscut to intersect the vein at a depth of 100 feet below the existing level, then (3), drift 400 feet along the vein. He has also proposed to drift 100 feet north on the Spud-patch vein from the existing adit. He has estimated the cost of the proposed work to be $31,313. The Coordinating Committee referred the application to the field for examination, and asked that particular attention be given to the applicants proposals.

The examining engineers and geologists believe that diamond drilling will not be a satisfactory method of exploring this deposit, because the distribution of scheelite is extremely erratic and the holes may miss even a large ore shoot. Holes drilled down dip of the vein might not yield significant information. They also believe that the proposed crosscut is a less effective, and a more costly method of exploring the vein at depth, than a winze on the vein. The continuity and grade of ore down the dip should be determined before extensive work, such as the proposed crosscut, is risked.

Exploration on the Spud-patch vein could best be planned after its intersection with the more productive Schafer vein has been exposed. The showings in the adit do not warrant further investigation at this time.

Accordingly, it was suggested to the applicant that a winze, sunk from the existing workings, would be a more practical method of exploring the ore shoot at depth. The applicant believes his original proposal to

be preferable to the one suggested, and has advised the Field Team (phone Dec. 11, 1951, Williams to A. C. Johnson) that he does not wish to change his program.

The applicant changed his plans, however, at a later date and decided to withdraw the original application for exploration aid consisting of diamond drilling and crosscutting. As company engineers did not agree with the DMEA field team regarding their proposed method of exploration (sinking a winze from existing workings), they decided to drive a new adit 339 feet to the northwest located about 220 feet southeast of and 117-feet vertically below the Schafer workings to explore for downward extensions of known ore bodies (fig. 5). This work is being done on company account. On January 9 the face of the adit was at 89 feet.

A revised application for exploration assistance will be submitted based on exploratory work to be done from this lower adit.

MILLING

The company has advised the DMEA field team that a millsite has been obtained at Lackawanna, about 6 miles north of Ely, Nev., where a 100-ton daily capacity tungsten concentrates will be installed to treat ores from the Schafer and other company properties. This mill is to be moved from Hailey, Idaho.

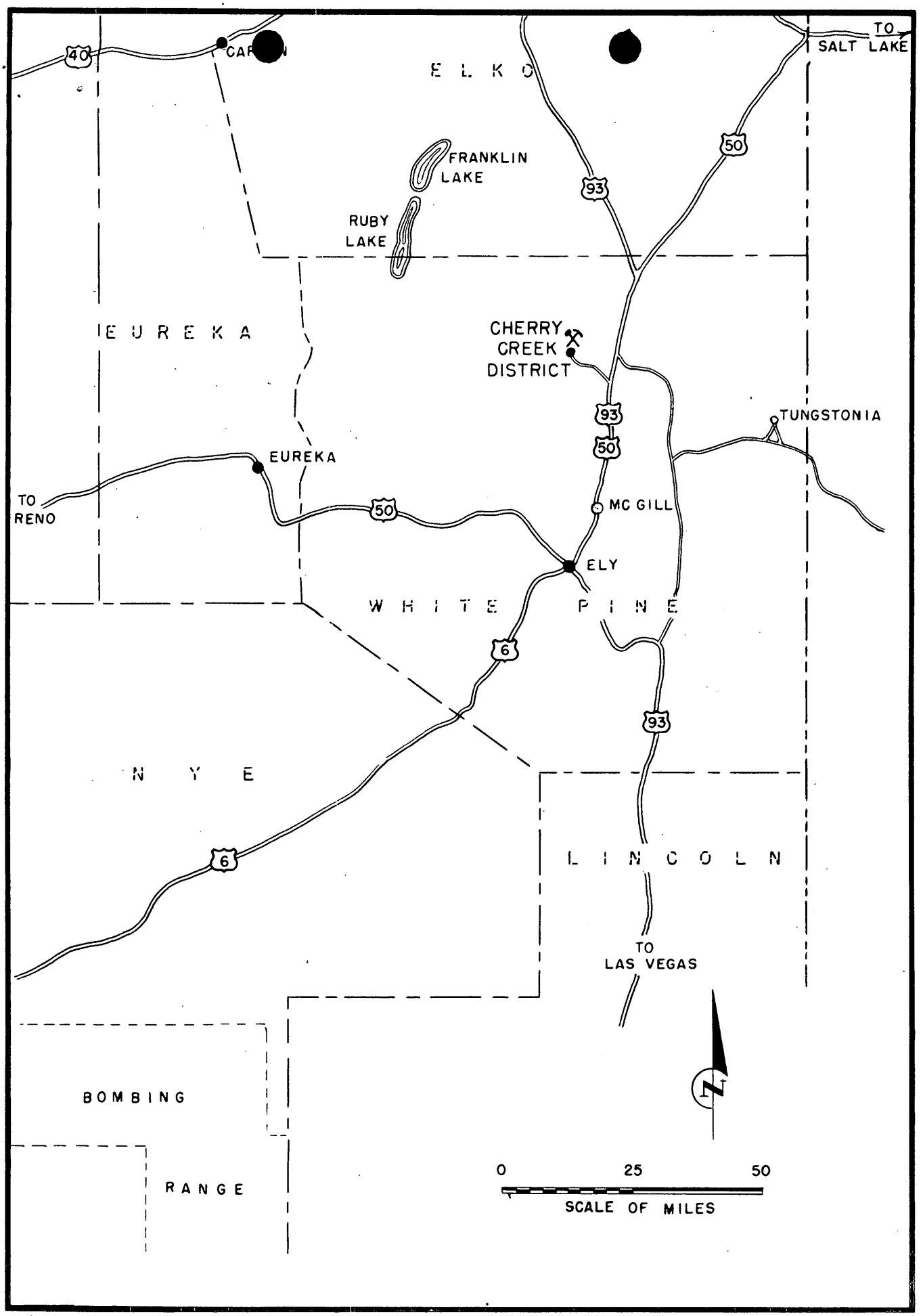
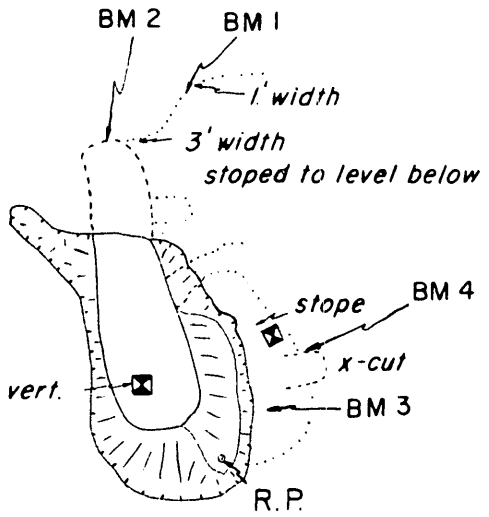
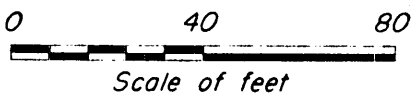


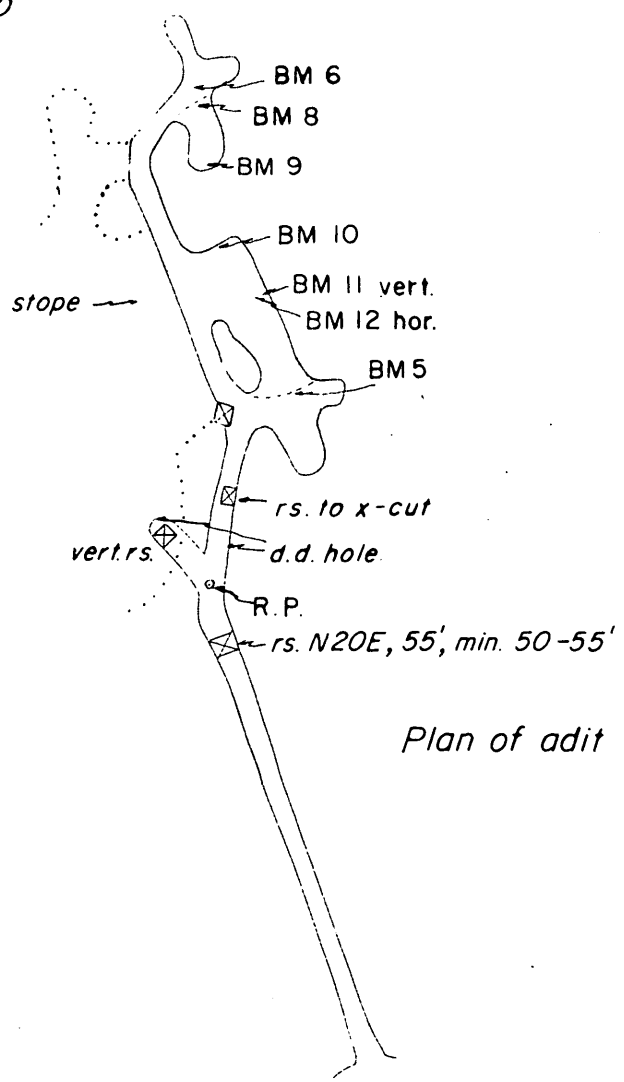
Figure 1- Location map, Cherry Creek tungsten district, White Pine Co., Nevada



Plan of pit



Samples normal to vein unless shown otherwise



Plan of adit

Sample	Width	% WO_3
1	1.5'	1.14
2	2.5	6.91
3	4.0	0.39
4	4.0	0.31
5	8.5	1.19
6	3.0	0.28
7	Bin	0.36
8	5.0	0.33
9	4.5	0.03
10	4.0	0.53
11	3.0	0.42
12	4.0	0.21

Figure 4 - Assay map, Schafer tungsten mine, White Pine County, Nevada

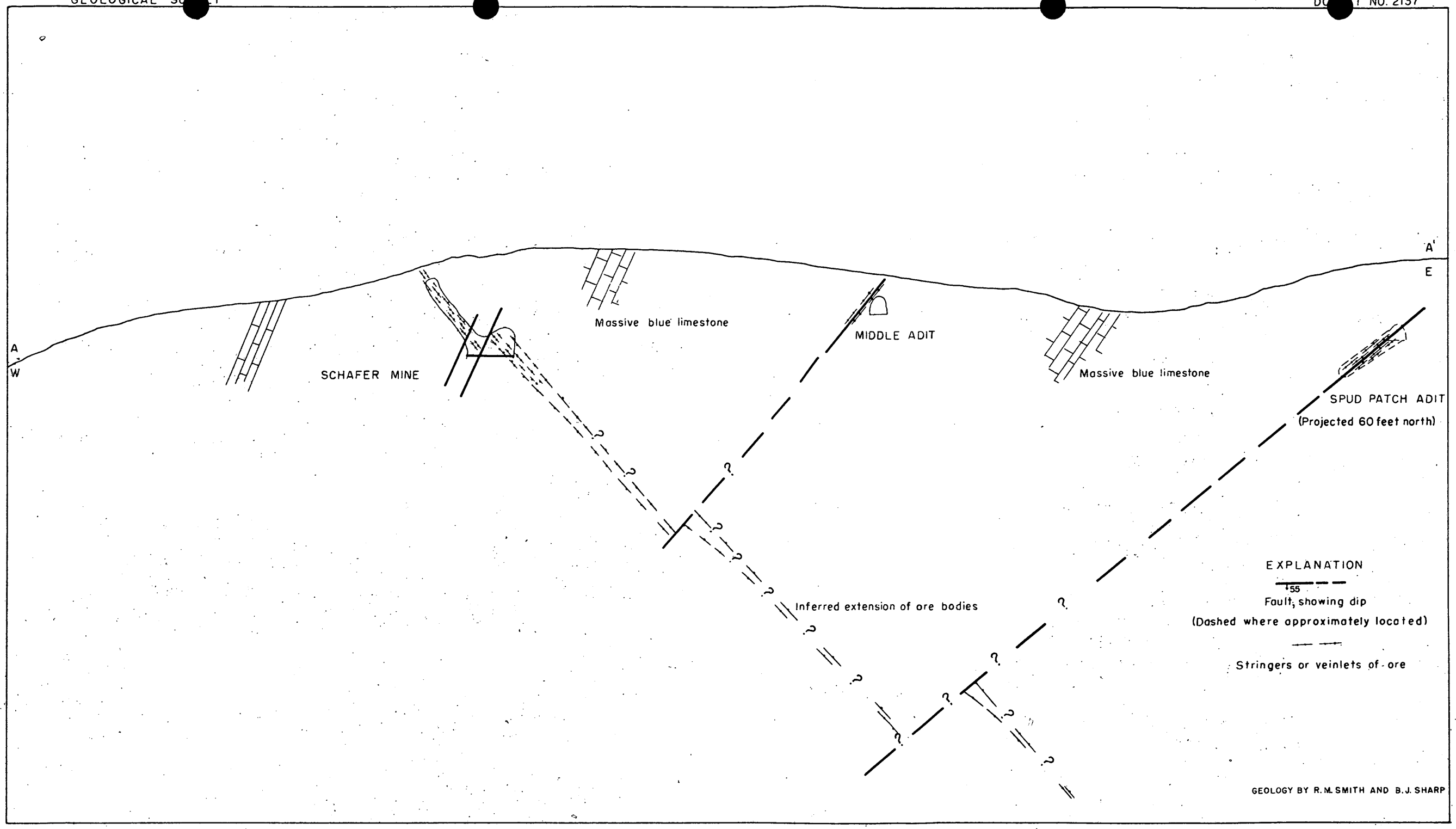


FIG. 3

SECTION ALONG LINE A–A'

SCHAFER MINE, CHERRY CREEK MINING DISTRICT

WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

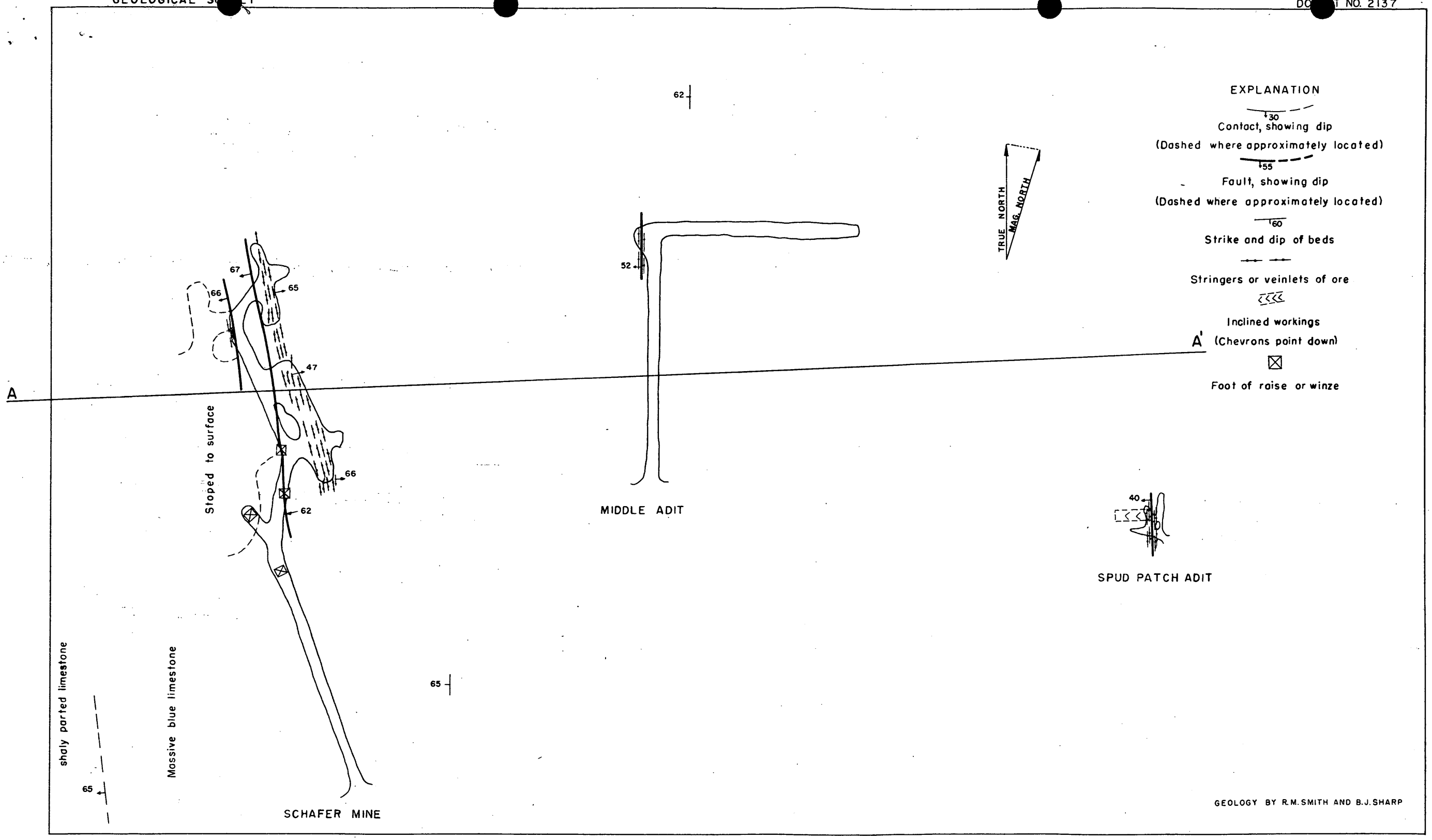


FIG. 2

GEOLOGIC SKETCH MAP OF SCHAFER MINE
CHERRY CREEK MINING DISTRICT
WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

DMA-2137-T

COPY

January 18, 1952

Mr. C. P. Williams, President
Baltimore Camas Mines
601 Eastman Building
Boise, Idaho

Dear Mr. Williams:

This will confirm my phone conversation of this date in which I advised that the field team expects to make an examination of the Ajax Tungsten property in Juab County, Utah, just as soon as snow conditions will permit.

Reports on the Shafer Mine and Hilltop Mine in White Pine County, Nevada, we understand have been finished by the field team and those reports should be received here in Washington at an early date. Just as soon as Mr. Holderer has received the analysis we will contact you and then you can come on here for the purpose of discussing these properties and the question of financial aid you have requested in connection with the moving of a mill from Idaho to Nevada.

As I have advised you, arrangements are being considered for taking concentrates to a central digester. This will eliminate part of the expenditure you have considered heretofore.

Very truly yours,

/Signed/ HOWARD I. YOUNG

Howard I. Young
Deputy Administrator

HIY:owb
cc: Mr. Larson
Senator Dworshak
Congressman Baring
Mr. Douglas
Mr. Lyon
Mr. Holderer
DMPA Files
Admin. Files

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

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

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 8 1952

January 3, 1952

Memorandum

To: C. O. Mittendorf, Acting Administrator, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-2137X - Tungsten - Schafer Mine, White Pine County, Nevada - Baltimore Camas Mines, Inc., Eastman Building, Boise, Idaho.

Reference is made to your subject letter dated December 29, requesting advice as to the progress of our investigation of subject property.

The property was examined by our engineers and geologists in November, at which time the plans of the applicant for exploring the property were found to be unfeasible. A different plan for carrying out the exploratory work was proposed to the applicant by engineer L. F. Muller of the Bureau of Mines and geologist Roscoe Smith of the Geological Survey, and on December 13 Mr. D. E. Anderson, engineer for the Baltimore Camas Mines, Inc. wrote Mr. A. C. Johnson, Chief, Mining Division, Bureau of Mines, Region III, in part as follows:

> "We have given careful thought to the proposals advocated by your engineers for exploration of this company's SCHAFER property and find that from a standpoint of economics of both time and money we cannot concur in the sinking program proposed by Mr. Smith and Mr. Muller. We did, however, through the course of our discussions with your engineers gain some helpful information and have since, through application of some of the geologic principles discussed, made some revision in our own plan of attack".

On December 17 Mr. Johnson wrote to me stating that the company is planning to submit a new proposal for exploring the

Schafer Mine in White Pine County, Nevada, and it has requested that I send a new set of MF-103 forms to Mr. Anderson. These forms went forward on December 19, so that the Washington Office of the Defense Minerals Exploration Administration shortly should receive a revised application from the company.

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

Copy to E. H. Bailey, USGS

FILE COPY
SURNAME:

Brewer
Selfridge

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

DEC 29 1951

Mr. H. C. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMA 2137X - Tungsten
Shafer Mine, White Pine Co., Nevada
Baltimore Camas Mines, Inc.
Eastman Building, Boise, Idaho

Dear Mr. Miller:

A field appraisal of the above noted property was requested of your office by air mail letter dated October 31, 1951, the said letter enumerating seven points of interest.

Please advise us of the progress of your investigation at this time.

Sincerely yours,

C. O. Mittendorf (fw) 12-29

Acting Administrator
Defense Minerals Exploration
Administration

QLBrewer8lm
12/28/51

cc: Admn. Reading File
Mails and Files Br.
C. O. Mittendorf
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Docket
G. C. Selfridge
Q. L. Brewer

BE

File in 2137
Baltimore Camas

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

P. O. BOX 1551
RENO, NEVADA

December 17, 1951

Mr. Tom Lyon, Chairman
Coordinating Committee
Defense Minerals Administration
Washington 25, D.C.

Dear Mr. Lyon:

Under date of October 31, docket DMA-2137, Tungsten Exploration project for the Shafer Mine, White Pine County, Nevada, Baltimore Camas Mines, Inc., 601 Eastman Building, Boise, Idaho, was forwarded to Mr. H. C. Miller, Executive Officer of the DMEA Team, for further information on this property.

The docket has not been returned because the plans for exploring this property were not feasible and the company now plans on re-submitting a new application for exploration work. As soon as this new application is received, a report will be sent to you.

Very truly yours,

A. C. Johnson

A. C. Johnson, Chief
Mining Division
Region III

10/31/51 - to Reg. III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 27 1951

December 17, 1951

Mr. C. S. Lumley
Executive Vice-President
M. E. Boyster & Associates
2000 Industrial Bank Bldg.
Detroit 26, Michigan

Dear Mr. Lumley:

A copy of your letter of November 29, addressed to the Bureau of Mines, Washington, D. C., requesting information on core drilling that was done by the Bureau of Mines in Township 25-N., Range 34-E., Pershing County, Nevada, has been referred to this office for further reply.

The property referred to is the Segerstrom-Heiser iron property in Pershing County, Nev. The Segerstrom-Heiser deposit is in the northeast portion of an area about 10 miles long and 6 miles wide, throughout which several other widely scattered iron deposits are found. In this deposit, the magnetite ore bodies, somewhat lenticular in shape, outcrop sporadically over an irregular area approximately 1½ mile in length, which varies from less than 100 to over several hundred feet in width. Except in the northeastern part of the deposit, these ore bodies occur in a dense, fine- to coarse-grained diorite, which, though well exposed in the open pits, seldom outcrops. Northeast of the principal deposit and approximately half a mile distant, outcrops of magnetite are found in a fine-grained siliceous rock appearing to be rhyolite. Still farther east about ½ mile, the rhyolite is capped by a basic flow.

The deposition is believed to have been of the vein type, the mineral-bearing media having deposited the ore in openings in the diorite on the west end and the rhyolite on the east. No evidence that the ore bodies might have been formed by replacement of either diorite or rhyolite was noted.

Magnetite is the only ore mineral of consequence. Gangue minerals are chlorite, calcite, apatite, pyrite, and minor quantities of quartz. Except for the chlorite, which is largely secondary, the gangue minerals are all primary and were deposited with the magnetite.

I am sorry that I do not have a copy of Report of Investigations R. I.-4025 to send you as it is out of print. However, these reports of investigations can be consulted at any good public library.

Very truly yours,

A. C. Johnson, Chief
Mining Division
Region III

ACJ:gh
cc: H. C. Miller
Base Metals Branch - Wash., D.C.
Minerals Div., - Wash., D.C.

Dabit file

FILE COPY 340
SURNAME:

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

Holderer
Wallgard
Guhon
Thayer

Air Mail

Mr. H. C. Miller, Executive Officer
DMA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco, California

Subject: DMA-2137 Tungsten, Exploration project 631,313
Shafer Mine, White Pine County, Nevada
Baltimore Gamas Mines, Inc., 601 Eastman
Building, Boise, Idaho.

Dear Mr. Miller:

We are referring the subject application to you for a field appraisal to determine its merits and the best method of exploration - if advisable.

Please investigate the following parts of the applicant's proposal with a view of alternate and more practical methods:

1. The proposed two 100-foot diamond drill holes from near the face of the drift are evidently designed to be drilled in a 2-3 foot vein down dip and along the strike. This is impractical and would give misleading results. They should be drilled from the surface, if the topography permits, or the hole to test the downward extension can be drilled from a crosscut into the hanging wall.

2. To drive 400 feet of crosscut to get 100 feet of depth is a lot of "dead work." Why not sink an inclined shaft in the vein, drift from it, and get out ore at the same time?

3. Surface trenching and sampling should be planned ahead of the proposed 400 feet of drifting to guide and/or justify the drifting.

4. It appears that more surface exploration is in order at the "Good Patch" vein, in addition to the drift already started there.

5. The costs should be checked and also the competence of the applicant.

6. Is the legal dispute settled and why did Cherry Creek give up the lease?

7. What are the plans for milling the ore?

If your investigation is favorable, please assist the applicant to complete all the necessary exhibits and contract forms and forward them together with your report and recommendations.

Very truly yours,

signed 10/31

A. P. Parsons, Acting Chairman
Coordinating Committee

Enclosures

Bureau of Mines

Geological Survey

TJBallard:ec
Oct 23, 1951

CC: Adm. Reading File
DMA Docket File
Field Team Region III
Mr. Lemmon
Mr. Geehan
Coord. Comm.
Mr. Holderer

240

FILE COPY
SURNAME:

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

Holderer
Ballard
Graham
Thayer
Smoot
Thayer for Rock

Air Mail

OCT 31 1951

The Baltimore Comas Mines, Inc.
601 Eastman Building
Boise, Idaho

In reply please refer
to DMA-2137 Tungsten

Gentlemen:

We are referring your application for an exploration project on the Shafer Mine to Mr. W. C. Miller, Executive Officer, DMA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco, California, for a field appraisal.

Please contact Mr. Miller and offer your cooperation.

Very truly yours,

Signed 10/31
cc

A. P. Parsons, Acting
Director, Supply Division

TJBallard:ec
Oct 23, 1951

CC: DMA Docket File
Adm. Reading File
Field Team Region III
Mr. Holderer

BALTIMORE CAMAS MINES, Inc.

601 Eastman Building

BOISE, IDAHO

DEPARTMENT OF THE INTERIOR
RECEIVED
NOV 1 9 1951
Defense Minerals Administration
Production Expansion Division

October 25, 1951

Defense Minerals Administration
Washington, D. C.

Refer:
Serial No. 2719
Docket No.D.M.A. 2137

Attention: Mr Selfridge

Tungsten

Gentlemen:

We are herewith enclosing the required signed copies of LANDLORD'S SUBORDINATION AGREEMENTS relative to the exploration loan applications on the SHAFER PROPERTY.

In addition copies of original contracts and transfer transactions from the original contracts to the present operational status are enclosed.

Any additional imformation relative to these projects will be supplied upon request.

Respectfully,

G. P. Williams, President
Baltimore Camas Mines, Inc.

gpw/aep

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 9 1951

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George B. Holderer DATE: October 15, 1951

FROM : T. P. Thayer Thayer

SUBJECT: DMA-2137 Shafer Mine, White Pine Co., Nevada
Baltimore Camas Mines, Inc., Boise, Idaho

The information in Geological Survey files is out of date, but indicates minable ore on the property. The later operations by the Cherry Creek Mining Co. bear out the Survey findings.

The docket will have to be referred to the field for general appraisal as to merit and best method of exploration.

The proposal to diamond drill along and down the ore shoot does not seem very practical, and question of drilling across the dip from the surface should be looked into. The surface profile shown in the vertical section with the underground map suggests that diamond drilling would be very effective.

The reasons for termination of the lease by the Cherry Creek Mining Co. should be checked with the company.

The possibility of self-liquidating exploration down along the ore shoot should be considered, and plans for milling the ore.

October 9, 1951

Subject: Exploration
Re: DMA-2137

Mr. G. P. Williams, President
Baltimore Camas Mines, Inc.
601 Eastman Building
Boise, Idaho

My dear Mr. Williams

This will acknowledge receipt of your application dated October 5,1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2137 and referred to the Ferro-Alloys Branch.

Kindly refer to DMA-2137 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

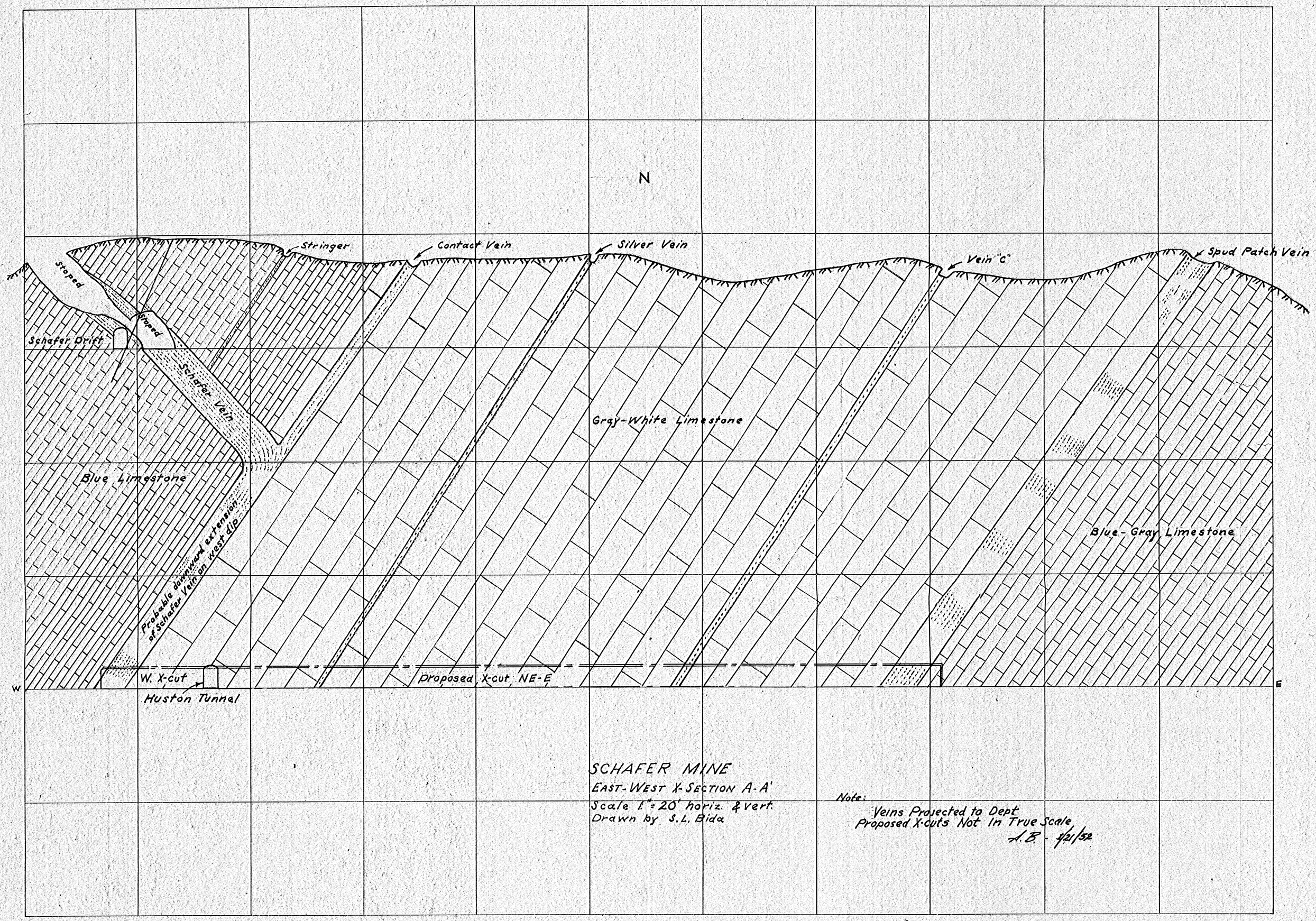
DMEA 2137 - Tungsten E-281

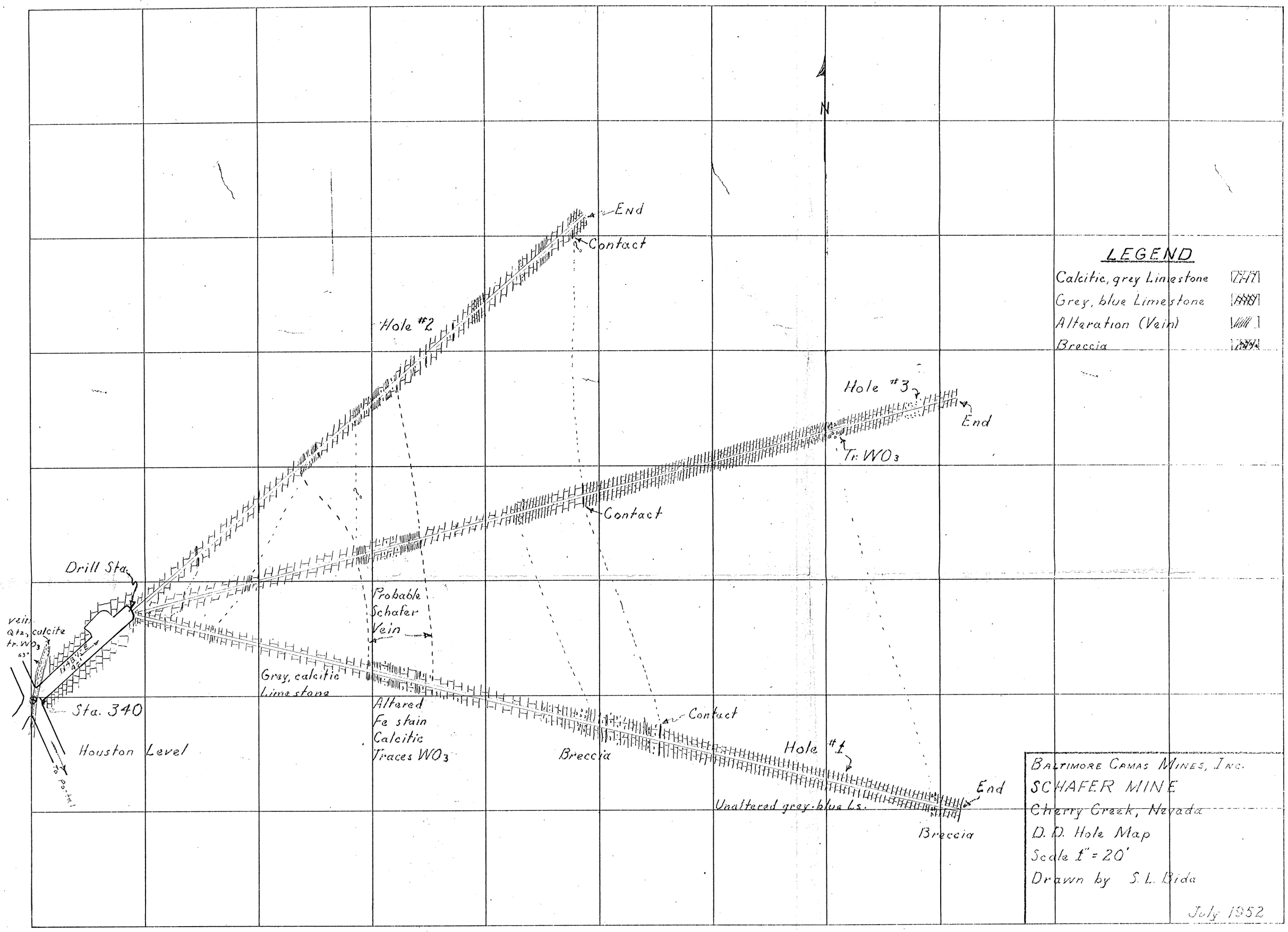
March 31, 1952 (6 mos.) — (expires Sept 31, 1952)
(start in 30 days)

Schafer Mine
White Pine Co., Nevada

$20,280 total
$15,210 is 75%

DMEA-2137. Idm E-281.


N
Stringer
Contact Vein
Silver Vein
Vein "C"
Spud Patch Vein
Stoped
Stoped
Schafer Drift
Schafer Vein
Gray-White Limestone
Blue Limestone
Probable downward extension of Schafer Vein on west dip
Blue-Gray Limestone
W. X-cut
Proposed X-cut NE-E
Huston Tunnel
W
E
SCHAFER MINE
EAST-WEST X-SECTION A-A'
Scale 1" = 20' horiz. & vert.
Drawn by S.L. Bida
Note:
Veins Projected to Dept.
Proposed X-cuts Not In True Scale
A.B. - 4/21/52


N
LEGEND
Calcitic, grey Limestone
Grey, blue Limestone
Alteration (Vein)
Breccia
End
Contact
Hole #2
Hole #3
End
Tr. WO3
Contact
Drill Sta.
Probable Schafer Vein
Vein Qtz, calcite tr. WO3
63°
Gray, calcitic Limestone
Sta. 340
Altered Fe stain Calcitic Traces WO3
Contact
Hole #1
Houston Level
Breccia
To Portal
End
Unaltered grey-blue Ls.
Breccia
BALTIMORE CAMAS MINES, INC.
SCHAFER MINE
Cherry Creek, Nevada
D.D. Hole Map
Scale 1" = 20'
Drawn by S.L. Bida
July 1952

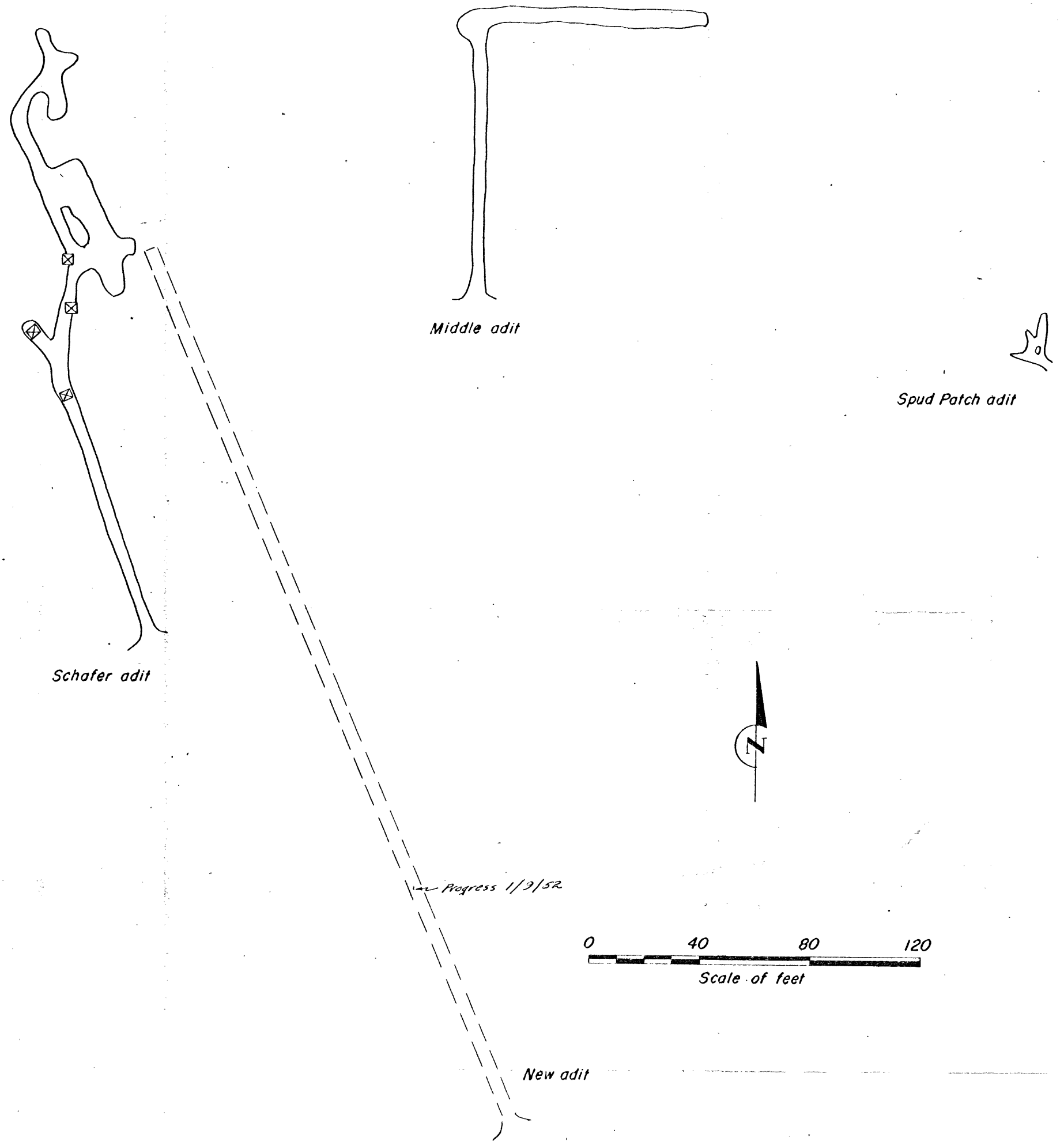
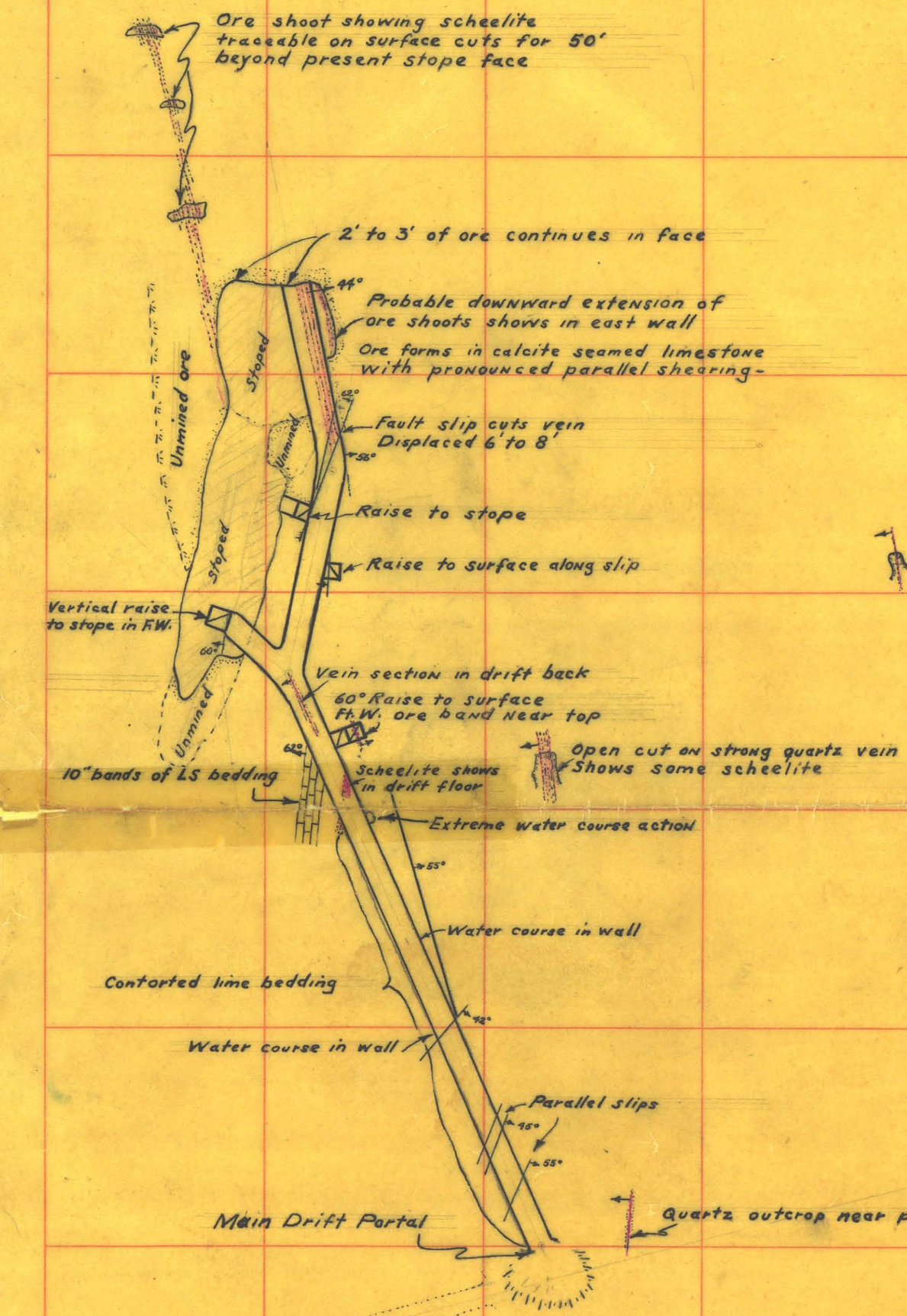
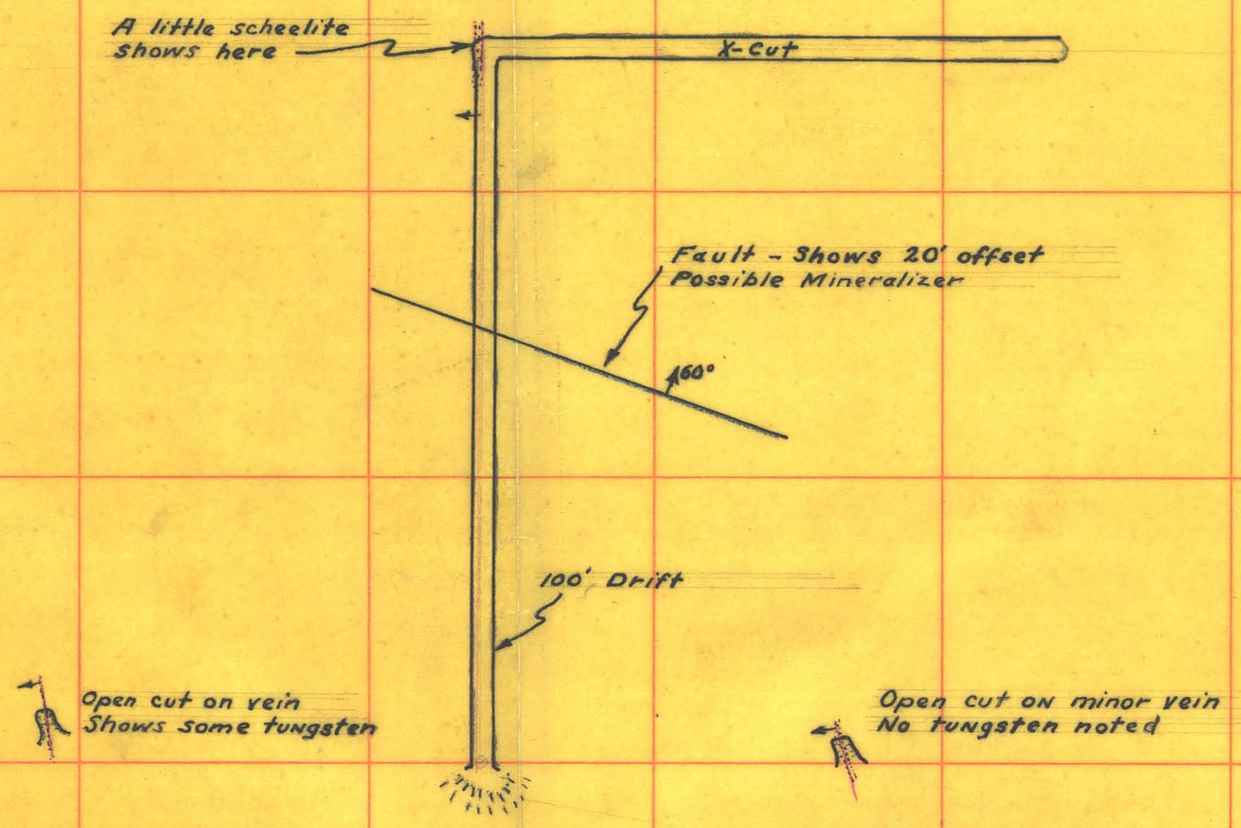
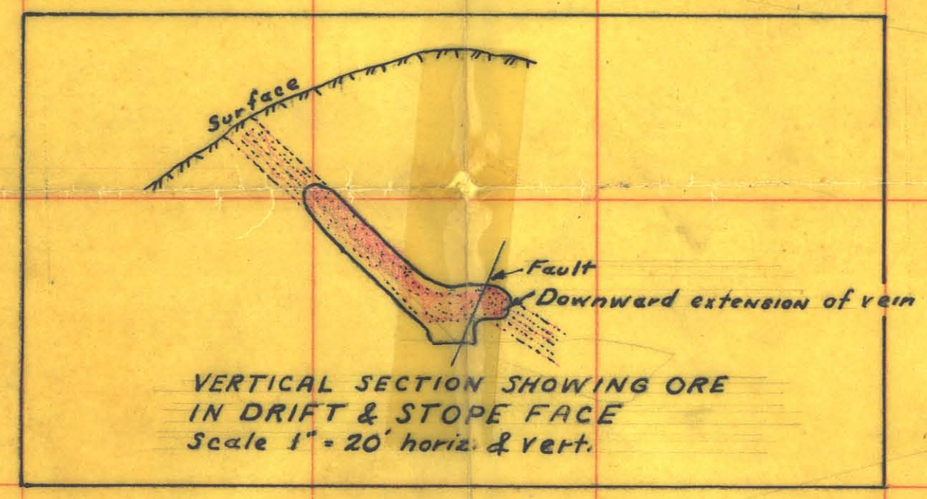
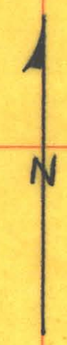


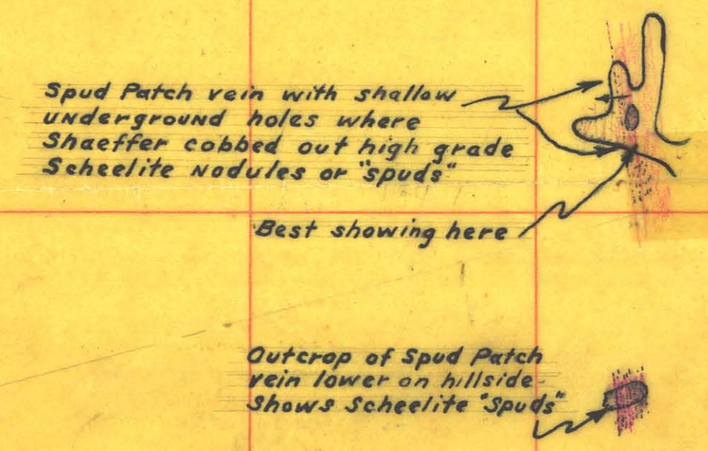
Figure 5 - Schafer Mine workings, showing location of new adit











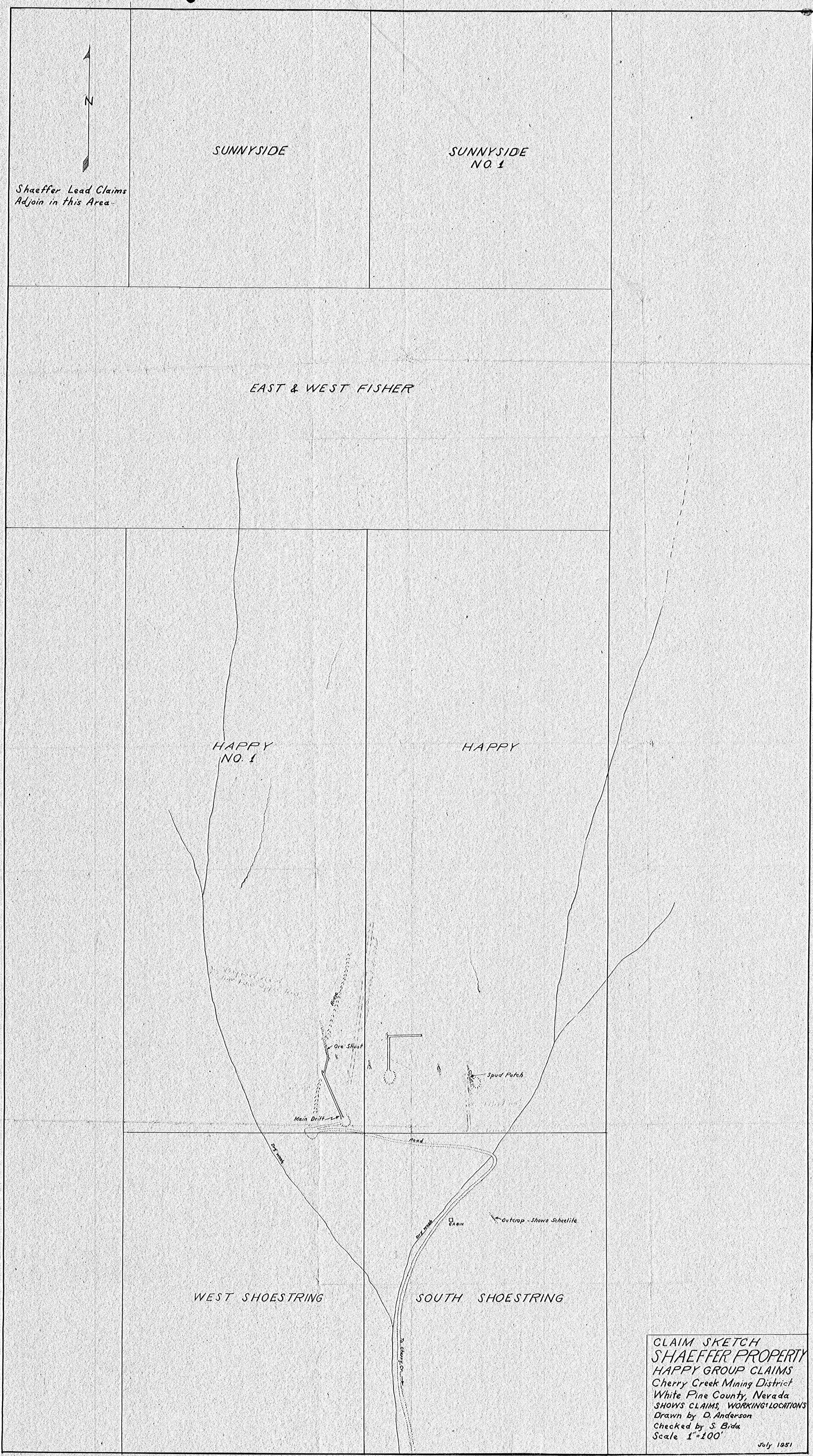
LEGEND

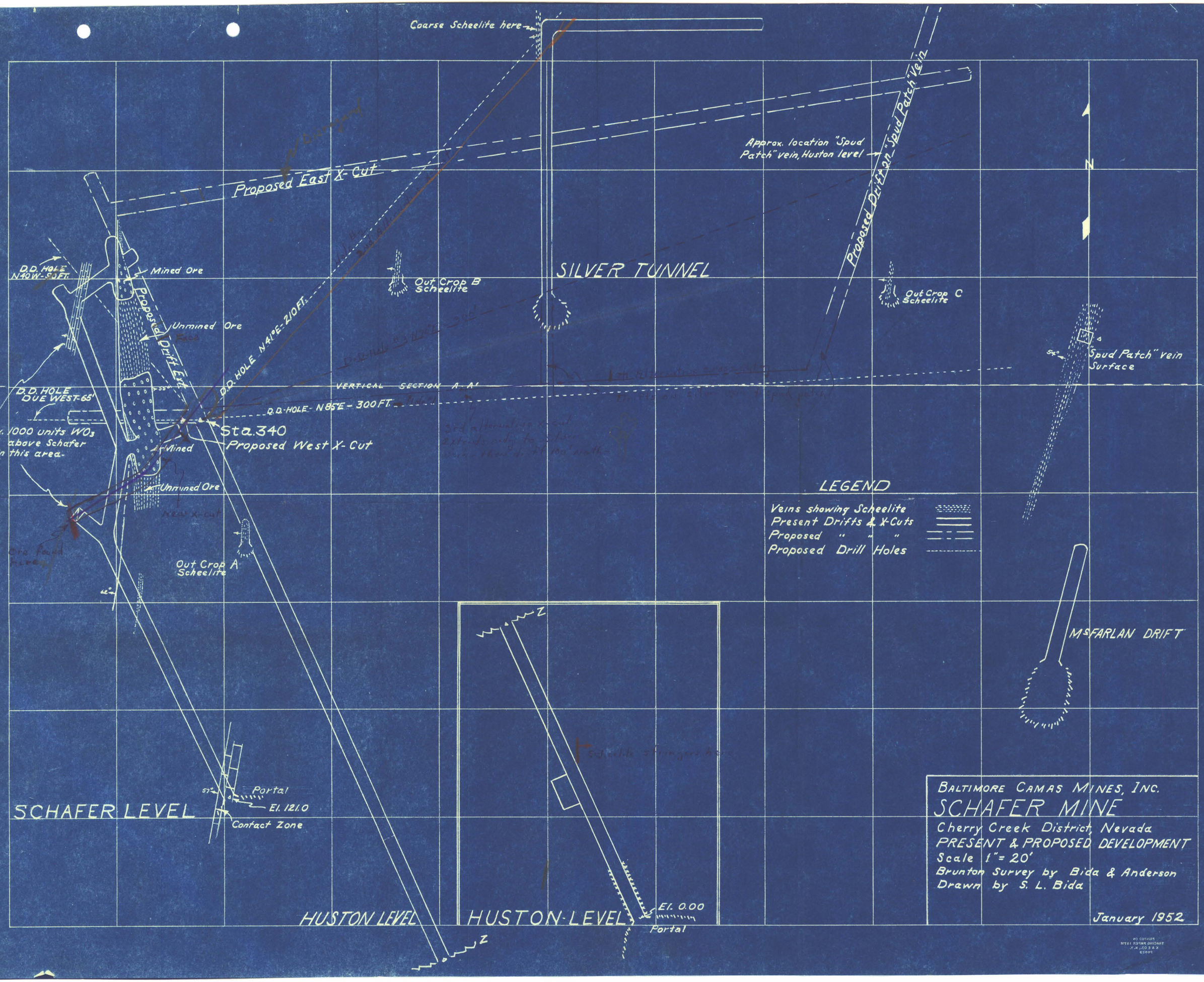
Veins
Faults

GEOLOGIC MAP
SHAEFFER PROPERTY
Cherry Creek District, Nevada
SURFACE & UNDERGROUND GEOLOGY
ON HAPPY & HAPPY NO. 1 CLAIMS

Brunton Survey by- S. Bida & D. Anderson, E.M.'s
Drawn by- D. Anderson
Scale 1 = 20'

July 1951


N
Shaeffer Lead Claims
Adjoin in this Area
SUNNYSIDE
SUNNYSIDE
NO. 1
EAST & WEST FISHER
HAPPY
NO. 1
HAPPY
Ore Shoot
Spud Patch
Main Drift
Road
Dry wash
Dry wash
CABIN
Outcrop - Shows Scheelite
WEST SHOESTRING
SOUTH SHOESTRING
To Cherry Cr.
CLAIM SKETCH
SHAEFFER PROPERTY
HAPPY GROUP CLAIMS
Cherry Creek Mining District
White Pine County, Nevada
SHOWS CLAIMS, WORKING & LOCATIONS
Drawn by D. Anderson
Checked by S. Bida
Scale 1"=100'
July 1951


Coarse Scheelite here
Proposed East X-Cut
Approx. location "Spud Patch" vein, Huston level
Proposed Drift on "Spud Patch" Vein
N
SILVER TUNNEL
Out Crop B Scheelite
Out Crop C Scheelite
D.D. HOLE N40W-50FT.
Mined Ore
Proposed Drift East
Unmined Ore
D.D. HOLE N41°E-210FT.
"Spud Patch" vein Surface
A
VERTICAL SECTION A-A'
A'
D.D. HOLE DUE WEST-65'
D.D. HOLE - N85°E - 300 FT.
Sta. 340
Proposed West X-Cut
Approx. 1000 units WO3 Stoped above Schafer level in this area.
Mined
Unmined Ore
Out Crop A Scheelite
LEGEND
Veins showing Scheelite
Present Drifts & X-Cuts
Proposed " " "
Proposed Drill Holes
McFARLAN DRIFT
Portal
El. 121.0
Contact Zone
SCHAFER LEVEL
HUSTON LEVEL
HUSTON LEVEL
El. 0.00
Portal
BALTIMORE CAMAS MINES, INC.
SCHAFER MINE
Cherry Creek District, Nevada
PRESENT & PROPOSED DEVELOPMENT
Scale 1" = 20'
Brunton Survey by Bida & Anderson
Drawn by S. L. Bida
January 1952