DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~Defense Minerals Exploration Administration~~
OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY

OFFICIAL DOCKET FILE

~~Idm-E NO.~~

~~DMEA~~ OME NO. 6484

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

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

Right Side

- [ ] Project summary (final)
- [ ] Work Comoleted analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab) May 1966
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

OFFICIAL
COPY
O. M. E.
RECEIVED
JUL 30 1965
INITIALS | CODE

MINERAL MOUNTAIN MINERALS, INC.
(an Arizona Corporation)
3049 North Marigold Drive
Phoenix, Arizona
85018

To: CHIEF,
Division of Exploration Operations
Office of Mineral Exploration
Dept. of Interior
Room 4460, Geological Survey
Washington D.C. 20240

Dear Sir:

Attached are two copies of an "Application for Financial Assitance"in Minerals Exploration and we respectfully request its consideration.

We trust the enclosed data are sufficient to enable judgements to be made on the program we recommend, and will supply any additional information if required.

We are forwarding this application direct to you on the request of the Denver Office of the OME.

Thanking you,

Respectfully submitted,
MINERAL MOUNTAIN MINERALS, INC.
by Philip S. Hoyt.
Managing Director.

PSH:k

July 27th, 1965

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 30 1965
INITIALS | CODE

MME Form 40
Jan. 65

Budget Bureau No. 42-R1368
Approval expires Dec. 31, 1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85–701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

MINERAL MOUNTAIN MINERALS, INC.,
an Arizona Corporation
3049 No. Marigold Drive
Phoenix 18, Arizona 820
Phone - 946-3966

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6484

DATE RECEIVED: 7-30-65

REGION: III

DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [ ]
- CORPORATION [X]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED:

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Richard A. Hero		President
Philip S. Hoyt, Jr.		Vice President
B. J. Hero		Secty-Treas.

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Silver (Gold & Copper)

ESTIMATED COST OF PROJECT: $ 46,000.00

PROPERTY NAME	LOCATION COUNTY	STATE
Talley-Wall Rainbow Silver Mine	Pinal	Arizona

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior, Washington 25, D. C., or with the nearest OME Field Office.*

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

July 24th 1965
DATED

Richard A Hero
BY *(Signature)*

President
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a).

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property, state name and address of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and cost of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i.e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

INT.-DUP. SEC., WASH., D.C

THE FOLLOWING DATA ARE PRESENTED TO COVER DATA
REQUIRED FOR THIS APPLICATION FOR FINANCIAL ASSISTANCE
****

1. FINANCIAL ELIGIBILITY - EXHIBIT A

   (a) Copies of letters from: Valley National Bank, Scottsdale, Ariz.
   1st Natl. Bank, " "

   (b) None
   (c) By cash and service.

2. APPLICANTS RIGHTS TO LAND - EXHIBIT B

   (a) Copy of Lease-Option Agreement attached and copy of assignment of Lease-Option Agreement to the Corporation.
   (b) Statement of description of claims and plot showing location, general area and accessability, names of claims, book and page number of recordations.
   (c) Five copies on OME forms 52 of Lein and Subordination Agreement by owners of claims or Lessors. (3 copies attached)

3. PHYSICAL DESCRIPTION - EXHIBIT C

   (a) See copies of Millar Report (1963).
   (b) Description of work now being done on property by the company, its nature, extent and objectives.
   (c) Copies of shipping records of ores mined and sold in 1930's.
   (d) Description of known ore reserves.
   (e) See copy Millar Report.

4. ACCESSIBILITY OF PROPERTY - EXHIBIT D

   (a) Name and address of persons who will meet OME representative:
   Richard A. Hero, President., P. O. Box 754
   Florence, Arizona
   Philip S. Hoyt, Sr. Managing Director
   3049 No. Marigold Drive, Phoenix 18 Arizona
   Phone 946-3966

   (b) Shipping and Supply Points;
   Superior, Arizona - 10 Miles
   Florence, Arizona - 28 Miles
   Phoenix, Arizona - 72 Miles
   Globe and Miami - 30 Miles
   Arizona

MINERAL MOUNTAIN MINERALS, INC.
3049 North Marigold Drive
Phoenix 18 Arizona

July 19th, 1965

Valley National Bank,
Scottsdale, Arizona

Application for Loan of
$35000 for exploration of
Talley-Wall Silver Property
****

Gentlemen:

We are submitting some data and respectfully regest its consideration for a loan of $35000. for the further exploration of the above property.

We are presently doing work on this property to develop its productive status after laying dormant since 1938, and during the years 1936, 37 and 38 some 3000 tons of silver ore was mined and sold to smelters at Miami, Hayden and Superior.

This ore settled at about 15 oz. of silver per ton at a price of 70 cents per oz. Present prices have almost doubled and it is our intention to explore for further ore at depth and the accompanying data indicate the program for this exploration project and what we hopp to find.

The use of this capital will be confied to this exploration progran in accordance with the outline of the budget and how it will be expended and will be repaid on the basis of results of the ores and values developed after the exploration program has been completed.

We will appreciate you consideration of this loan applicationa and trust you can give us an answer on its availablity promptly.

Thanking you,

Very truly yours,

MINERAL MOUNTAIN MINERALS, INC.

by Richard A Hero President.

RAH:k

VALLEY NATIONAL BANK

SCOTTSDALE OFFICE 137 NORTH SCOTTSDALE ROAD SCOTTSDALE, ARIZONA

July 23, 1965

Mineral Mountain Minerals, Inc.
3049 North Marigold Drive
Phoenix 18, Arizona

Attn: Mr. Richard A. Hero, Pres.

Dear Mr. Hero:

This letter will inform you of our inability to comply with your $35,000, 10 year term loan request of today.

Very truly yours,

H. L. Wagner
Asst. Manager

HLW:mb

PROTECT YOUR FAMILY — APPOINT THE VALLEY BANK AS YOUR EXECUTOR AND TRUSTEE

MINERAL MOUNTAIN MINERALS, INC.
3049 North Marigold Drive
Phoenix 18 Arizona

July 19th, 1965

The ~~Guaranty~~ First National Bank,
Scottsdale, Arizona

Application for loan of
$35000 for exploration costs
outlined in attached data.
****

Gentlemen:

We are submitting some data attached and respectfully request its consideration for a loan of $35000 for the purpose of further exploration of the Walley-Wall Silver mine property as described in attached papers.

We are presently doing work on this propoerty to develop its productive status after laying dormant since 1938, and during the years 1936, 37 and 38 some 3000 tons of silver ore was mined and sold to smelters at Miami, Hayden and Superior, Arizona.

This ore settled at about 15 oz. per ton in silver, at a price of 70 cents per oz. Present price of silver has almost doubled and it is out intention to explore for further ore at depth and the accompanying data indicate the program and cost for this explotation project and what we hope to find.

The use of this capital will be confined to this exploration program in accordance with the outline of the budget and how it will be expended and will be repaid on the basis of results of the ores and values developed after the exploration program shall have been completed.

We will appreciate your consideration of this loan application and trust you can give us an answer on its availability promptly.

Thanking you,

Very truly yours,

MINERAL MOUNTAIN MINERALS, INC.

BY Richard A Hess President.

PSH:k
RAH:k

FIRST NATIONAL BANK 1st OF ARIZONA
SCOTTSDALE OFFICE: 6 S. SCOTTSDALE RD., SCOTTSDALE, ARIZONA
Since 1877

July 23, 1965

Mineral Mountain Minerals, Inc.
3049 North Marigold Drive
Phoenix 18, Arizona

Attn: Mr. Richard A. Hero, Pres.

Dear Mr. Hero:

By means of this letter, we wish to inform you that we will be unable to grant your request for a ten year loan in the amount of $35,000.00, which you require in your silver exploration endeavor.

This request is not in line with our bank policy in that the term needed is in excess of our limitations.

Very truly yours,

J. R. Mulligan
Assistant Vice President

JRM/v

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: TALLEY GROUP (Old Talley-Walker Group, Or Talley Wall). Date: 6/19/65

District: Mineral Hill Dist. Pinal County Engineer: Lewis A. Smith

Subject:
Mine Visit and Conference with Phillip Hoyt.

PROPERTY: 6 Unpatented Claims.

LOCATION: Ten miles by road, SE of Superior and 3-3½ miles E of the Ajax Mine. (Access road very rough, except 3 miles nearest to Superior. This is now being worked over in places.)

OWNER: R. Talley, Superior.

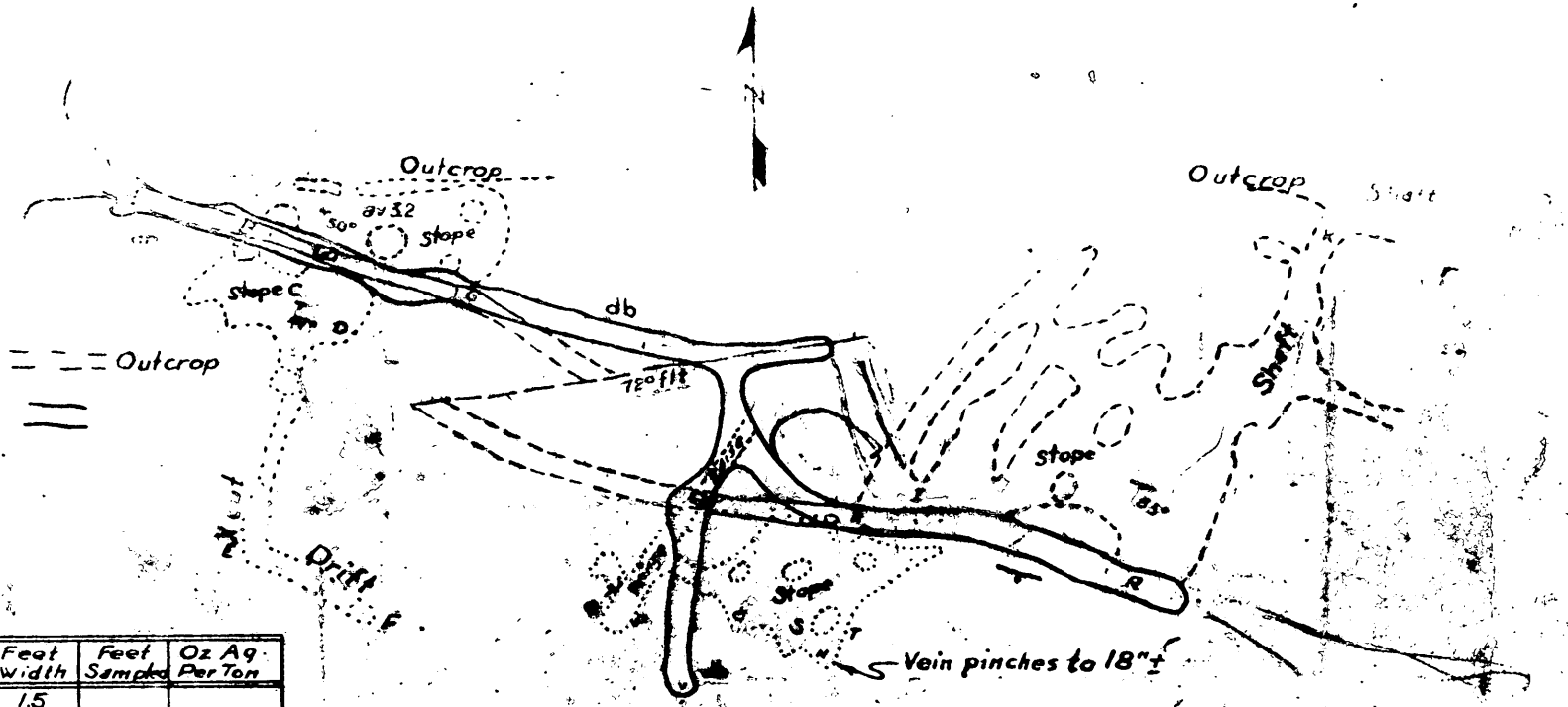
Optioneer: Phillip Hoyt, Scottsdale, Arizona (3049 N. Marigold) (946-3966). (Mineral Mountains, Inc.)

WORK: Present work consists of repairing the old 350' adit, than trends NW-SE. This has been completely retimbered for 320 feet. New track (20 lb. rails) have been installed in the tunnel and out onto the dumps, where there is an old bin. Air is furnished by a 450 Worthington Compressor. Ore at the tunnel face is reported to run from 10-13 ounces silver to the ton (6' wide). Some ore, also is said to assay $17.00 to ton in old pillars. Much of the old shaft workings is said to be in poor condition. Present plans are to extend the tunnel another 250 feet to contact the old shaft workings. The rehabilitated portion is very well timbered.

GEOLOGY: The mineralized zone apparently follows a contact between diorite (Footwall) and schist (Hanging Wall). The zone generally strikes NW. The vein varies considerably in width (2-8 feet). Talley reports that the good ore is 2-4feet wide.

A Conference with Phillip Hoyt, Jr. and Earl Kincannon. Kincannon said two small cars, shipped some time ago, ran about 9 oz silver but had fair silica content.

Equipment includes and Oliver Cat made by Hail Co., Milwaukee, Wis., a mine car (1 ton) and 4 jackhammers in addition to the cat. Mucking will probably be done with a small air mucking machine.



Location	Vein	Feet Width	Feet Sampled	Oz Ag Per Ton
A	fw	1.5		
B	fw	3.0		
C	fw	3.2	3.2	11.84
D	fw	1.5		
E	hw	3.5	3.5	1.20
F	hw	3.2	3.2	1.80
G	fw	3.0		
H	hw	7.7		
I	hw	6.5	6.5	11.83
J	hw	5.6	5.6	14.32
K	fw	2.5	2.5	17.10
L Outcrop			2.0	1.72
M Outcrop			2.8	3.62
N	hw	2.7	2.7	16.80
O	hw		3.0	17.00
P	hw	6.2	6.2	11.40
Q	hw	6.2		
R	hw	3.5		
S	hw	4.2		
T	hw	2.0		
Average of shipments of 2944.6 dry tons				14.40

TALLEY & WALL MINE
NEAR SUPERIOR, ARIZ.
PLAN AT TUNNEL LEVEL

---- Indicates workings above tunnel level

..... Indicates workings below tunnel level

Note: This is a sketch, not an accurate map.

Scale 1" = 50' June 1938.

J.F. Frost

Book + Page #s of Recordations on first page —

BOTTLEWEED	BROOMWEED
RAINBOW # 1. ⊗ mine location	RAINBOW # 2.
JERRY	BUCKHORN

EAST

WEST

"EXHIBIT B"

LEASE AND OPTION AGREEMENT

THIS LEASE AND OPTION, made and entered into this 2nd day of ~~February~~ MARCH, 1965, by and between ARTHUR L. GOODMON, of Phoenix, Arizona and M.E. TALLEY, of Superior, Arizona, Parties of the First Part, hereinafter called LESSORS, and Philip S. Hoyt, of 3049 N. Marigold Drive, Phoenix, Arizona, and RICHARD A. HERO, of Phoenix, Arizona, Parties of the Second Part, hereinafter called LESSEES,

W I T N E S S E T H

That for and in consideration of Ten Dollars, in hand paid to the Lessors by the Lessees, receipt of which is hereby acknowledged, and for other good and valuable consideration, and of the covenants, stipulations and agreements hereinafter contained, the said Lessors do hereby and by these presents lease, let and option unto the Lessees, those certain lode mining claims more fully described hereafter, this lease and option being hereby granted and accepted upon the express following terms and conditions, to-wit:

OFFICIAL COPY O. M. E. RECEIVED JUL 30 1965

1. That this lease and option shall be for a term of ten years and as much longer as commercial ores shall be mined and sold from the property or minimum royalties paid as provided hereafter.

2. That the claims hereby leased and optioned are as follows:

NAME	RECORDED IN BOOK	PAGE
RAINBOW SILVER #1	48	567
RAINBOW SILVER #2	118	821
BUCKHORN	48	590
BOTTLEWEED (BATTLEWEED)	51	301
JERRY	51	301
BROOMWEED	51	301
RAINBOW MILLSITE (5 acres)	51	301

The above claims and millsite are all in the Pioneer Mining District, Pinal County, Arizona, all assessment work has been done and all claims are in good standing and titles guaranteed by the Lessors.

3. That the Lessees shall pay or cause to be paid to the Lessors a royalty of Ten (10) Percent of the net smelter returns from any sales of ores or concentrates that may be sold from the above claims, provided, however, that any and all hauling costs from mine to smelter or selling point shall first be deducted from the selling price.

4. That the Lessees shall have Ninety (90) days free time within which to go upon the property and do any and all things necessary and proper within which to determine values and potentials of ores in the above claims, and on or before the end of ninety days the Lessees shall pay or cause to be paid to the Lessors the sum of One Thousand Dollars ($1,000) and upon making such payment the free time period shall be extended an additional one hundred and eighty (180) days within which time the Lessees shall continue exploration and development of the ground.

That at the end of the nine months period, a minimum monthly royalty shall be paid to the Lessors by the Lessees of Two Hundred Dollars ($200) per month and continue this payment each month during the term of this lease and option, unless purchased by the Lessees or cancelled by the Lesssees as hereinafter provided.

That all minimum royalties paid hereafter and hereunder shall be credited to royalties that shall become due and payable for production as provided in Clause 3, and all royalties paid on production or as minimum advance monthly royalties shall be credited to the purchase price, if and when the option to purchase as provided hereunder is exercised by the Lessees.

5. That the Lessors do hereby give and grant unto the Lessees the exclusive and irrevocable right and option to purchase the above claims for the sum of FIFTY THOUSAND DOLLARS, ($50,000) less any royalties that shall have been paid to the Lessors prior to the purchase data.

6. That the Lessors shall at all times provide adequate and legally required insurance of all kinds necessary to protect workmen and the public from injuries or hazards as a result of the mining or milling operations conducted by the Lessees.

That the Lessors shall furnish to the Lessees for posting upon the ground a Notice of Non-Liability of the Lessors for any liens or labor and material costs incident to the operation of the property by the Lessees.

7. That the Lessees shall mine and operate the mine in a minerlike manner, they shall keep all openings free of waste rock, muck and broken ore and shall at no time mine or remove ore or rock from any openings nearer than fifteen (15) feet from the sides or walls of any incline, raise or winze and that no operations shall be conducted at any time that will adversly effect full and free access in any present or future drifts, winzes, shafts or stopes that would be detrimental to the mine and its future operation.

The Lessors may at all timeshave full access to all workings for inspection purposes for determining any failure of the Lessees to carry out the above operating provisions and shall report to the Lessees any derelection in this regard.

8. That the Lessees shall have full and free access to, from and over all of the claims leased and optioned hereunder, with full and free rights to use of all roads and rights-of-way now existing, camp sites, water sources presently available or which may be developed in the future and any and all rights for full use of all appurtenances and mine openings and developed assets now on the property.

9. That the Lessees shall do and perform all annual assessment work necessary to continue the titles to the above claims during the period of this lease, unless terminated as provided hereafter, this annual assessment work to be done and performed and proof-of-labor recorded on or before thirty days prior to the end of each annual assessment year, beginning with the annual assessment work required for the present year which is due to be performed on or before September 1st, 1965.

10. That this Lease and Option may be assigned by the Lessees at any time, in whole or in part, upon written notice to the Lessors of such assignment, such written notice to be deposited in the U.S. Mail addressed to each of the Lessors.

11. That if, at any time during the term of this lease and option, the Lessees determine that ores of commercial value, in the Lessee's judgement, are not present and profitably mineable, the Lessees may cancel this lease and option, by giving written notice to the Lessors, and to each of them, such notice to be considered as given and received upon the posting of such notice in the United States Postoffice, by registered mail, and upon such cancellation by the Lessees all of the benefits and obligations of the Lessees under this lease and option shall cease and determine.

12. That if at any time during the term of this lease and option the Lessors believe that the Lessees have not kept and performed the obligations hereunder provided, the Lessors, may, at their option, give written notice to the Lessees of such failore to keep the terms and provisions of this lease and option, and if, within thirty days of the mailing of such written notice to the Lessees by the Lessors, that Lessees have not cured any alleged default, the Lessors may declare this lease and option cancelled and of no further force nor effect and shall be null and void.

That this lLease and Option shall inure to the benefit of the Parties hereto, their respective heirs, executors, successors and assigns.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 2nd day of ~~February~~ March, 1965.

Witness: _____ Arthur L. Goodmon
Arthur L. Goodmon

Alex Arnett M. E. Talley
M. E. Talley

LESSORS

Witness: _____ Philip S. Hoyt
Philip S. Hoyt

_____ Richard A. Hero
Richard A. Hero.

LESSEES

STATE OF ARIZONA)
) SS
COUNTY OF PINAL) Personally appeared before me ~~Arthur L. Goodmon~~ ~~and~~ M.E.Talley, ~~both~~ known to me to be the persons subscribing to the above lease and option, and after being sworn ~~each of them~~ deposes and states ~~that~~ they know the contents thereof and sign the same as ~~their~~ his free and voluntary act and deed.

Florence Flaughin
Notary Public

Dated March 2, 1965.
My Commission expires _____ 196__.

Goodman-Talley Lease and Option.

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

I, Geraldine E. Terry, a Notary Public in and for the State and County aforesaid, do affirm that Philip S. Hoyt and Richard A. Hero personally appeared before me, and upon being sworn, deposes and say that they have read the foregoing lease and option agreement, and they know the contents thereof and that they have freely signed the same as their free and voluntary act and deed.

Dated: March 16th 1965.

Geraldine E. Terry
Notary Public

My Commission expires October 23 1966.

STATE OF ARIZONA
COUNTY OF MARICOPA } SS.
This instrument was acknowledged before me this 4 day of March, 1965, by Arthur L. Goodman
In witness whereof I herewith set my hand and official seal.
[illegible], NOTARY PUBLIC
My Commission Expires Dec. 22, 1967

"EXHIBIT B"

ASSIGNMENT OF LEASE AND OPTION AGREEMENT

WE, the undersigned, being the Lessees in and to that certain Lease and Option Agreement, dated March 2nd, 1965, by and between ourselves as Lessees and Arthur L. Goodmon and M. E. Talley, and which lease and option covers the following claims:

RAINBOW SILVER #1-	Recorded	in	Book	48 --	Page	567
RAINBOW SILVER #2-	"	"	"	118 --	"	821
BUCKHORN -	"	"	"	48 --	"	590
BOTTLEWEED -	"	"	"	51 --	"	301
JERRY -	"	"	"	51 --	"	301
BROOMWEED -	"	"	"	51 --	"	301
RAINBOW MILLSITE -	"	"	"	51 --	"	301

all in the Pioneer Mining District, Pinal County, Arizona,

do hereby and by these presents sell, assign, transfer and deliver unto the MINERAL MOUNTAIN MINERALS, INC. an Arizona Corporation, for Ten Dollars, receipt of which is hereby acknowledged, and for other good and valuable consideration, all of our rights, title and interest in and to the above mentioned Lease and Option, and all of the benefits and obligations of the above lease and option are hereby assumed by the said MINERAL MOUNTAIN MINERALS, INC..

This ASSIGNMENT is hereby made by virtue of the provisions of Clause 10 in the Lease and Option Agreement.

TO HAVE AND TO HOLD unto the said MINERAL MOUNTAIN MINERALS, INC. from this 24th day of March, 1965.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 24th day of March, 1965.

Richard A. Hero
Richard A. Hero

Philip S. Hoyt
Philip S. Hoyt

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

Before me, [illegible], a Notary Public in and for the aforesaid State and County, personally appeared Richard A. Hero and Philip S. Hoyt, known to me to be the persons acknowledging the above assignment of Lease, and upon being sworn affirm that they have signed the same as their free and vulontary act and deed.

Dated: March 24th, 1965

[illegible]
Notary Public

My Commission expires Dec. 8 1968.

RECORDED IN BOOK 422, Page 435, of records of Pinal County, Florence, Arizona.

"EXHIBIT C"

WILLIAM B. MILLAR
CONSULTING GEOLOGIST

REPORT ON THE TALLEY - GOODMON RAINBOW SILVER MINE

PINAL CO., ARIZONA

The writer spent three days studying this property and in this report will present only the more important geological data and certain conclusions reached in regard to reopening or further developing the mine. A more detailed report can be prepared if and when required.

Location

The Rainbow Silver mine is reached by turning south on a gravel road four miles east of Florence Junction. For about 11½ miles the road can be traveled by car, the final 1½ miles should be covered by Jeep or truck. The 13 miles take about one hour of driving.

Geology

The most productive ("main") vein closely follows a contact between a diabase which is intrusive into Pre-Cambrian schist. This curving contact with its clear signs of related mineralization can be followed at surface for some 400' and no extensions should be expected. The future of the mine lies with ore continuity in depth below the stoped area - along some 200' of the 400' noted - and in the remaining 200' of strike which has only been slightly prospected at surface.

The vein as mined varies in width from 3' to 8', averages about 5', dips at 50° to 54° (most readings 51°) southwest, and has well marked hanging and footwalls. The vein is in a clearly marked, strong geological structure, possibly a fault plane, certainly a well fractured zone which should persist in depth. The vein material is highly oxidized, frequently soft, the best ore being limonitic and/or manganese stained. The amount of vuggy quartz varies considerably, the best ore having the most quartz. Where values drop off the ore is greenish - probably chloritic alteration - and the material appears to be quartz veinlets, stringers and blebs cutting or surrounding rock fragments which may originally have been pieces of diabase or schist broken from the foot and hanging walls respectively. In places the quartz shows the typical crustiform structure common in low temperature, epithermal veins.

Past Mining

The discoverer (in the 1920's) of the mine ran an adit in from the hillside at S 69°E following an outcropping vein

in diabase which is roughly parallel to the main contact vein but in the footwall of it. Ore was stoped for a distance of 70' along the adit level and up to surface, a maximum of about 50' of stope length. This particular ore showing has too little potential to receive more comment in this report.

In the 1930's Pete Talley tried to follow the vein just noted, found it ended going SE, and then while crosscutting a short distance into the hanging wall found the main vein. Stoping began on the adit level, proceeded at S 85°E along that level for perhaps 200' (caving prevents taping), and went up-dip until surface was reached in places. The maximum stope length (adit level to surface) was about 140' measured along the average vein dip of 51° SW.

To mine the best ore shoot found at a lower depth, Talley put down a winze from the adit level at the very NW end of the main vein which, curiously enough, was the same point where he had originally found it with his prospecting crosscut. At an inclined (51°) distance of 31' in the winze a level was run at S 85°E for 72' and the ore was removed from the area between this level and the adit level above. Meanwhile the winze was deepened to where it is now, 64' inclined distance below the adit level and with no drifting on the vein at this lowest point.

The stoping above and below the adit level resulted in the shipment of some 4000 tons of ore with an average value of 14 ozs. of silver and no payable gold. It can be assumed that no higher average value for the ore will be found above the water table. At water level and below there may well be a change both in mineralization and value of same.

Conclusions

1. The miners in the 1930's removed all easily stoped ore from the mine, and any further production will have to come from ore reserves located by new development work.

2. The quickest method of building ore reserves will be to extend the winze to surface (about 55'), put up headframe, bin and hoisting equipment, and then sink the winze for, say, another 100'. At that point establish a level and proceed SE into ore which should be encountered in 30' or less. The expense of this work is estimated at $25,000. If this new level is advanced 200' to the SE, the maximum amount of ore at all likely to be developed up-dip between it and the present levels is approximately 10,000 tons.

3. There are two most important unknowns when evaluating this mine:

(1) At water level - within 100' down dip from the present bottom of the winze - will there be a zone of rich secondary ore? This is quite possible and should be considered as an

uncertain but real encouragement to any investor in the future of this property. No geologic reasoning can assure such a zone - one simply has to mine or drill to get the answer.

(2) Southeast of the present stoped area there lies some 200' of diabase - schist contact which has been very little explored at surface and not at all in depth. More ore may well be located here as there is no visible change in geological structure and some spotty mineralization does show at surface. The mine's full potential cannot possibly be known until exploration work is done in this area.

Recommendation

The main vein is wide enough and dips so uniformly that it presents an excellent target for diamond drill exploration. With vertical holes 300' deep the vein presumably will be intersected about 400' down-dip from surface well below water level, and with the vein material no longer so soft and oxidized, thus making good core recovery a reasonable expectation. The writer would spend up to $10,000 drilling a series of holes along the contact but would be prepared to stop such work if the expenditure of about $5,000 to $6,000 had brought no satisfactory results.

Once assays from the drill cores are available, the potential of the mine can be estimated to that depth and thereafter any expenditures to develop and mine ore will be mining with most of the gamble removed.

W.B. Millar
Consulting Geologist

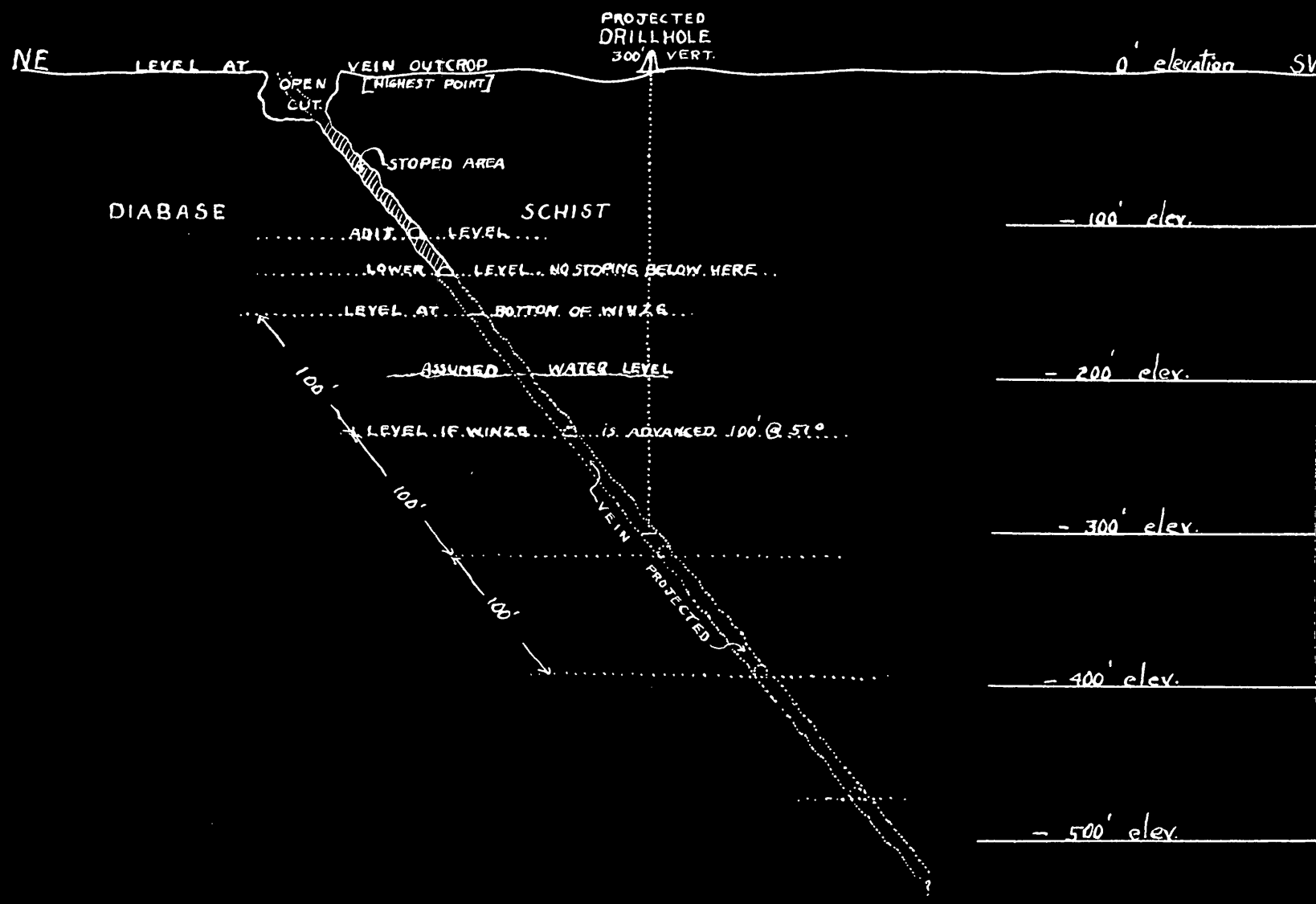
Patagonia, Arizona.
July 16, 1963.

VERTICAL SECTION

TALLEY - GOODMON RAINBOW SILVER MINE

PINAL CO., ARIZONA

To accompany report by W.B. Millar, dated July 16, 1963



SCALE 1" = 100'

W.B. Millar
Cons. Geol.

TALLEY AND WALL MINE

Summary of 56 Smelter Settlement Sheets
80 Car Loads were shipped - only these sheets available.

Date	Lot No.	Tons Dry Wt.	Per Ton Ag. Oz	Per Ton Value	Total Smelter Settlement
3/23/'37	320	47.3365	13.40	9.8201	$299.58
4/11/'33	496	53.588	20.90	12.7072	493.40
4/24/'37	538	90.797	12.00	8.7780	479.23
5/ 1/'37	542	47.122	11.50	8.4123	231.48
4/28/'38	357	53.5315	16.10	9.7888	336.65
6/19/'36	814	51.415	18.00	13.167	497.03
7/ 7/'36	852	42.354	14.20	10.3873	291.70
6/27/'38	871	51.2555	17.20	10.4576	356.62
7/ 7/'36	882	44.741	15.70	11.4846	357.24
7/23/'37	921	49.014	11.90	8.7049	255.11
7/23/'37	928	50.8855	13.60	9.9484	327.74
7/23/'37	932	48.7785	11.70	8.5586	246.75
8/20/'37	989	42.9735	14.70	10.7531	311.69
8/26/'37	996	100.509	12.20	8.9243	545.19
9/ 1/'37	1005	45.9315	12.50	9.1438	259.23
9/ 2/'37	1014	50.9545	13.40	9.8021	321.12
7/30/'37	1021	42.755	13.10	9.5827	260.07
9/10/'36	1028	47.424	15.10	11.0457	357.85
9/11/'36	1040	51.104	19.40	14.1911	546.36
9/15/'36	1046	50.008	16.10	11.7772	413.93
9/16/'36	1056	49.754	15.40	11.2651	386.34
9/18/'36	1071	47.21	16.50	12.0698	404.58
9/16/'37	1075	48.2045	11.50	8.4123	236.79
9/22/'37	1094	54.603	11.30	8.2660	260.24
9/25/'36	1101	47.477	18.40	13.4596	472.85
9/23/'37	1107	53.236	10.90	7.9734	238.15
9/29/'36	1119	54.1435	18.50	13.5328	543.21
9/27/'37	1123	99.2415	12.20	8.9243	538.32
9/27/'37	1129	47.6615	12.10	8.8512	255.05
10/ 8/'36	1153	53.182	17.80	13.0207	506.33
10/ 9/'36	1168	52.4985	15.60	11.4114	415.34
10/14/'37	1182	53.561	13.20	9.6558	329.90
10/14/'36	1191	49.272	12.00	8.778	260.06
10/20/'36	1211	46.913	23.40	17.1171	638.82
10/23/'36	1222	45.067	19.10	13.9717	471.93
10/26/'36	1247	45.8095	20.70	15.1412	533.32
10/26/'37	1256	50.7295	14.80	10.8262	371.65
10/31/'36	1257	45.58	19.20	14.0448	480.63
10/27/'37	1270	50.8175	11.10	8.1197	234.76
10/31/'36	1273	45.416	15.80	11.5577	365.95
11/ 3/'37	1274	41.2455	10.00	8.0465	187.98
11/ 5/'36	1302	46.0975	13.50	9.8753	293.89
11/10/'36	1313	32.017	13.20	9.6558	197.09
11/13/'36	1336	43.335	11.60	8.4854	216.04
11/16/'37	1347	44.545	7.70	5.6326	95.00
11/20/'36	1374	44.1275	11.70	8.5586	223.30
11/18/'37	1377	46.436	12.50	9.1438	262.05
11/25/'36	1390	44.371	13.60	9.9484	286.12
11/30/'36	1413	45.447	15.70	11.4846	362.88

TALLEY AND WALL MINE (continued)

Date	Lot No.	Tons Dry Wt.	Per Ton Ag.Oz.	Per Ton Value	Total Smelter Settlement
12/ 3/'36	1428	45.391	10.20	7.4613	$179.81
12/ 4/'36	1447	47.15	11.60	8.4854	235.06
12/10/'36	1491	46.299	16.20	11.8503	386.61
12/17/'36	1516	44.981	18.90	13.8254	464.45
12/23/'36	1528	43.884	19.10	13.9717	459.54
12/29/'36	1561	43.516	11.60	8.4854	316.94
12/30/'36	1575	50.3335	15.50	11.3383	394.53
Totals		1,812.1538			$16,693.53

Arithmetic Average ounces Silver per ton 14.42 ~~$19.01~~

Average Smelter Settlement per ton $ 9.21

Statement by J. F. Frost of shipments made:

2944.6 tons, average 14.40 oz. Ag. per ton.

68 % SiO_2
9 % Al_2O_3

Talley-Wall Mine

80 cars shipped

Pete Talley
Fleetwood 6-7571
Hayden

	Tons	Min % Cu	Oz. Ag	Ag Min	Fe	CaO	Al_2O_3	SiO_2
1936	1492	0.24	16.01	0.01	8.1	1.1	6.1	66.6
1937	1252	0.21	12.19	0.01	9.7	0.9	6.3	66.8
1938	201	0.24	16.31	0.01	7.3	0.5	4.7	71.3
	2945	0.23	14.40	0.01	8.8	1.0	6.1	66.9

5. EXPLORATION WORK - EXHIBIT E

(a) The proposed exploration work includes both core drilling and sinking winze below present depth, for additional one hundred fifty feet and one level off the winze at any point deemed most favorable after sinking is completed.

Drilling will be done on contract basis by Boyles Bros. as per attached letter and bid. Three holes to be drilled to approximately 400 feet to determine if ore shows at point of intersection of contact, see cross-section projection in Millar Report. These to be vertieal holes to intersect vein down dip (51°), and to evaluate ore zone as to thickness, grade and type of silver minerals present. Assays to be made for silver - gold - copper- and silica and alumina (for possible flux quality) for nearby smelter needs. Hayden, Superior, Miami and Ajo.

(b) Access road to be built with part of the loan funds as follows;

Imporvement of present road now be used on limited basis, for ore hauling to nearest black-top highway (60 - 70) at Superior, about ten miles, about half of distance to have major portion of repairs. This to include drainage, grading and minor changes for better grades and eliminate bad features for more heavy hauling. Maximum of 5000 to be budegeted for this work to include use of trucks, dozer and loader, pipe for drainage, etc., Possible assistance by county and/or U. S. Forest Service will be solicited.

(c) If OME Contract is executed, work can be started within ten days, as property is now under rehabilitation by the company, camp established, minor road repairs made, new rail laid in adit (300') powder magazine installed, ore bunker repaired, drill sites dozed and ready at drill hole locations, geology worked out, old stops filled and all working areas retimbered. The anticipated exploration program should be completed within eight months from date of beginning. Drilling will be completed within sixty days from beginning, the sinking of winze will start within ten days and should be completed within ninty days, this including all timbering required. One reservation we would wish to agree to is after completing the short clean cut on the adit level to its present face, this work now under way, we might alter plans to go down

in the winze as shown below the east end of the adit, this decision depending on results of this work and best judgement and prudence to do the additional sinking from the bottom of this winze.

6. EXPERIENCE OF OFFICERS AND DIRECTORS (MANAGEMENT) - EXHIBIT F

See attached-outline of experience of
Richard A. Hero, President and Executive Officer
Philip S. Hoyt, Managing Director
Wm. B. Millar, Consulting Geologist

7. ESTIMATE OF COSTS - EXHIBIT G

(a) Independent Contract - See Boyles Bros. letter of and bid. Estimated manimum cost of drilling program - - $10,000.

(b) Personal Services.

SUPERVISION	MONTHLY
Managing Director	$ 400.00
President - on job salary only - (no salary being paid to any company officers as such)	400.00
Consulting Geologist - to supervise drilling & guide sinking in winze etc. for 6 months @ $300. mo. estimated tenure - 6 months during exploration by drilling & in winze --- $1800.	300.00

LABOR	
2 miners @ $400. mo.	800.00
1 - Trammer or hoist man.	400.00
1 mucking machine operator	400.00
Incidental Labor -	300.00
Monthly Management & Labor Cost	$3,000.00
Maximum Labor time to complete Exploration Program - 5 months @ $3,000.	$15,000.00

(c)

OPERATING MATERIALS & SUPPLIES	MONTHLY
Fuel for compressor & hoisting 1500 gals. @ 30¢	450.00
Oil & Greases - est. monthly need.	75.00
Powder - fuse & caps - 12 boxes 40% geldy caps & fuse est.	250.00
Water Supply - hauling from Spring 2 miles (some mine water at 300")	150.00
Incidental items - small tools - replacement, etc.	250.00
Monthly Total operating Materials & Supplies	$1,175.00
for 5 mos. exploration program @ $1,200. per mo.	$6,000.00

d. OPERATING EQUIPMENT

		MONTHLY
	During Exploration Program - Lease - Rental Basis C.P. Compressor 320C.F.M.	$ 450.00
	Hoist - skip & cable, etc.	200.00
rent purchase basis	(2 - Sinker Hammers (1 - Drifter (1 - Stoper per mo. rent basis	250.00
	Headframe & timber cost for winze & all other needs, est.	500.00
		$1,400.00
	For 5 mos. exploration period 5 x $1,400.	$7,000.00

e. INITIAL REHABILITATION & REPAIRS

The following items are now on the property and owned by the Corporation, having been installed during May & June 1965:

1. New timbering in adit to make safe and workable - approximately 150 feet new timber work replacing stulls & lagging.

2. All open ground in old stopes above adit level has been filled for safety & stability.

3. New powder magazine installed for all safety requirements, etc.

4. New 16# rail, new ties, replacing old light track for approximately 300' including track to ore bunker and waste dump.

5. 3 drill site locations dozed for coredrill sites and mud sumps dug for coredrill work.

6. All surface areas leveled off for easy access to facilities and for ore haulage.

7. Camp set up, for two workmen, with all necessary items for camp use - other miners come and go each working day from Superior and Florence.

8. Electric Lighting Unit (Kohler) suitable for complete permanent lighting of mine.

9. Company equipment now at mine:
   320 - CP Compressor
   2 - mine cars
   1 - mucking machine
   2" airline from compressor to present working face in adit.
   1-500 gal. water tank
   1000' - 3/4" water line - to camp and mine workings.

10. Skidway in winze to bottom at 72' below adit level.

11. Ore bunker repaired and ready for about 75 tons capacity at adit level.

12. Access roads usable, but short haul road will need repairs as provided in the exploration program.

f. MISCELLANEOUS

1. Cost of repairs and maintainence of all equipment in 7(d), 10% of $7,000.00 - - - 5 months @ $700.00- - - - - - - - - - - - - - - - - - -$3,500.00

2. Road Work (to be contracted) but to be done, if and when, new ore developed as a result of the exploration program - - estimated cost not to exceed - - - - - - - - - - - - - $5,000.00
This work to be done on the short access road about 10 miles to the blacktop, U. S. highway 60-70 at Superior (see map)

3. Cost of assaying during exploration of winze development and checking core material from drill holes, 100 assays @ $7.00 - - - - - $ 700.00

4. Accounting expense
C.P.A. for 6 Months @ $25.00 - - - - - - - - $ 150.00

5. Workman's Compensation and Employer's Liability Insurance, (now in force)
5 months labor cost - - - - - - - - - - - - -$1,398.00
$7,948.00

g. RECAPITULATION

Estimate of Costs:

(a)	Drilling Costs	$10,000.00
(b)	Personal Services	15,000.00
(c)	Operating Material and Supplies	6,000.00
(d)	Operating equipment	7,000.00
(e)	Installations and repairs, etc., now being done at Company expense.	
(f)	Miscellaneous items - $2,948.00	[illegible]
	Road repairs - - $5,000.00	8,000.00
		$46,000.00

(h) APPLICATION FOR OME ASSISTANCE

	$34,000.00
Financing to be supplied by company	12,000.00
	$46,000.00

Respectfully Submitted,

Richard A Hero

President

Philip S. Hoyt

Managing Director

Mineral Mountain Minerals, Inc.,
(An Arizona Corporation)
3049 No. Marigold Drive
Phoenix 18, Arizona

MINERAL MOUNTAIN MINERALS., INC.

****

Statement as of June 15th, 1965

ASSETS:

Cash in Bank - June 15th.,	$12799.66
Repaied royalties	1000.00
Equipment Inventory	3704.11
Supplies	293.94
Prepaid Insurance	340.00
	$18,137.71

LIABILITIES: No Debts - All purchases - labor- etc., on cash basis.

10% royalty to be paid on net smelter returns,

All applies $50,000.00, to option to purchase property.

AGREEMENT

We, the undersigned agree that the payment of $1000 being made this date shall be credited as prepaid royalties under the contract of Lease and Option dated March 2nd, 1965.

Arthur L. Goodman

M. E. Talley

June 7th, 1965

"EXHIBIT F"

WILLIAM B. MILLAR
CONSULTING MINING GEOLOGIST

EXPERIENCE RECORD

Education	Graduated from M.I.T. in Geological Engineering in 1926 and during 1931 -'33 took post-graduate work at Columbia University.
1926 - '27	First professional experience was on oil reconnaissance for Benedum and Trees, most famous wildcatters of this period. (Venezuela and U.S.)
1928 - '31	In N. Rhodesia for Rhodesian Selection Trust Ltd. developing copper deposits. First mine geologist at Mufulira, which has grown into one of the world's greatest underground copper mines.
1932 - '33	Operated a private syndicate prospecting for gold in Canada with two airplanes and a dozen prospectors.
1933 - '34	Expedition leader for a syndicate searching for and operating gold and diamond placers in British Guiana.
1935 - '38	Field engineer for the then very well known New York consulting firm of Rogers, Mayer and Ball. Worked in the Italian "colonies" of Eritrea and Ethiopia, and in Italy itself, on a variety of minerals from asbestos to zinc.
1938 - '46	Geologist for Johns-Manville during World War 2 getting extensive experience with several strategic industrial minerals, but primarily with asbestos.
1946 - '49	With Lazard Freres and Ladenburg, Thalman as mineral consultant for these Wall St. bankers and also a director of their subsidiary, American Anglo-Transvaal Co. Work for most part in South Africa.
1950 - '60	Consultant to the Kennecott Copper Corp. management in New York. Foreign problems and extensive travel in Europe, South America and Africa; also mineral researches in the U.S. and Canada.
1960 - '61	Moved from New York to Arizona and now concentrate on projects in the western States in which I have a personal interest. I propose to follow this procedure until my retirement in about 1980.

W. B. Millar
Sept. 1961

PROFESSIONAL BACKGROUND
of
Philip S. Hoyt
3049 N. Marigold Drive
Phoenix 18 Arizona
946-3966
Consulting Mining Geologist

SOURCE REFERENCE-

1. INTERNATIONAL BLUE BOOK* *"Who's Who in the World" 1909-1940 by Hyacinthe Ringrose-Belgrave Press, N.Y.

EXTRACT-
"Geologist and Mineralogist, Born June 5th, 1896, at Bozeman, Montana, of Scotch-Irish parentage. Discovered and pioneered the first commercial production of kyanite, olivine and vermiculite and others of the industrial mineral specialties, and new flotation reagents and milling processes.

2. From domestic publications of the U.S. Bureau of Mines, State Mining Bureaus, and others, including Engineering and Mining Journal and other technical papers, 36 years in the discovery, research, acquisition, exploration and development of the Industrial Mineral Specialty products, including mica, asbestos, feldspar, fluorspar, lithium minerals, kyanite, dumortierite and andalusite, flint pebbles for grinding media, tremolite for acid filters, vermiculite, beryllium minerals, paligorskite in Alaska and others. Most of this work was done on a consulting basis on special projects with the larger U.S and British mining and industrial concerns, including:

Managing Director of Project.

Laclede-Christy Clay Products Co., of St. Louis, chief Geologist -- 10 years.
Asst. State Geologist, Wyoming- 2 years-(see EMJ November 8th, 1924).
Johns-Manville Corporation-2 years-Consulting on Special Project in SE States.
Lithium Corporation of America, 2 years-Consulting-Special Project-Western States
Beryllium Corporation of Reading, Pa. 3 years Western Geologist-Exploration Project.
James Stewart Company-Supt. Const. Mica Mill 1958-completed
International Minerals & Chemical Corp. Consulting Tax work-1958-60
Industrial Minerals Corp. of Nevada-Director and Consulting Engineer-1957-60
U. S. Bureau of Mines-Employment and Consulting Rating GS11-

During the last war developed and produced for own account fluorspar, mica, ocher, flint pebbles, paligorskite (Alaska) tremolite (Alaska) and others. Made good profits on all operations.

In 1955 began exploration for and acquisition of rare earth minerals including especially those invloved in developing the technology of uses for nuclear energy, both fission and fusion and in missle work, shielding and alloys.

These rare earths include particularly beryllium, samarium, gadolinium, yttrium and germanium.

3. MEMBER OF:

American Institute of Mining and Metallurgical Engineers--30 years.
Arizona Small Mine Owners Assn.-20 years
Western Mining Council--life membership-
New Mexico Mining Associates- and others.

PAST MEMBER OF:

Pan-American Inst. of Min.&Met. Eng.
American Ceramic Society
Geological Society of America etc.

Was member of IMdustrial Advisory Committee-AIMME--1945--

Was member Industrial Minerals "Membership Committee" AIMME--1962

New Milling processes developed are shown in Taggarts "Handbook of Mineral Dressing" under Sou. M&MCo.

Current References: Richard H. Jahns-Geology Dept. Penn. State U.
Charles Dunning, Mining Engineer-Phoenix
Cloyd M. Smith-Munsey Building, Washington D.C. Mining Eng.

(above data compiled by B. F. Hecker, San Diego, Calif.)

"EXHIBIT G"

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
AND FABRICATION

Boyles Bros.
DRILLING COMPANY
CONTRACTORS - ENGINEERS - GEOLOGISTS
10801 North 21st Avenue
PHOENIX 21, ARIZONA
Phones: Office 944-1731
Home 947-0637

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY 10, UTAH
HUnter 7-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
DENVER
SACRAMENTO
ST. LOUIS

April 27, 1965

Mr. Philip S. Hoyt
3049 N. Marigold Drive
Phoenix, Arizona 85018

Dear Mr. Hoyt:

For your drilling of a minimum of 1000 feet in three holes at your property approximately fifteen miles southwest of Superior, Arizona, we submit the following prices.

1. Mobilization.....$250.00

2. Drilling	NXWL	NC or Collar Pipe
0 to 500 feet	6.60	7.30

3. Cementing, if required, 12.50 per hour plus cost of cement or cement substitutes, including drilling mud and chemicals.

4. Water truck rental of 190.00 per month plus 12 cents a mile. Water to be hauled from your source of supply.

5. Core boxes can be furnished at 1.00 per box.

6. You are to furnish access roads and drill stations at no cost to us.

Thanks for asking for our prices.

Sincerely yours,

J.E. Roberts

J.E. Roberts
District Manager

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/2	R Smith	120
6/2/66	Kirkemo	120
6/2	Johnson	110
6/3	Kilgore	220
6/3	Neffer	
		110
		220

JUN 6 1966

AIRMAIL

Mineral Mountain Minerals, Inc.
3049 North Marigold Drive
Phoenix, Arizona 85018

Re: OME-6484 (Silver)
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Valley-Wall)
Pinal County, Arizona

Gentlemen:

Careful study of your application for financial assistance in exploring the referenced mine and of other information available to us indicates that the probability of disclosing significant new reserves of silver ore is not sufficiently promising to justify Government participation in the proposed project. Accordingly, we regret to inform you that your application is denied.

We regret the necessity of taking such action, which, however, is taken without prejudice to your property. If your future work reveals evidence that could materially alter this opinion, we shall be pleased to consider a new application.

Please accept our apology for the abnormal delay in reaching a decision on your proposed project. The delay was owing partly to a heavy backlog of application and partly to recent changes in the location of our field office and accompanying loss of personnel.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Region III
OME Reading File
Mr. Smith
130
120M

RMSmith/gla 6-2-66

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/2	R. M. Smith	120
		120
6/2	RJ	110
		220
		~~120~~

June 2, 1966

Memorandum

To: The File

From: R. M. Smith

Subject: OME-6484 (Silver)
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Talley-Wall)
Pinal County, Arizona

Justification for Denial of Application

The purpose of the project proposed by the Applicant is to explore by 1200 feet of core drilling and if then warranted by 150 feet of winzing and an unspecified amount of drifting on two levels for silver-copper siliceous fluxing ore in and along the downward continuation of the main (contact) Rainbow vein which has been mined 2 to 8 feet wide for 200 feet along the strike above an adit level 140 feet to the surface and for 72 feet along the strike to a depth of 31 feet below the adit level and yielded 4,000 tons of ore that averaged 14.4 oz. silver per ton.

Subsequently, the Applicant proposed a smaller project to consist of 25 feet of winzing, 50 feet of drifting to the ore shoot, and an unspecified amount of drilling from the drift ". . . to explore in the ore zone some feet below the level . . . ."

Although it is not clear whether the proposed work is all in the oxide zone or whether the sulfide zone might be expected to have a higher or lower silver content, it is evident that the proposed work is development rather than exploration. Surface showings indicate that continuations of the vein along the strike cannot be expected and that the future of the mine is dependent on continuity in depth below the stoped area. The proposed work is to open a new level on the known ore shoot.

The Field Officer concluded that the chance of discovering significant amounts of silver is not good, particularly as the ore body that was previously mined averaged only 14.4 oz. silver per ton and does not constitute ore at present prices and mining costs. He recommended that the application be denied without prejudice. I concur in his recommendation.

R. M. Smith

R. M. Smith

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Smith

RMSmith/gla 6-2-66

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
U. S. Geological Survey -- Denver Federal Center
Building 25- Room 2284
Denver, Colorado 80225

OFFICIAL
COPY
O. M. E.
RECEIVED
MAY 23 1966

INITIALS	CODE
	110
gla	130
	~~120~~
	120

May 19, 1966

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: Report of examination: OME-6484 (Silver)
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Talley-Wall)
Pinal County, Arizona

Transmitted herewith is an original and two copies of a report of examination by J. William Hasler, Geologist, on the above captioned subject.

The average silver assay of the mineralized material shipped to the smelter was 14.40 ounces per ton, and at present prices would have a total value of approximately $20.00 per ton. Upon the basis of silver and copper alone this would not constitute ore grade material as mining costs would be at least $20.00 per ton, consequently this would not constitute ore grade material. The chances of discovering significant amounts of silver are not good. It is therefore recommended that the application for exploration assistance be denied without prejudice.

J. William Hasler

cc: Original and 2 copies of report to Chief, OME
OME chron
Hasler chron
OME-6484

ON-SITE REPORT

UNITED STATES

DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, SECRETARY

U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION III

OME-6484(Silver)

MINERAL MOUNTAIN MINERALS, INC.

RAINBOW SILVER MINE (TALLEY-WALL)

PINAL COUNTY, ARIZONA

by

J. William Hasler

May 1966

Contents

	Page
Introduction and summary	1
The property	2
Geology and ore deposits	2
Proposed exploration	3
Conclusion and recommendation	3

Introduction and Summary

The Mineral Mountain Minerals, Inc., 3049 North Marigold Drive, Phoenix, Arizona applied to the Office of Minerals Exploration for financial assistance to explore the Talley-Wall Rainbow Silver Mine in Pinal County, Arizona. The application was referred to the field and an examination was made November 8, 1965. The vein has been mined for a distance of some 400 feet along a Diabase-Precambrian contact. The vein strikes S. 69° E., and dips from 50° - 54° west and ranges from three to eight feet wide. The report contained a list of production returns from 1,812.15 tons of ore that contained an average (arithmetical) of 14.42 oz. of silver per ton. The average settlement per ton appears to have netted $9.21. There is no mention of the mining costs but they would most certainly have been in the neighborhood of at least $20.00 per ton. Value of the ore at current prices would total approximately $20.05 per ton which would not constitute ore grade material, unless the ore could be utilized as fluxing ore due to its high silica content.

Can it be used as flux? would it command a better price

The proposed exploration consists of diamond drilling and sinking a winze an additional 150 feet below the present level, and the total estimated cost of the project would be $46,000.00. A later proposal asked to reduce the loan amount to $10,000.00. It is concluded that the proposed exploration is essentially development work in that it consists of sinking a winze and drifting below a known stoped area for extensions of known mineralized material. The chances of finding a significant discovery of silver is not good. It is therefor recommended that the application for financial assistance be denied.

The Property

The Talley-Wall Rainbow Silver mine may be reached by turning south on a gravel road four miles east of Florence Junction, then 13-1/2 miles southeast. The claims under lease and option are located in T. 3 S., R. 11 E., Gila and Salt River Meridian and are recorded in Book 422, Page 230 of the records of Pinal County, Florence, Arizona.

Geology and Ore Deposits

The vein lies along a contact zone between a diabase intrusive and Precambrian schist and strikes S. 69° E., and has a dip of 50 - 54° west. The vein ranges from three to eight feet wide and averages five feet. Vein material is highly oxidized, soft and manganiferous. In 1930, stoping began on the adit level and was continued for some 200 feet along the vein and was stoped to the surface--a distance of some 140 feet. A winze was sunk for 31 feet and ore was mined for a length of 72 feet and up to the main adit level. The winze was then sunk to a depth of 64 feet where work was terminated. The development work resulted in the shipment of some 4,000 tons in 1936, 1937, and 1938 of material that averaged 14.4 oz. of silver per ton. At current prices the value per ton totals approximately $20.00.

what is the vein

still oxidized?

would the primary zone be higher grade?

Proposed Exploration

The proposed exploration includes drilling three vertical holes of approximately 400 feet each to determine the strength of the vein and mineralization, and then to sink a winze below its present depth for an additional 150 feet with an intermediate drift along the vein to test for continuity and grade. The vein material will be assayed for silver, gold, copper, silica and alumina (for possible flux quality) for nearby smelter needs at Hayden, Superior, Miami or Ajo. Some road improvement for about five miles is also included in the application. Total estimated cost of the exploration work is $46,000.00. A later proposal was made to decrease the amount of the laon to $10,000.00 from the original cost estimate of $46,000.00.

Conclusion and Recommendation

The average silver assay of the mineralized material shipped to the smelter was 14.40 ounces per ton, and at present prices would have a total value of approximately $20.00 per ton. Upon the basis of silver and copper alone this would not constitute ore grade material as mining costs would be at least $20.00 per ton, consequently this would not constitute ore grade material. The chances of discovering significant amounts of silver are not good. It is therefore recommended that the application for exploration assistance be denied without prejudice.

Denver Federal Center -- U. S. Geological Survey
Building 25 - Room 2284
Denver, Colorado 80225

March 8, 1966

ORIGINAL COPY
O. M. E.
RECEIVED
MAR 10
110
120 m
125

Philip S. Hoyt and Son
3049 North Marigold Drive
Phoenix, Arizona 85018

Re: OME-6484
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Talley-Wall)
Pinal Co., Arizona

Gentlemen:

This letter is in reply to your request dated March 3, 1966 relative to an amendment to your application for a reduction amounting to $10,000 from the original estimated cost of $46,000. The request for an amendment should be in duplicate the same as the original application for financial assistance and financial exploration.

However, in the interest of time, I will forward your letter to Washington and retain a true copy in my files.

Your application is still pending as I have not yet completed a report on your property due to a sizeable backlog of field examination reports and other contractual obligations.

Very truly yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

JWHasler/mc/2/8/66

cc: Chief OME
6484
Chron
Hasler

PHILIP S. HOYT AND SON 3049 North Marigold Drive
Phoenix, Arizona 85018
March 3rd, 1966

Mr. J. W. Hasler,
U. S. Geological Survey
Office of Minerals Exploration,
Region III, Building 20
Federal Center,
Denver, Colorado 80225

APPLICATION FOR OME LOAN
MINERAL MOUNTAIN MINERALS, INC.

Dear Mr. Hasler:

In regard to the application made last Fall for some assistance for exploration of the Talley-Wall silver mine project, Pinal County, Arizona, we would like to re-open this application for further consideration, if agreeable.

Since your visit here, we have been shut down all winter and during this dormant period, I have taken over the project from Mr. Hero, and would like to amend the application for assistance, reducing the requested amount to $10000, of which we would provide the $2500 and the OME furnish $7500, all to be used for the following further exploration work:

1. To sink another 25 feet in the present winze which is now down about 90 feet below the level of the adit, as you will recall.

2. To then drift over for a distance of maximum 50 feet to go into the ore zone which we believe to be present there.

3. To then do some drilling, shallow holes, from a favorable point in this drift, and if we get the ore expected, this drilling to explore in the ore zone some feet below the level of the projected drift.

4. I expect you will recall this ground, which you examined, and can follow the program as suggested and if you feel this is sound I will be glad to submit any amended data that is needed to give the application further consideration.

There is a lot of activity in the whole area as all of the major companies are in there with their geological people and I feel that this property is worthy of this further exploration effort due to the fact its location is favorable on the north end of this mineralized silver area.

We have everything ready to operate. There will be no lost motion in getting started again. We spent some $20000 last year in cleaning up the old workings, timbered everything safe and this further work program can be done at a minimum cost and get it completed promptly.

As we have had no further word from you after your visit and inspection we preseume the application is still pending.

PSH:k

Cordially yours,

Philip S. Hoyt Chas.
Pres. Mt. Minerals Inc

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/16	[illegible]	130
8/17	Johnson	110
8/17	CAU	220
		120M

AUG 17 1965

Mineral Mountain Minerals, Inc.
3049 North Marigold Drive
Phoenix 18, Arizona

Re: OME-6484 (Silver)
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Talley-Wall)
Pinal County, Arizona

Gentlemen:

The application for assistance in exploring the subject property has now been reviewed by the Washington Office and referred to Mr. H. M. Connors, Acting Field Officer, U. S. Geological Survey, Office of Minerals Exploration, Region III, Building 20, Federal Center, Denver, Colorado 80225.

The Regional Office will notify you in case additional information concerning the application is needed.

Sincerely yours,

(signed) FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

GLAult/a (8-16-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
OME Region III

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/16	[illegible]	130
8/17	Johnson	110
		220
		120M

AUG 17 1965

Memorandum

To: Acting Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: OME-6484 (Silver)
Mineral Mountain Minerals, Inc.
Rainbow Silver Mine (Talley-Wall)
Pinal County, Arizona

The subject application is referred to Region III for a field examination and recommendations.

Mr. Millar in his report of July 16, 1963, on the property states: "The most productive ('main') vein closely follows a contact between a diabase which is intrusive into Pre-Cambrian schist. This curving contact with its clear signs of related mineralization can be followed at surface for some 400' and no extensions should be expected. The future of the mine lies with ore continuity in depth below the stoped area - along some 200' of the 400' noted - and in the remaining 200' of strike which has only been slightly prospected at surface." The showing has been mined to an approximate depth of 170 feet.

The Applicant proposes a number of diamond drill holes to test the mineralization at depth. Additional exploration would include sinking an existing winze an additional 150 feet from which a new level would be driven. The indicated potential of the property is small, and the sinking of the winze and the driving of the new level is considered development work rather than exploration. OME could participate only in the drilling if warranted.

If a contract is recommended, the Applicant should submit a financial statement as the bank letters are considered unsatisfactory. The copies of the letters to the banks make no mention of a 10-year term though both replies mention a 10-year term and one letter mentions "request of today" and the other states "the term needed is in excess of our limitations."

23263

In addition, the Applicant should submit another bid for the drilling and also a new set of the Lien and Subordination Agreements. The set which was submitted as Exhibit B and is enclosed does not have the date nor the signatures in their proper places. Item 3 should not be left blank.

(signed) FRANK E. JOHNSON

Frank E. Johnson

Enclosures

GCSelfridge/gla (8-16-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
Mr. Selfridge (2)
OME Reading File

July 30, 1965

Mineral Mountain Minerals, Inc.
3049 No. Marigold Drive
Phoenix 18, Arizona

Subject: OME - 6484

Gentlemen:

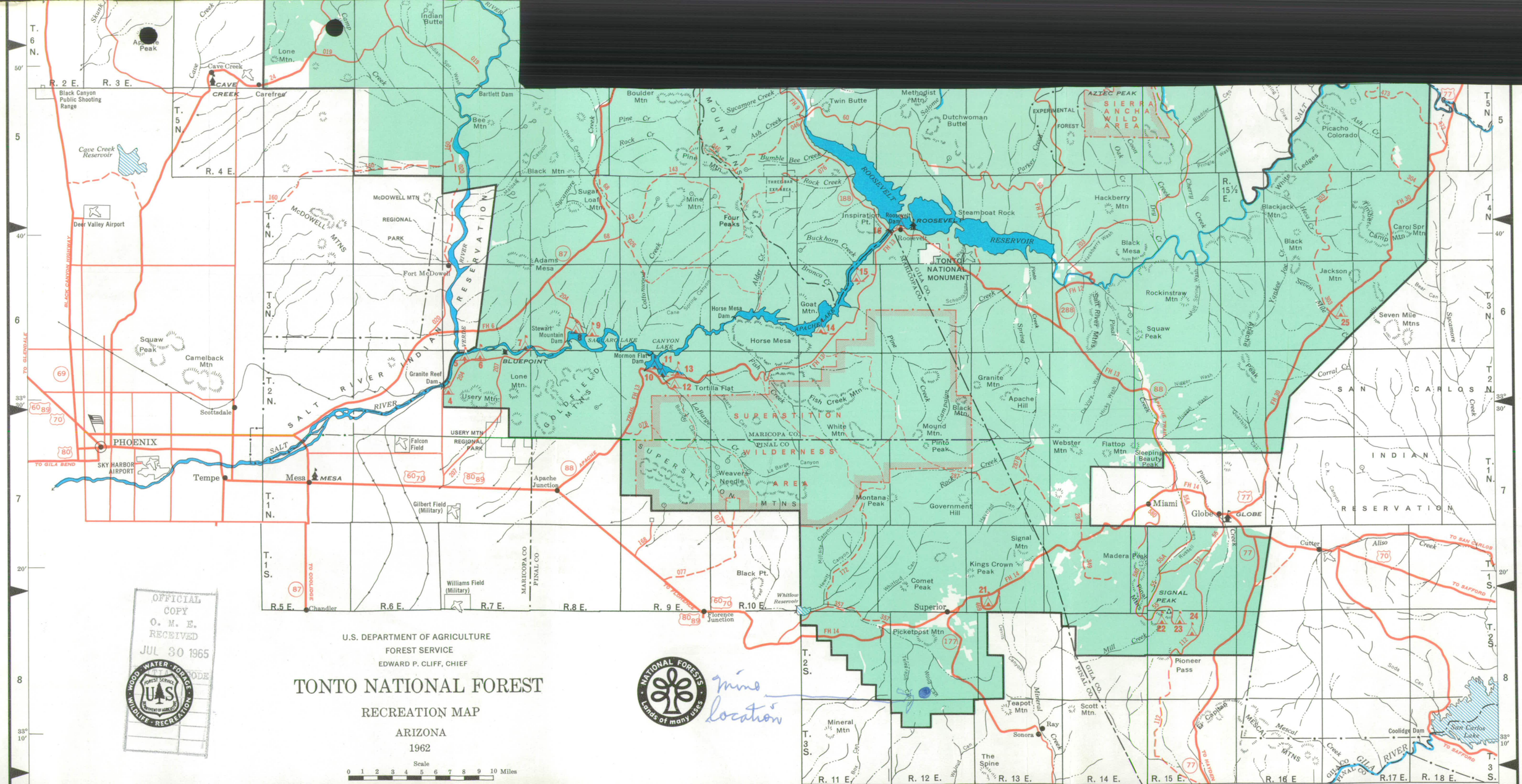
Your application for exploration assistance, dated July 24, 1965, submitted to our office at Washington, D. C., has been assigned Docket Number OME - 6484.

Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region III with
copy of application and
attachments


U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
EDWARD P. CLIFF, CHIEF
TONTO NATIONAL FOREST
RECREATION MAP
ARIZONA
1962
Scale
0 1 2 3 4 5 6 7 8 9 10 Miles
NATIONAL FORESTS
Lands of many uses
mine location
OFFICIAL COPY
O. M. E.
RECEIVED
JUL 30 1965
WOOD · WATER · FORAGE · WILDLIFE · RECREATION
FOREST SERVICE
U.S.
DEPARTMENT OF AGRICULTURE
PHOENIX
Tempe
Mesa
Scottsdale
Chandler
Apache Junction
Florence Junction
Superior
Miami
Globe
Cutter
Coolidge Dam
Sonora
Ray
Carefree
Cave Creek
Fort McDowell
Bluepoint
Roosevelt
Roosevelt Dam
Tortilla Flat
Sunflower
Black Canyon Public Shooting Range
Cave Creek Reservoir
Deer Valley Airport
Squaw Peak
Camelback Mtn
McDOWELL MTN REGIONAL PARK
McDOWELL MTNS
SALT RIVER INDIAN RESERVATION
SALT RIVER
GILA RIVER
ROOSEVELT RESERVOIR
SAGUARO LAKE
APACHE LAKE
CANYON LAKE
Mormon Flat Dam
Stewart Mountain Dam
Horse Mesa Dam
Granite Reef Dam
Roosevelt Dam
SUPERSTITION WILDERNESS AREA
SUPERSTITION MTNS
GOLDFIELD MTNS
TONTO NATIONAL MONUMENT
SIERRA ANCHA WILD AREA
AZTEC PEAK
SIGNAL PEAK
SAN CARLOS INDIAN RESERVATION
San Carlos Lake
MESCAL MTNS
MARICOPA CO
PINAL CO
GILA CO
TO GLENDALE
TO GILA BEND
TO CONCHO
TO SAN CARLOS
TO SAFFORD
TO MATHEW
BLACK CANYON HIGHWAY
APACHE TRAIL
Gilbert Field (Military)
Falcon Field
Williams Field (Military)
USERY MTN REGIONAL PARK
SKY HARBOR AIRPORT
Four Peaks
Mine Mtn
Black Mtn
Sugar Loaf Mtn
Adams Mesa
Horse Mesa
Goat Mtn.
Granite Mtn
Apache Hill
Webster Mtn
Flattop Mtn
Sleeping Beauty Peak
Rockinstraw Mtn
Hackberry Mtn
Black Mesa
Blackjack Mtn
Jackson Mtn
Carol Spr Mtn
Picacho Colorado
Seven Mile Mtns
Tortilla Flat
Fish Creek Mtn
White Mtn
Mound Mtn.
Pinto Peak
Weavers Needle
Montana Peak
Government Hill
Signal Mtn
Kings Crown Peak
Madera Peak
Comet Peak
Picketpost Mtn
Pioneer Pass
Teapot Mtn
Scott Mtn.
Mineral Mtn
The Spine
Black Pt.
Whitlow Reservoir
Lone Mtn.
Usery Mtn.
Indian Butte
Bartlett Dam
Bee Mtn
Boulder Mtn
Twin Butte
Methodist Mtn.
Dutchwoman Butte
Steamboat Rock
Inspiration Pt.
Buckhorn Creek
Bumble Bee Creek
Rock Creek
Sycamore Creek
Pine Cr
Rock Cr
Ash Creek
Tonto Creek
Pinal Creek
Salt River Mtns
Aliso Creek
Mill Creek
Sudo Can
Corral Cr
Seven Mile Wash
Hackberry Wash
Pinto Creek
Cherry Creek
Dry Cr
Oak Cr
Pinal Cr
Cane Spring Canyon
Cottonwood Creek
Alder Cr
Bronco Cr
Campbell Creek
Millsite Canyon
Whitlow Can
Hewitt Canyon
Devils Canyon
Mineral Can
Walnut Can
Box Can
Twelve Peaks Wash
Rudell Can
Hackberry Can
Hicks Wash
Nigger Wash
Dry Wash
Bear Can
Sycamore Creek
Yuma Jac Creek
Seven Mile Creek
White Ledges
Hess Cr
Pinal Creek
Mescal Creek
Gila River
Aliso Creek
Coolidge Dam
San Carlos Lake
R. 2 E.
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R. 4 E.
R. 5 E.
R. 6 E.
R. 7 E.
R. 8 E.
R. 9 E.
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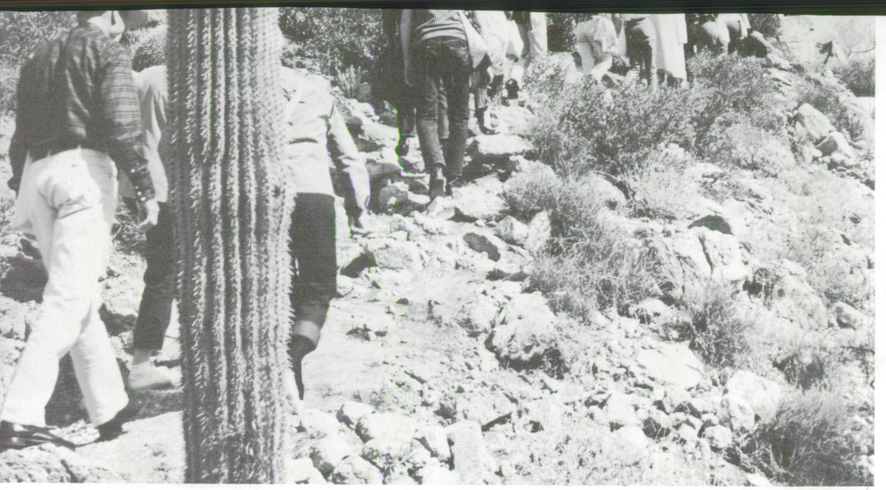


• Don's Club of Phoenix on annual hike into Superstition Wilderness Area.

abundant warm-water fish such as bass, crappie, perch, bluegill, and catfish in the lakes.

Rocky Mountain mule deer, white-tailed deer, elk, black bear, and javelina call the Tonto home in addition to wild turkey, quail, dove, band-tailed pigeon, duck, geese, rabbit, squirrel, and beaver. Mountain Lion is the king of the predator family which includes coyote, bobcat, fox, skunk, weasel, raccoon, and porcupine.

Wildlife is a crop and the Forest Service and Arizona Game and Fish Department work together to keep fish and game populations on the Tonto in balance with available food. The State is responsible for the wildlife itself and the Forest Service for the land, or habitat.

LIVESTOCK GRAZING

The steak you ate last night may have come from a prime steer that grew up on the Tonto National Forest. Each year, the cattle and sheep which harvest the National Forest's forage crop, produce 11,600,000 lbs. of beef and 1,195,000 lbs. of lamb for the tables of America. In addition, the sheep produce about 53,000 lbs. of wool. The livestock is owned by 108 local ranchers and graze under paid permit. The Forest Service

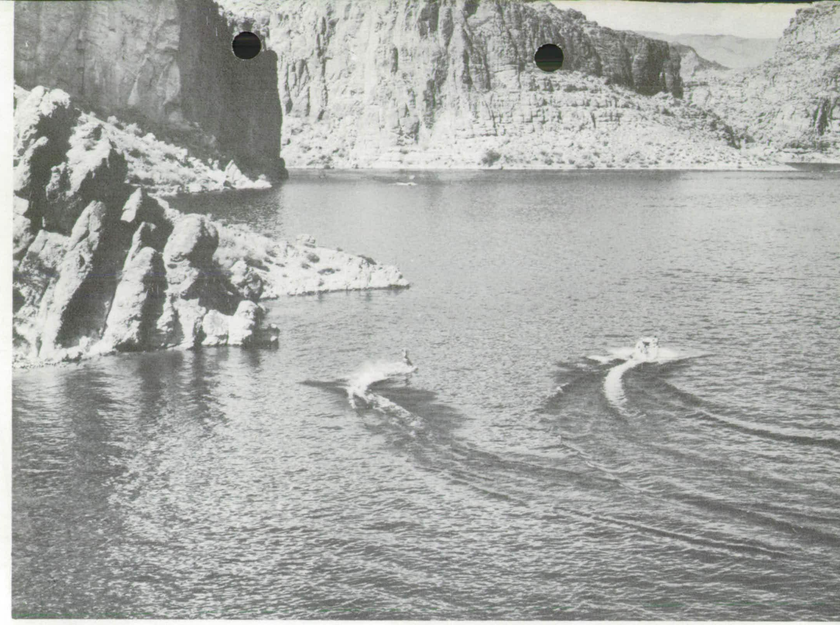
balancing of growth and cut is called "sustained yield" forestry.

The Forest Service does no commercial logging itself. National Forest timber is sold under competitive bid to private individuals and companies who harvest the timber under Forest Service supervision. Money received from timber sales, grazing permits and other National Forest uses goes into the U.S. Treasury. By law, one-fourth of Tonto National Forest receipts is returned to the State for use on schools and roads in the counties having National Forest land.

The Tonto and other National Forests are supplying the major portion of the wood needed to insure continuous operation of the Southwest Forest Industries' new 32.5 million dollar pulp and paper mill at Snowflake Mills, Arizona. Timber cut from the Tonto also supports sawmills at Payson and Heber.

Sustained yield management of the Tonto's commercial Forest land means jobs and pay checks for men in the woods, at the mills, and all along the line to the finished products.

PREVENT FOREST FIRES!



• Water skiing on Canyon Lake.

• Butcher Jones Beach, Saguaro Lake.