DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

## CONTROLLED DOCUMENT

DMA Docket No. 393

## DO NOT DETACH THIS SLIP

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

This document has been recorded as

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

Routing Slip

| | | | |
|---|---|---|---|
| To: | Code 500 | Date | 7/7/53 |
| To: | Oper Com | Date | 8-19-53 |
| To: | Oper Com | Date | 3-8-54 |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |
| To: | | Date | |

## DO NOT DETACH

## CONTROLLED DOCUMENT

Docket copy

# ASSIGNMENT OF EXPLORATION PROJECT CONTRACT

WHEREAS, the QUEEN MINING SYNDICATE has entered into an exploration project contract with the U. S. Government which contract is known as Docket No. DMA 393 (Copper) and Contract No. Idm-E586, and

WHEREAS the said QUEEN MINING SYNDICATE desires to assign this contract to a mining company organized by themselves and known as the COPPER QUEEN MINING COMPANY, now therefore,

We, the QUEEN MINING SYNDICATE (assignor) for and in consideration of $1.00 now paid, and other valuable consideration, do hereby grant and assign, subject to Government approval, to COPPER QUEEN MINING COMPANY, a Montana corporation (assignee) all of our interest in a certain exploration project contract No. Idm-E586 dated August 20, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and ourselves as OPERATOR.

By acceptance of this Assignment, the ASSIGNEE agrees to assume and perform all of the reservations, terms, conditions, agreements and covenants in said contract contained.

The post office address of the grantee and assignee herein is as follows:

COPPER QUEEN MINING COMPANY, c/o Lyon Construction Company, Clinton, Montana.

IN WITNESS WHEREOF, I have hereunto set my hand this 15th day of February, 1954.

G. D. Lyon, Secretary of
Queen Mining Syndicate, Grantor
and Assignor

STATE OF WASHINGTON)
) ss.
County of Spokane )

I, the undersigned, a notary public in and for the State of Washington hereby certify that on this 15th day of February, 1954, personally appeared before me G. D. LYON, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes herein mentioned.

WITNESS my hand and official seal this 15th day of February, 1954.

Notary Public in and for the State of Washington, Residing at Spokane

In consideration of the foregoing Assignment, the undersigned hereby accepts the same and agrees to assume and perform all of the reservations, terms, agreements, and covenants contained in the contract above described.

Dated this 15th day of February, 1954.

COPPER QUEEN MINING COMPANY

By _____
President

The Government, this 29th. day of April, 1954, without releasing the Operator, Queen Mining Syndicate, a partnership, from any of the terms, provisions, and conditions of the said Exploration Project Contract, hereby consents to the above Assignment.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

Chandler

Hoffman

COPY

THIS INDENTURE, Made this 15th day of February, 1954, between J. H. MELLEN and MARY E. MELLEN, his wife, of Drummond, Montana; WILLIAM HOWELL, a divorced man of Drummond, Montana, G. D. LYON and ETHEL P. LYON, his wife, of Missoula, Montana, Parties of the First Part; and COPPER QUEEN MINING COMPANY, a Montana corporation, Party of the Second Part,

W I T N E S S E T H:

That the Parties of the First Part, for and in consideration of the sum of Ten Dollars ($10.00), and other valuable consideration, lawful money of the United States of America to them in hand paid by the said Party of the Second Part, the receipt whereof is hereby acknowledged, do by these presents grant, bargain, sell, convey and confirm unto the Party of the Second Part, and to its assigns and successors in interest forever, an undivided three fourths interest in and to all of the following lots, pieces and parcels of land situate, lying and being in the County of Granite, State of Montana, particularly described as follows, to-wit:

| | | |
|---|---|---|
| Sunday Quartz Lode Mining Claim, | Survey | 4692 |
| Free Trade Quartz Lode Mining Claim, | " | 4582 |
| Nuggett Quartz Lode Mining Claim, | " | 4689 |
| Russell " " " " | " | 4688 |
| Pine " " " " | " | 4475 |
| Protection " " " " | " | 4476 |
| Queen " " " " | " | 4392 |
| Toe Calk " " " " | " | 4395 |
| Float " " " " | " | 4540 |
| Inbetween " " " " | " | 4539 |
| Treble " " " " | " | 4541 |
| Armadilla " " " " | " | 4555 |
| Sunol " " " " | " | 4394 |
| Sunrise " " " " | " | 2697 |
| Oakland " " " " | " | 4690 |
| Irce " " " " | " | 4562 |
| Marie " " " " | " | 7241 |

All that portion of the Maud S. Quartz Lode Mining Claim, Survey 4393 which is North of the South line of the County Road, the said road being the well defined road to the South of Henderson Creek.

All that portion of the Gaylord Quartz Lode Mining Claim which is North of the South line of the County Road, the said road being the well defined county road South of Henderson Creek, and the Gaylord being Survey No. 4397,

Also the following described tract of land starting at corner No. 2 of the Queen Quartz Lode, Survey No. 4392; thence South 35° 47' E. 961.5 feet; thence South 49° 45' West, W. 380.5 feet; thence W. 271.8 ft.; thence No. 1025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. Said tract lying in Section Thirty-five (35) Township Nine (9) North, Range Fourteen (14) W., M. P. M.

| | | | | |
|---|---|---|---|---|
| Also the Addie Quartz Lode | Mining | Claim, | Survey | 6342. |
| Nellie Quartz Lode | " | " | " | 6343 |
| Sunflower Quartz Lode | " | " | " | 5394 |
| Bellflower " " | " | " | " | 5393 |

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD unto the said Party of the Second Part, its assigns and successors in interest, the said premises, with the appurtenances, and the quiet and peaceful possession of the same and all thereof by the Party of the Second Part, its assigns and successors in interest;

The Parties of the First Part do hereby WARRANT, and will forever defend.

And the Parties of the First Part, without any representation or covenant of ownership, do quitclaim unto the Party of the Second Part the following unpatented lode claims situate adjacent respectively to the other property described herein:

The Robinson Lode Claim,
The Frog " "
The Heel Calk Quartz Lode Claim,
The Jenny Y. " " Mining Claim,
The May " " " "
The Eagles Nest " " " "
Protection No. 2 Lode Mining Claim, Notice of Location of which is found recorded in Book 18 of Lode Locations, Granite County, Montana, at page 341, to which record reference is hereby made for a more complete description.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto set their hands and seals the day and year first above written.

/s/ J. H. Mellen

/s/ Mary E. Mellen

/s/ G. D. Lyon

/s/ Ethel P. Lyon

/s/ William D. Howell

STATE OF WASHINGTON )
ss
County of Spokane )

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this 15th day of February, 1954, personally appeared before me J. H. MELLEN, WILLIAM HOWELL, and G. D. LYON, to me known to be the individuals described in and who executed the within instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

/s/ Wellman Clark
Notary Public in and for the State of Washington, Residing at Spokane

(SEAL)

WELLMAN CLARK
Notary Public
State of Washington
Commission Expires
March 22, 1954

STATE OF MONTANA )
ss.
County of Granite )

On this 17th day of February, in the year 1954, before me, F. M. DURFEE, a Notary Public in and for the State of Montana, residing at Drummond, personally appeared MARY E. MELLEN, to me known to be the person whose name is subscribed to the foregoing instrument, and she acknowledged to me that she acknowledged the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 17th day of February, 1954.

(SEAL)

F. M. DURFEE
NOTARIAL SEAL
STATE OF MONTANA

/s/ F. M. Durfee
Notary Public for the State of Montana, residing at Drummond.
My commission expires
Oct. 30, 1955

STATE OF MONTANA )
ss.
County of Missoula)

On this 20th day of February, in the year 1954, before me, Russell E. Smith, a Notary Public in and for the State of Montana, residing at Missoula, personally appeared ETHEL P. LYON, to me known to be the persons whose name is subscribed to the foregoing instrument, and she acknowledged to me that she acknowledged the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 20th day of February, 1954.

/s/ Russell E. Smith
Notary Public for the State of Montana, residing at Missoula.
My commission expires
December 15, 1954

(SEAL)
RUSSELL E. SMITH
NOTARIAL SEAL
STATE OF MONTANA

RECORDED

COMPARED 46207

INDEXED

STATE OF MONTANA, )
County of Granite ) SS

I hereby certify that the within instrument was filed in my office on the 10th day of March A.D. 1954 at 16 minutes past 1:00 o'clock p.m., and is recorded on page 384 of Book 35 of Deed Records of Granite County, State of Montana.

Attest my hand: /s/ H. E. McDougal, County Recorder

Fees $2.00 By /s/ Maude Echols, Deputy

COPY

QUIT CLAIM DEED

THIS INDENTURE, Made this 19th day of February, 1954, between RUTH D. NOON, a widow, of Portland, Oregon, Party of the First Part, and COPPER QUEEN MINING COMPANY, a Montana corporation, Party of the Second Part,

WITNESSETH, that the said Party of the First Part, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration, lawful money of the United States of America, to her in hand paid by the said Party of the Second Part, the receipt whereof is hereby acknowledged, hath Granted, Bargained, Sold, Remised, Released, and forever Quit-Claimed, and by these presents, does Grant, Bargain, Sell, Remise, Release, and forever Quit-Claim, unto the said Party of the Second Part, its assigns and successors in interest forever, her interest in and to all of the following lots, pieces and parcels of land situate, lying and being in the County of Granite, State of Montana, particularly described as follows, to-wit:

| | | |
|---|---|---|
| Sunday Quartz Lode Mining Claim, | Survey | 4692 |
| Free Trade Quartz Lode Mining Claim, | " | 4582 |
| Nuggett Quartz Lode Mining Claim, | " | 4689 |
| Russell " " " " | " | 4688 |
| Pine " " " " | " | 4475 |
| Protection " " " " | " | 4476 |
| Queen " " " " | " | 4392 |
| Toe Calk " " " " | " | 4395 |
| Float " " " " | " | 4540 |
| Inbetween " " " " | " | 4539 |
| Treble " " " " | " | 4541 |
| Armadilla " " " " | " | 4555 |
| Sunol " " " " | " | 4394 |
| Sunrise " " " " | " | 2697 |
| Oakland " " " " | " | 4690 |
| Irce " " " " | " | 4562 |
| Marie " " " " | " | 7241 |

All that portion of the Maud S. Quartz Lode Mining Claim, Survey 4393 which is North of the South line of the County Road, the said road being the well defined road to the South of Henderson Creek.

All that portion of the Gaylord Quartz Lode Mining Claim which is North of the South line of the County Road, the said road being the well defined county road South of Henderson Creek, and the Gaylord being Survey No. 4397.

Also the following described tract of land starting at corner No. 2 of the Queen Quartz

Lode, Survey No. 4392; thence South 35° 47' E. 961.5 feet; thence South 49° 45' West, W. 380.5 feet; thence W. 271.8 ft; thence No. 1025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. Said tract lying in Section Thirty-five (35) Township Nine (9) North, Range Fourteen (14) W., M. P. M.

| | | | | |
|---|---|---|---|---|
| Also the Addie Quartz Lode | Mining | Claim, | Survey | 6342 |
| Nellie Quartz Lode | " | " | " | 6343 |
| Sunflower Quartz Lode | " | " | " | 5394 |
| Bellflower " " | " | " | " | 5393 |

and the following unpatented lode claims situate adjacent respectively to the other property described herein:

The Robinson Lode Claim,
The Frog " "
The Heel Calk Quartz Lode Claim,
The Jenny Y. " " Mining Claim,
The May " " " "
The Eagles Nest " " " "
Protection No. 2 Lode Mining Claim, Notice of location of which is found recorded in Book 18 of Lode Locations, Granite County, Montana, at page 341, to which record reference is hereby made for a more complete description.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD unto the said Party of the Second Part, its assigns and successors in interest, the said premises, with the appurtenances, and the quiet and peaceful possession of the same and all thereof by the Party of the Second Part, its assigns and successors in interest.

IN WITNESS WHEREOF, the Party of the First Part has hereunto set her hand and seal the day and year first above written.

/s/ Ruth D. Noon

STATE OF OREGON )
ss.
County of Multnomah)

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this 19th day of February, 1954, personally appeared before me RUTH D. NOON, a widow, to me known to be the individual described in and who executed the within instrument, and acknowledged that she signed and sealed the same as her free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

(SEAL)

CLARENCE D. PHILLIPS

NOTARY PUBLIC

STATE OF OREGON

/s/ Clarence D. Phillips
Notary Public in and for the State of Oregon, Residing at

My commission expries
Dec. 29, 1957

- - - - - - - - - - - - - - - - - - -

RECORDED
COMPARED 46206
INDEXED
P.O.

STATE OF MONTANA,)
County of Granite) ss

I hereby certify that the within instrument was filed in my office on the 10th day of March A.D. 1954 at 15 minutes past 1:00 P.M. and is recorded on page 382 of book 35 of Deed Records of Granite County, State of Montana.

Attest my hand: /s/ H. E. McDougal, County Recorder

Fees $1.25 by /s/ Maude Echols, Deputy

COPY

THIS INDENTURE, made this 24th day of August, in the year 1953, between JAMES A. MURRAY and HELEN MURRAY, his wife, of Washington, D. C., WILLIAM D. MURRAY and LULU ANN MURRAY, his wife, of Butte, Montana, CHARLES A. MURRAY and THEA H. MURRAY, his wife, of Washington, D. C., HOWARD A. MURRAY and JOSIE H. MURRAY, his wife, of Loveland, Colorado, and EDWARD MURRAY and DAPHNE MURRAY, his wife, of Pond Hollow Farm, Westbury, Long Island, and LOWNDES MAURY and ANNE H. MAURY, his wife, of Butte, Montana, parties of the first part, and J. H. MELLEN, of Drummond, Montana, W. J. NOON, of Drummond, Montana, WILLIAM HOWELL, of Drummond, Montana, and G. D. LYON, of 1639 Helena Avenue, Missoula, Montana, parties of the second part,

W I T N E S S E T H: That the parties of the first part, for and in consideration of the sum of Ten ($10) Dollars, and other valuable considerations, lawful money of the United States of America to them in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged, do by these presents grant, bargain, sell, convey and confirm unto the parties of the second part, and to their heirs and assigns forever, all of the following lots, pieces and parcels of land situate, lying and being in the County of Granite, State of Montana, particularly described as follows, to-wit:

| | | |
|---|---|---|
| Sunday Quartz Lode Mining Claim | Survey | 4692, |
| Free Trade Quartz Lode Mining Claim, | " | 4582 |
| Nuggett Quartz Lode Mining Claim, | " | 4689 |
| Russell " " " " | " | 4688 |
| Pine " " " " | " | 4475 |
| Protection " " " " | " | 4476 |
| Queen " " " " | " | 4392 |
| Toe Calk " " " " | " | 4395 |
| Float " " " " | " | 4540 |
| Inbetween " " " " | " | 4539 |
| Treble " " " " | " | 4541 |
| Armadilla " " " " | " | 4555 |
| Sunol " " " " | " | 4394 |
| Sunrise " " " " | " | 2697 |
| Oakland " " " " | " | 4690 |
| Irce " " " " | " | 4562 |
| Marie " " " " | " | 7241 |

All that portion of the Maud S. Quartz Lode Mining Claim, Survey 4393 which is North of the South line of the County Road, the said road being the well defined road to the South of Henderson Creek.

All that portion of the Gaylord Quartz Lode Mining claim which is North of the South line of the County Road, the said road being the well defined county road South of Henderson Creek, and the Gaylord being Survey No. 4397.

Also the following described tract of land starting at corner No. 2 of the Queen Quartz Lode, Survey No. 4392; thence South 35° 47' E. 961.5 feet; thence South 49° 45' West, W. 380.5 feet; thence W. 271.8 ft.; thence N. 1025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. Said tract lying in Section Thirty-five (35), Township Nine (9) North, Range Fourteen (14) W., M. P. M.

Also the Addie Quartz Lode Mining Claim, Survey 6342
Nellie Quartz Lode " " " 6343
Sunflower Quartz Lode " " " 5394
Bellflower " " " " " 5393

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD unto the said parties of the second part, their heirs and assigns, all and singular, the said premises, with the appurtenances, and the quiet and peaceful possession of the same and all thereof by the parties of the second part, their heirs and assigns:

The parties of the first part do hereby WARRANT, and will forever defend.

And the parties of the first part, without any representation or covenant of ownership, do quitclaim unto the parties of the second part the following unpatented lode claims situate adjacent respectively to the other property described herein:

The Robinson Lode Claim;
The Frog " "
The Heel Calk Quartz Lode Claim;
The Jenny Y. Quartz Lode Mining Claim;
The May Quartz Lode Mining Claim;
The Eagles Nest Quartz Lode Mining Claim;
Protection No. 2 Lode Mining Claim, Notice of location of which is found recorded in Book 18 of Lode Locations, Granite County, Montana, at page 341, to which record reference is hereby made for a more complete description.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands and seals the day and year first above written.

/s/ James A. Murray

/s/ Helen K. Murray

/s/ Howard A. Murray

/s/ Josie H. Murray

/s/ Charles A. Murray

/s/ Thea H. Murray

/s/ Edward E. Murray

/s/ Daphne Murray

/s/ Lowndes Maury

/s/ Anne H. Maury

/s/ Lulu Ann Murray

/s/ William D. Murray

DISTRICT OF COLUMBIA, )
: ss.
CITY OF WASHINGTON, )

On this 17th day of Aug., in the year 1953, before me, Chas. E. Alden, a Notary Public in and for the District of Columbia, City of Washington, personally appeared JAMES A. MURRAY and HELEN MURRAY, his wife, CHARLES A. MURRAY and THEA H. MURRAY, his wife, known to me to be the persons whose names are subscribed to the foregoing deed, and they each and all acknowledged to me that they executed the same.

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

/s/ Chas. E. Alden
Notary Public for the District of Columbia, City of Washington, residing At
My commission expires 8-14-57

(SEAL)
CHAS E. ALDEN
NOTARY PUBLIC
DISTRICT OF COLUMBIA

Project #4, Ben Guerir )
: ss.
French MOrocco, N.Africa)

On this 5th day of Aug., in the year 1953, before me, a commissioned officer of the United States Army, empowered to take acknowledgments, personally appeared HOWARD A. MURRAY, known to me to be the person whose name is subscribed to the foregoing deed, and he acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand, and have affixed or written or subscribed a seal this 5th day of Aug. 1953.

/s/ James M. Gale, NA.CF
Summary Court, Officer
East Atlantic District
APO30

STATE OF MONTANA, )
; ss.
COUNTY OF SILVER BOW, )

On this 24th day of August, in the year 1953, before me, Sylvester J. Sullivan, a Notary Public in and for the State of Montana, residing at Butte, personally appeared Lowndes Maury and Anne H. Maury, his wife, W. D. Murray and Lulu Ann Murray, his wife, to me known to be the persons whose names are subscribed to the foregoing instrument, and they severally acknowledged to me that they acknowledged the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 24th day of August, 1953.

/s/ Sylvester J/ Sullivan
Notary Public for the State of Montana, residing at Butte. My commission expires September 29, 1954.

(NOTARIAL SEAL)

SYLVESTER J. SULLIVAN
NOTARIAL SEAL
STATE OF MONTANA

DISTRICT OF COLUMBIA, )
: ss.
CITY OF WASHINGTON, )

On this 17th day of Aug. in the year 1953, before me, Chas. E. Alden, a Notary Public in and for the District of Columbia, City of Washington, personally appeared EDWARD MURRAY AND DAPHNE MURRAY, his wife, known to me to be the persons whose names are subscribed to the foregoing deed, and they each acknowledged to me that they executed the same.

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

/s/ Chas E. Alden
Notary Public for the District of Columbia, City of Washington,
residing at _____
My commission expires 8/14/57

(SEAL)
CHAS E. ALDEN
NOTARY PUBLIC
DISTRICT OF COLUMBIA

DISTRICT OF COLUMBIA )
: ss.
CITY OF WASHINGTON )

On this 17th day of August, in the year 1953, before me, Chas. E. Alden, a Notary Public in and for the District of Columbia, City of Washington, personally appeared JOSIE H. MURRAY, wife of Howard A. Murray, a party who subscribed the foregoing instrument, and she personally acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal this 17th day of Aug., 1953.

/s/ Chas. E. Alden
Notary Public for the District of Columbia, City of Washington, residing at
My commission expires 8/14/57

(SEAL)

CHAS. E. ALDEN
NOTARY PUBLIC
DISTRICT OF COLUMBIA

- - - - - - - - - - - - - - - - - - - - - -

RECORDED COMPARED

INDEXED 46075

P.O.

STATE OF MONTANA)
ss
County of Granite)

I hereby certify that the within instrument was filed in my office on the 14th day of January A.D. 1954 at 15 minutes past 2:00 o'clock p.m., and is recorded on page 326 of Book 35 of Deed Records of Granite County, State of Montana.

Attest my hand: /s/ N. E. McDougal, County Recorder

Fees$4.15 By /s/ Maude Echols, Deputy

MF-200 (A)
(February 1952)

DOCKET NO. DMEA [illegible]

COMMODITY Copper

Docket Copy

IDM-E 586

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

# EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 20th day of August, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Queen Mining Syndicate, a partnership composed of W. A. Moon, O. [illegible] Lyon, J. H. Mellen, and William Howell, Jr.

hereinafter called the "Operator," as follows: and as set forth in Annexes I and II attached hereto and made a part hereof:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Granite, described as follows:[3] set forth in Annex I

the Operator represents and undertakes:[4]

(*a*) ~~That the Operator is the owner in possession and entitled to possession, and that the property is subject only to the following claims, liens or encumbrances as to one of which the subordination agreement of the holder is attached:~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 60 days from the date of this contract shall commence work on a project of exploration for[5] Copper

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $10,730.00, which is 50 percent of $21,460.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof: Provided, that no failure by the Operator to make the Operator's rights subject hereto, without any disposition of the Operator's rights therefrom, or the cost of maintaining such rights, shall be considered in lieu of the Government's assessment work, or to relieve exclusive of exploration work, the Government from the obligation of the Operator to make the required final report and final account, or to relieve the Operator of any liability for payment of any amounts due under the terms of this contract, or to operations on the land or production therefrom, or to the Government's right to a percentage royalty on production, or to the Government's lien upon such production, or to the Government's right to terminate this contract for such transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

[illegible] MINING SYNDICATE
(Operator)

By G. E. Tyson

Secretary

By O. Meredith
Administrator, Defense Minerals Exploration Administration

Hoffman
Chamberlain

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

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXPLORATION PROJECT CONTRACT
QUEEN MINING SYNDICATE
DOCKET NO. DMA-393

## ANNEX I

The land referred to in Article 2 of the contract form consists of the following patented and unpatented mining claims:

### Patented Quartz Lode Mining Claims

| | | |
|---|---|---|
| ✓ Marie | Survey No. | 7241 |
| ✓ Queen | " " | 4392 |
| ✓ Toe Calk | " " | 4395 |
| ✓ Sunol | " " | 4394 |
| ✓ Russell | " " | 4688 |
| ✓ Sunrise | " " | 2697 |

### Unpatented Quartz Lode Mining Claims

These are recorded in the office of the County Clerk and Recorder of Granite County, at Philipsburg, Montana, as follows:

| | Book of Quartz Locations | Page |
|---|---|---|
| ✓ Robinson | 1 | 14 |
| ✓ Heel Calk | 1 | 17 |
| ✓ Frog | 1 | 18 |
| ✓ Jennie Y | 3 | 595 |

| | Book of Certificate of Locations | Page |
|---|---|---|
| Gopher, Relocation | 21 | 459 |

# EXPLORATION PROJECT CONTRACT
# QUEEN MINING SYNDICATE
# DOCKET NO. DMA-393

ANNEX II

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after a sufficient, complete, final report and final account referred to in the contract has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development, The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

EXPLORATION PROJECT CONTRACT
QUEEN MINING SYNDICATE
DOCKET NO. DMA-393

EXHIBIT "A"

Description of the Work

As indicated on the attached map, entitled "Fig. 1, Map of Mining Claims," after rehabilitating and straightening 900 feet of the Main Tunnel, drift northward from the north end of Main Tunnel, on the vein for 550 feet, in cross section a minimum of 5 feet by 7 feet in the clear, sample the vein at suitable regular intervals to delimit ore shoots, and have not more than 110 assays made.

Agreed Unit Costs

| | | |
|---|---|---|
| Tunnel rehabilitation, 900 feet @ $1.60/ft. 1/ | $1,440.00 | |
| Drifting, 550 feet @ $35.60/ft. | 19,580.00 | |
| Assays, 110 @ $4.00/ea. | 440.00 | |
| Total Agreed Unit Costs | | $21,460.00 |
| Government Participation at 50% | | $10,730.00 |

1/ This comprehends all costs, including necessary timbering.

James A. Murray
James A. Murray

W. D. Murray
W. D. Murray

Edward E. Murray
Edward E. Murray

Howard A. Murray
Howard A. Murray

By Charles A. Murray
Charles A. Murray
Their Attorney in Fact.

MF-203

# OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Montana, County of Granite, described as follows:1/

all that property described in an Extension of Lease and Option agreement dated July 2, 1951, between the undersigned and Queen Mining Syndicate, recorded on page 616, Book 10 of Miscellaneous Records, Granite County, Montana, which property description is incorporated herein by reference,

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Queen Mining Syndicate, a partnership

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 10,725.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this _____ day of _____, 195 ___.

Charles A. Murray [Seal] Lorraine Murray (Seal)

_____ [Seal] _____ (Seal)

_____ [Seal] _____ (Seal)

(Seal) (Seal)

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

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

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

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

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

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

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

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

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

File Copy
Surname

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 500
WASHINGTON 25, D. C.

February 9, 1956

Memorandum

To: Contract Administration and Audit Division

From: Chief, Base Metals Division

Subject: Docket No. DMEA-393 (Copper), Copper Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586

Work on the cited project was completed in January 1954. The Final Field Team Report has only recently been received (January 30). In view of the time lag the customary closing letter is waived.

W. R. Griswold

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 500
WASHINGTON 25, D. C.

# PROJECT SUMMARY REPORT

By: W. R. Griswold February 6, 1956

1. Docket No. DMA-393 (Copper)
   Contract No. Idm-E586
   Property: Sunrise Mine
   Location: Granite County, Montana

   Operator: Copper Queen Mining Company
   Assignee of Queen Mining Syndicate
   c/o Lyon Construction Company
   Clinton, Montana

   Operator's property rights: Indenture dated February 15, 1954, conveying 3/4 interest to patented and unpatented claims described in the contract.

   Quit claim deed, dated February 19, 1954, covering patented and unpatented claims described in the contract.

2. Contract dated August 20, 1953.

Work Authorized

| | |
|---|---|
| 900 ft. tunnel rehabilitation @ $1.60/ft. | $ 1,440.00 |
| 550 ft. drifting @ $35.60/ft. | 19,580.00 |
| 110 assays @ $4.00 per assay | 440.00 |
| Total | $21,460.00 |
| Government's participation, 50% | $10,730.00 |

Amendments - None

Work Completed

| | |
|---|---|
| 849 feet rehabilitation @ $1.60/ft. | $ 1,358.40 |
| 550 feet drifting @ $35.60/ft. | 19,580.00 |
| 4 assays @ $4.00 per assay | 16.00 |
| Total | $20,954.40 |
| Government's participation, 50% | $10,477.20 |

3. Audit Certification - dated April 27, 1954.

Operator's final report waived.
Field Team final report dated January 1956.

4. Certification of Discovery - None

5. Comment

The project was undertaken to explore the Queen vein of the Sunrise mine for copper. No ore was discovered by project work, and all evidence points to the fact that the deposit is not of economic interest under present or forseeable conditions.

No certification of discovery or development is warranted by the results of project work nor is Government participation in further exploration considered warranted.

The Queen vein where not oxidized is a massive quartz vein containing variable amounts of pyrite, chalcopyrite, bornite, and scheelite. Work within the unoxidized portions of the vein indicates that the ore shoots along the vein are small and lenticular and constitute about 10 per cent of the vein. Production records indicate that the grade of ore mined from these small ore shoots average 0.21 ounce of gold per ton, 1.3 ounces of silver per ton, and 2.4 per cent copper.

Drifting on the vein was sporadic because of lack of adequate supervision, inability to employ competent miners, poor living quarters at the mine, and inaccessibility of the mine during the winter months. Finally, by February 1955 the drift had been driven 550.5 feet, completing the project.

No ore was discovered by project work.

W. R. Griswold

WRG/er 2/9/56

Copy to: Docket
Base Metals
Chron.

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

RECEIVED
FEB - 3 1956

February 2, 1956

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of Final Field Team Report, Docket No. DMEA 393 (copper), Contract No. Idm-E586, Copper Queen Mining Company, Assignee of Queen Mining Syndicate, Sunrise Mine (formerly Queen Mine), Granite County, Montana, $21,460.00

The Final Field Team Report of the Sunrise Mine by John D. Bardill, Bureau of Mines, and James J. Quinlan, Geological Survey, has been reviewed.

According to the report, 849 feet of main adit rehabilitation, 550 feet of drifting, and 4 sample analyses were completed at a total cost of $20,954.40.

The exploration drifting did not discover any ore. Information gained from the work indicates that the deposit is low-grade and not of economic importance.

As a result the examiners recommend that no Certification of Discovery or Development is warranted by the results of the project work nor is Government participation in further exploration considered warranted.

I agree with this recommendation.

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
F i l e s
Thor Kiilsgaard, U.S.G.S.
R. W. Geehan

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JAN 30 1956

January 24, 1956

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

Re: Docket No. DMA-393 (Copper)
Copper Queen Mining Company,
Assignee of Queen Mining Syndicate
Sunrise Mine (Formerly Queen Mine)
Granite County, Montana
Contract No. Idm-E586

Dear Mr. Selfridge:

Enclosed are four copies of a Field Team final report written by John D. Bardill, Mining Engineer, U. S. Bureau of Mines, and James J. Quinlan, Geologist, U. S. Geological Survey, on the Sunrise Mine (formerly Queen mine).

The authors state that no Certification of Discovery or Development is warranted by the results of project work nor is Government participation in further exploration considered warranted.

By Field Team, Region I, NW District

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

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

Enclosures
cc: USBM(2)
Quinlan

Reviewed by
DMEA OPERATING COMMITTEE
2-1-56
(Date)

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION I
Northwest District

RECEIVED
JAN 30 1956

# FINAL REPORT

Contract Idm-E586

by

John D. Bardill
Mining Engineer
U. S. Bureau of Mines

James J. Quinlan
Geologist
U. S. Geological Survey

COPPER QUEEN MINING COMPANY, ASSIGNEE OF
QUEEN MINING SYNDICATE
Clinton, Montana

| | |
|---|---|
| Docket No.: | DMA-393 |
| Commodity: | Copper |
| Contract date: | August 20, 1953 |
| Completion date: | February 28, 1955 |

Reviewed by
DMEA OPERATING COMMITTEE
2-1-56
(date)

SUNRISE MINE
(Formerly Queen Mine)
Marville Mining District
Granite County, Montana

Spokane, Washington

January 1956

## CONTENTS


| | Page |
|---|---|
| INTRODUCTION | 1 |
| Summary | 1 |
| Recommendations | 1 |
| LOCATION AND ACCESSIBILITY | 2 |
| PROPERTY | 2 |
| Patented Quartz Lode Mining Claims | 2 |
| Unpatented Quartz Lode Mining Claims | 2 |
| History and Past Production | 3 |
| Mine Workings | 3 |
| GEOLOGY | 3 |
| THE PROJECT | 5 |
| Summary of Factual Data | 7 |
| Discussion of Conclusions | 8 |


## ILLUSTRATIONS


| Plate | | |
|---|---|---|
| 1 | Map of Sunrise Mine area, Granite County, Montana | In pocket |
| 2 | Geologic Map of Sunrise Mine, Granite County Montana | In pocket |

FINAL REPORT

COPPER QUEEN MINING COMPANY, ASSIGNEE OF
QUEEN MINING SYNDICATE
Sunrise Mine
(Formerly Queen Mine)
Maxville Mining District
Granite County, Montana

RECEIVED
JAN 30 1956

Contract Idm-E586

* * * *

## INTRODUCTION

This report describes an exploration project at the Sunrise mine, Granite County, Montana. The project was conducted by the Queen Mining Syndicate and its successor in interest to the property, the Copper Queen Mining Company, with Defense Minerals Exploration Administration assistance.

### Summary

The project was undertaken to explore the Queen vein of the Sunrise mine for copper. No ore was discovered by project work, and all evidence points to the fact that the deposit is not of economic interest under present or forseeable conditions.

The contract, dated August 20, 1953, and in the amount of $21,460.00, provided for rehabilitation of 900 feet of the Main Adit Level and 550 feet of drifting northerly on the vein on this level. Work was completed in February 1955 at a cost of $20,954.40, of which the Government participation was 50 percent or $10,477.20.

### Recommendations

No Certification of Discovery or Development is warranted by the results of project work nor is Government participation in further exploration considered warranted.

## LOCATION AND ACCESSIBILITY

The Sunrise mine is about 20 miles by road southwest of Drummond, Montana, and roughly 16 miles by road northwest of Philipsburg in sec. 2, T. 8 N., R. 14 W., and sec. 35, T. 5 N., R. 14 W., M.P.M., Granite County, Montana. The mine is reached from Stone Station on U. S. Highway 10A by 5 miles of county and Forest Service road through Henderson Gulch.

The mine is in the eastern margin of the John Long Mountains on the south slope of Sunrise Mountain at an altitude of about 6,000 feet. The grass-covered hills are rugged but not precipitous.

The climate is typical of western Montana of the same altitude with freezing temperatures and snow prevailing from November to April. Summers are warm and pleasant.

## PROPERTY

The property consists of the following patented and unpatented mining claims:

### Patented Quartz Lode Mining Claims

| | | |
|---|---|---|
| Marie | Survey No. | 7241 |
| Queen | do. | 4392 |
| Tee Calk | do. | 4395 |
| Sunol | do. | 4394 |
| Russell | do. | 4688 |
| Sunrise | do. | 2697 |

### Unpatented Quartz Lode Mining Claims

| | Book of Quartz Locations | Page |
|---|---|---|
| Robinson | 1 | 14 |
| Keel Calk | 1 | 17 |
| Frog | 1 | 18 |
| Jennie Y | 3 | 595 |

| | Book of Certificate of Locations | |
|---|---|---|
| Gopher, Relocation | 21 | 459 |

The unpatented claims are recorded in the office of the County Clerk and Recorder of Granite County, at Philipsburg, Montana.

The claims are reportedly owned by the company and are shown on plate 1 accompanying this report.

## History and Past Production

The Sunrise mine, which in the past has also been known as the Queen mine, was discovered about 1890. According to reports, it operated intermittently from 1892 to 1903 on enriched gold ore from oxidized parts of the Queen vein. Production during this period is estimated at $120,000.00 in gold from 40,000 tons of ore. About 15,000 tons of tailings from this early operation were cyanided in 1912; $3.50 to $4.00 per ton in gold is reported to have been recovered from these tailings.

Small-scale operations have been carried on at intervals since 1913. Most efforts during this period have been directed at exploiting unoxidized portions of the Queen vein. During this period about 8,000 tons of ore averaging 0.21 ounce of gold per ton, 1.3 ounces of silver per ton, and 2.4 percent copper have been produced.

## Mine Workings

The Main Queen workings include over 7,500 feet of adit level drifts and inclines on the Queen vein. These workings explore the vein for about 1,400 feet along its strike and about 1,600 feet down its dip. Because of the flat dip of the vein the workings explore the vein over a vertical range of only 500 feet. Plates 1 and 2 show the known principal drifts and inclines on the vein. Although a large part of the old workings are accessible (areas for which geology is shown on pl. 2 are accessible) for inspection purposes, it would take a considerable amount of rehabilitation work before mining operations could be carried on through most of them.

The Russell workings explore the Queen vein about 1,200 feet north of the Main Queen workings. A total of 500 feet of cross-cuts, drifts, and inclines has been driven to test the vein in the Russell area. The Russell workings are shown on plates 1 and 2.

In addition to the Queen and Russell workings numerous shallow shafts, pits, and trenches explore the Queen vein and other smaller structures on the property.

# GEOLOGY

The Sunrise mine is within the Philipsburg quadrangle. The geology of the quadrangle as well as the mine has been described by Emmons and Calkins (U. S. Geol. Survey Prof. Paper 78). The geology of the mine has also been described by John W. Cole (U. S. Bureau of Mines R.I. 4689).

The geology of the Philipsburg quadrangle is complex and many types of ore deposits are found within its boundaries. Much of the quadrangle is underlain by sedimentary rocks which range in age from Precambrian to Recent. A part of the area is underlain by granitic rocks which are believed to have been emplaced in Tertiary time.

The sedimentary rocks in the eastern part of the quadrangle have been intricately folded and faulted. In the western part, however, the structure is not nearly so complex. The western area is underlain principally by gently folded sedimentary rocks of the Belt series of Precambrian age. These rocks have been thrust eastward over the younger rocks along the Philipsburg overthrust. The Sunrise mine is about 4 miles west of this overthrust.

The Belt rocks in the immediate vicinity of the mine are impure limestones and calcareous shales which have been mapped as a part of the Newland formation. These rocks generally strike north and dip 15°-20° W.

A small pluton of granodiorite crops out 1,000 feet south of the main Queen workings in the bottom of Henderson Gulch (pl. 1). This outcrop is about 300 feet lower in altitude than the lowest Queen Adit Level (4W). Where exposed, this body of granodiorite contains sparse amounts of disseminated scheelite; the occurrence is described in detail by Robert J. Hundhausen (Investigation of Henderson Gulch Tungsten Deposit, Granite County, Montana: U. S. Bureau of Mines R.I. 4513). Most of the sedimentary rocks in the vicinity of the mine have been metamorphosed to some degree by the pluton, but only those rocks in the immediate vicinity of the contact are highly metamorphosed.

The principal ore-bearing structure of the mine is the Queen vein. This vein is a tabular replacement body in a massive limestone horizon. For the most part the vein appears to follow closely the bedding of the enclosing limestone, but in places it cuts it at a small angle. The vein strikes N. to N. 10° E. and dips 9°-40° W., averaging about 18°. The vein ranges in width from less than a foot to 10 feet, averaging about 3 feet.

The vein is oxidized for a distance of 200 to 300 feet from the adit portals on the lower adit levels, 3W and 4W. On the Main Adit Level, however, the vein is oxidized for 600 feet from the portal; beyond this zone of complete oxidation on the Main Adit Level the vein contains lenses of oxidized or partially oxidized material. Although the face of the Main Adit Level is 1,400 feet from the portal and 1,000 feet down dip from the vein's outcrop, it actually is only about 150 feet vertically below the surface (pl. 1). Although the

evidence available at the start of the project suggested that work from the north end of the Main Adit Level would be well within the sulfide zone, it is not surprising that the DMEA drift encountered oxidized vein material, considering that the area is only about 150 feet vertically below the surface. The shallow adits above the Main Adit Level are wholly within the oxide zone.

The oxide ore is reported to have contained quartz, calcite, limonite, cuprite, and in places copper carbonate and silicate minerals. According to available information it carried from $4.00 to $10.00 in gold to the ton. Most of the oxidized ore mined has come from that area of the vein between the No. 2E and 4W levels and reports indicate that values within this area were regular and persistent.

The Queen vein where not oxidized is a massive quartz vein containing variable amounts of pyrite, chalcopyrite, bornite, and scheelite. Work within the unoxidized portions of the vein indicates that the ore shoots along the vein are small and lenticular (stoped sections of vein within unoxidized portion are shown on pl. 2) and constitute about 10 percent of the vein. Production records indicate that the grade of ore mined from these small ore shoots average 0.21 ounce of gold per ton, 1.3 ounces of silver per ton, and 2.4 percent copper.

Scheelite is only a minor accessory mineral in the vein. It is very spotty and irregular in its distribution. Sampling and production records from the area of the best scheelite showing in the Main Adit Level and stopes above near coordinate N. 11,750 show only 0.05 percent $WO_3$. Considering that this is the best showing and that scheelite is not recognized in many parts of the vein, it is doubtful if the scheelite is of interest even as a possible by-product.

## THE PROJECT

The project was planned to test the Queen vein within the sulfide zone. Past work within the sulfide zone indicated the possibility that enough small ore lenses might be found within this zone to encourage a small operator to place the property in production. The most reasonable program for testing the vein within the sulfide zone appears to be by extending one of the adits already within the sulfide zone toward the north. Inasmuch as the north face of the Main Adit Level appeared to be well within the sulfide zone and it would cost less to rehabilitate this adit than any of the others known to be within the sulfide zone, it appeared best to conduct exploration through this adit. The contract as prepared provided for 900 feet of drift rehabilitation on the Main Adit Level and 550 feet of drifting north on the Queen vein on this level.

Although the contract called for work on the Main Adit Level, the Operator on his own account at first started to rehabilitate the No. 1W adit, as he considered it would be better to drift on the No. 1W Adit Level instead of the Main Adit Level as this level was 57 feet below the Main Adit Level, and old maps indicated that face of this lower level was about 225 feet north of the face of the Main Adit Level. It was the Operator's intention to request that contract work be transferred to the lower level if initial rehabilitation to reach its face could be done at reasonable cost. Rehabilitation of the lower adit was abandoned, however, after only 250 feet of the adit had been rehabilitated because work proved slow and costly. Work was then started on the program outlined in the contract.

Rehabilitation of the Main Adit was started in December 1953 and completed in January 1954. A total of 849 feet of drift was rehabilitated during this period.

Drifting on the vein was sporadic because of lack of adequate supervision, inability to employ competent miners, poor living quarters at the mine, and inaccessibility of the mine during the winter months. Finally, by February 1955 the drift had been driven 550.5 feet, completing the project.

Because of inadequate supervision and the probable disinterest of the contract miners, the DMEA drift did not follow the vein as closely as possible; in fact, the first 150 feet of DMEA drifting was in the footwall of the vein. This condition is well illustrated on the geologic map showing the DMEA workings (pl. 2).

The average strike of that part of the Queen vein exposed by the DMEA drifting is N. 5° E. and the average dip about 23° W. The vein exposed by the DMEA drifting ranges in width from 0.3 to 3.7 feet, averaging about 2 feet which is about 1.0 foot less than the average in the older workings.

Although evidence available at the start of the project suggested that work from the north end of the Main Adit Level would be well within the sulfide zone, most of the vein exposed by the DMEA drifting was oxidized or partially oxidized. Details on the oxidation are shown on plate 2.

No ore was discovered by project work. Only one short section of the vein, 60 feet in length, showed any values of interest whatsoever. This section of the vein is just north of U.S.B.M. Station 406 (pl. 2), and for the most part the vein within this section is unoxidized or only partially oxidized. Although other sections of the vein tested by the DMEA drifting contain some sulfides, this is the only section which can be considered as primarily

a sulfide one. Samples No. 175, 176, 177, and 178 (pl. 2) cut in this section over an average vein width of 1.3 feet indicate an average grade of 0.09 ounce of gold per ton, 0.5 ounce of silver per ton, and 1.62 percent copper. All other samples, some of which include sulfide material, show only negligible amounts of gold, silver, and copper.

It is regrettable that the DMEA drifting was not wholly within the sulfide zone, but information gained from this work is of aid in evaluating the deposit. It is clearly evident that the sulfide vein material encountered in the drifting is of little interest considering its grade and also the narrow width of the vein. The gold values in the oxidized portion of the vein area exposed by the DMEA drifting are low. Considering that the oxidized portions of the vein within the DMEA exploration area contain limonite and little or no manganese oxides, one might expect a slight residual enrichment of gold by the oxidation of a sulfide ore shoot. The lack of any evidence for such enrichment, however, suggests that prior to oxidation of the vein no sulfide ore shoot existed along the section of the vein explored under the contract.

## Summary of Factual Data

The following are the costs for 849 feet of main adit rehabilitation, 550 feet of drifting, and 4 sample assays:

| Item | | Total Cost |
|---|---|---|
| Adit rehabilitation | 849 feet @ $ 1.60/ft. | $ 1,358.40 |
| Drifting | 550 feet @ $35.60/ft. | 19,580.00 |
| Assays | 4 @ $ 4.00/sample | 16.00 |
| Total cost | | $20,954.40 |
| Government participation at 50 percent | | $10,477.20 |
| Total contract amount | | $21,460.00 |
| Government's share at 50 percent | | $10,730.00 |

The above costs were taken from the DMEA Auditor's Report of Review dated April 27, 1955.

The Government had no equity in the equipment used on the project.

There was no production, and consequently no royalties were due.

## Discussion of Conclusions

The Operator, comprising three members of the corporation who were active in directing the project, was financially competent, but the supervision of the work was poor. Because of inadequate supervision and probable disinterest of the workers, the contracting miners often drifted out into the walls away from the vein.

Poor housing facilities and difficult access to the mine during the winter months caused considerable delays. On the whole the work was barely satisfactory.

No ore was found by the DMEA drifting. It is regrettable that this drifting was not wholly within the sulfide zone, but information gained from the work indicates that no ore shoots existed along this section of the vein prior to oxidation.

All available information points to the submarginal nature of the deposit. The sulfide ore bodies within the vein are small and low grade and do not appear to be numerous enough to be of economic importance. Considering the amount of past exploration and development work, the production record of the property is unimpressive

Undoubtedly, small sulfide ore bodies similar to those mined in the past could be found by work along the vein, but all available evidence points to the fact that cost of finding and exploiting such bodies would be far greater than value of the ore that might be expected. Under such circumstances further exploration of the deposit is not considered warranted.

Enclosures
Distribution:
DMEA(4)
USBM(5)
USGS(SRO)
Docket
Quinlan

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 16 1953

1201 N. Division St.
Spokane 2, Washington
November 10, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: S. W. Zoldok, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586, Docket No. DMEA 393 (copper)

An inspection of the Main Tunnel and the No. 1-W. tunnel of the Sunrise mine was made on November 1. No one was present at the mine during the inspection.

No work has been done on the Main Tunnel level where rehabilitation work is specified under the DMEA contract.

The Operator has been rehabilitating the No. 1-W. tunnel although no mention of this is made in the contract. Subsequent to the inspection it was learned that the Operator would like to transfer the rehabilitation work to the No. 1-W. tunnel, but no formal request has been made by the Operator to do this and no recommendation on this transfer will be made at this time.

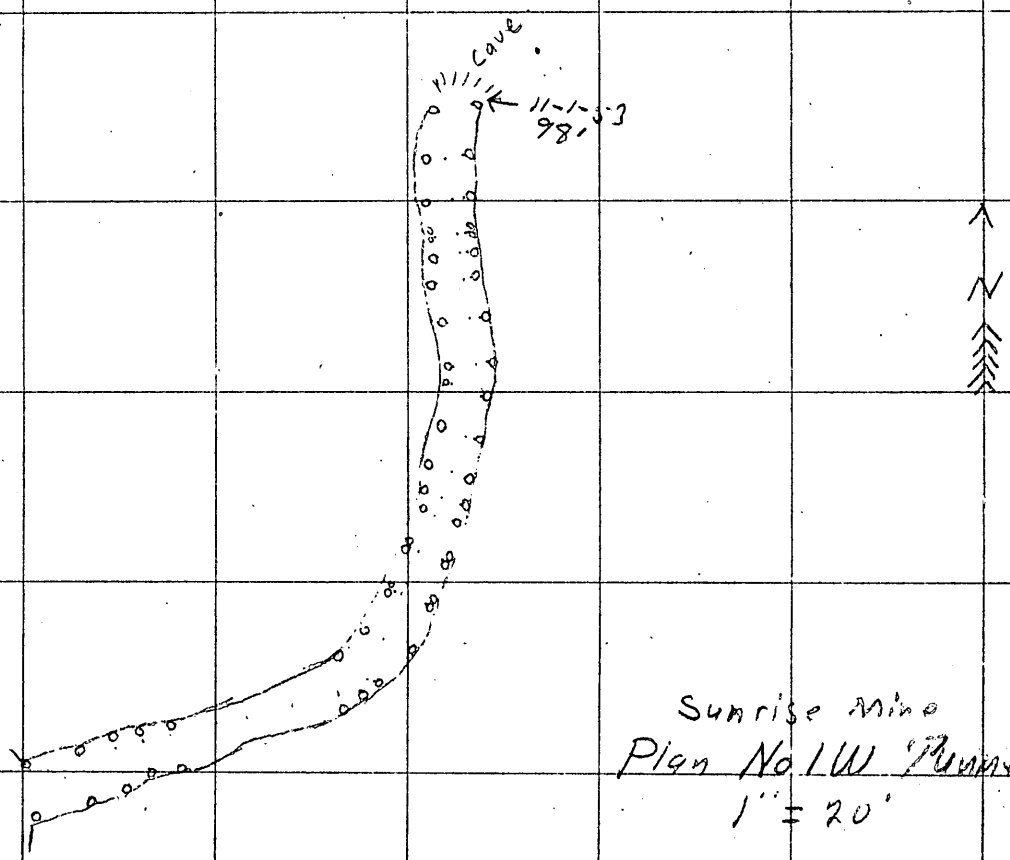
The rehabilitated work in the No. 1-W. tunnel was surveyed and a sketch map accompanies this report. Total rehabilitation work in the No. 1-W. tunnel is 98 feet.

S. W. Zoldok

S. W. Zoldok

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

Queen Mining Syndicate
Granite County, Mont
Docket No DMEA 393
Contract Idm-E 586




Sunrise Mine
Plan No 1W Tunnel
1" = 20'

S.W. Zoldak

[redacted]

XXXXXXXXXXXXXXXXX
1201 N. Division St.
Spokane 2, Washington
May 4, 1955

Mrs. Myrtle Purdy, Certifying Officer
DMEA Field Team, Region I, NW District
1201 North Division Street
Spokane 2, Washington

Re: Contract Idm-2586, Docket DMA 393
Copper Queen Mining Company

Dear Mrs. Purdy:

Work under the subject contract has been completed to the satisfaction of the Government. The operator has not submitted a final engineering report on the results of the work at the project; however, since such a report would have little value, this requirement is hereby waived by the Executive Officer.

All of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed, therefore, the Government has no equity in supplies or equipment used on the project.

A certification of Discovery or Development covering this project will not be recommended.

A final Report of Review dated April 27, 1955 by Auditor C. A. Turner has been received.

As all contract requirements have been met, it is requested that final settlement of our account with the operator be made.

Sincerely yours,

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

cc: DMEA - 2
USGS - 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington
April 27, 1955

Defense Minerals Administration
RECEIVED
MAY 2 1955

MEMORANDUM

To: DMEA Field Team, Region I, NW District

From: John D. Bardill and Eldon C. Pattee, Bureau of Mines Engineers, Region I

Subject: Final inspection, Docket No. DMEA 393 (copper), Copper Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586

This project was inspected April 24, 1955, by the above named Bureau engineers, accompanied by Mr. William Howell, one of the Operators.

The work had been completed during the winter.

The following are the measurements that were mutually agreed upon:

Starting point of contract was BM 227 plus 8 feet

| | | |
|---|---|---|
| BM 227 - BM 402 | 51.6 | feet |
| BM 402 - BM 403 | 73.8 | " |
| BM 403 - BM 398 | 30.9 | " |
| BM 398 - crosscut face | 32.5 | " |
| A - B | 11.0 | " |
| B - BM 399 | 9.0 | " |
| BM 399 - BM 400 | 58.0 | " |
| BM 400 - BM 401 | 43.0 | " |
| BM 401 - BM 406 | 20.3 | " |
| BM 406 - BM 464 | 53.6 | " |
| BM 464 - BM 467 | 45.1 | " |
| BM 467 - BM 466 | 45.1 | " |
| BM 466 - face | 85.0 | " |
| | 558.9 | " |
| Less | 8.0 | |
| Net allowable footage | 550.9 | feet |

Rehabilitation of the main adit totaled 849 feet.

The entire contract was on a fixed unit cost basis and there were no equipment purchases in which the Government has an equity.

The drifting failed to expose significant copper mineralization and it is doubtful that a certification of discovery will be recommended.

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

John D. Bardill

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

1201 N. Division St.
Spokane 2, Washington
March 28, 1955

MEMORANDUM

To: DMEA Field Team, Region I, NW District

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, Docket No. DMEA 393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract Idm-E586

Mr. William Howell, one of the Operators, advised me by telephone the evening of March 7, 1955, that the project contract work had been completed a short time before and that the mine was snowbound.

Mr. Howell also advised me that some more work may be done in the spring when the mine is accessible again.

A final inspection of the project will be made on my next routine inspection in the area.

John D. Bardill

John D. Bardill

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

March 4, 1955

Memorandum

To: DMEA Field Team, Region I, Northwest District

From: J. J. Quinlan, Geologist, U. S. Geological Survey

Subject: Interim Report, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

The Sunrise exploration project was inspected February 24, 1955. This inspection was made after Mr. Lyon of the Queen Mining Syndicate called Spokane to report that contract work had been completed and that the vein exposed by the last few feet of drifting looked very encouraging.

At the time of the inspection the DMEA drift had been advanced 215 feet north of USBM Survey Station 406 (see attached map). This represents an advance of 45 feet since the project was last inspected on February 1. Thus, 537 feet of a total of 550 feet provided for in the contract has been completed. This shows a slight discrepancy between the operator's measurements and mine.

Although the vein has widened in the last 45 feet, and the sulfide (mostly pyrite) content increased in the last 12 feet, the vein is low grade (see attached map). For the last 45 feet of drift the vein averages about 3 feet in width. DMEA samples from this section of the drift are tabulated below. These samples include Sample No. 181 which was cut at the face at the time of the February 1 inspection; assay results of this sample, however, were not available at the time the memorandum of February 18, reporting on this inspection, was prepared. The location of the samples are shown on the attached map.

| Sample No. | Width | oz. Au | oz. Ag | % Cu |
|---|---|---|---|---|
| 181 | 3.7 ft. | 0.012 | None | 0.34 |
| 182 | 2.9 ft. | 0.048 | 0.28 | 0.04 |
| 183 | 3.2 ft. | 0.060 | 0.24 | 0.43 |

A composite of the above samples was made and assayed for tungsten. This assay showed no tungsten.

Apparently what impressed and encouraged the operator more than anything else with the last few feet of drifting was the increase in the sulfide content of the vein. The face shows a 9- to 12-inch quartz-sulfide band in the center of a predominately limonitic vein zone, 3.2 feet wide. According to the miners, the face about 5 to 8 feet back of the face at the time of the inspection showed much better sulfides. At this point the quartz-sulfide band in the back is 1.5 to 2 feet wide; however, the miners report it was about 3 to 4 feet wide in the center of the face. Pyrite is the principal sulfide mineral of the band exposed in the face. As a check on the values it contained a 12-inch sample was cut across the sulfide band at the face. This sample assayed 0.126 ounce gold, 0.80 ounce silver, and 0.25 percent copper.

The operator plans to extend the drift an additional 20 feet or so before discontinuing work in the drift. It is understood, however, that the DMEA cannot participate in any work over the 550 feet provided for in the contract.

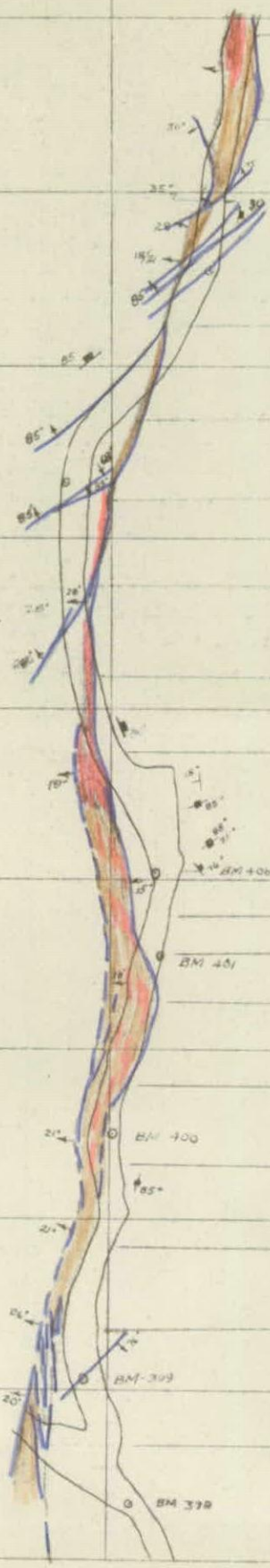
Attachment

Distribution:
DMEA (orig. & 3)
USBM (2)
USBM(AD)
Docket
Quinlan

DOCKET No. DMEA 393 (Copper)

SUNRISE MINE
GRANITE COUNTY, MONTANA
Scale 1" = 40'

N




| Sample No. | Width feet | Au oz | Ag oz | Cu % | |
|---|---|---|---|---|---|
| 183 | 3.2 | 0.06 | 0.24 | 0.43 | Composite Sample 181-183 No $WO_3$ |
| 182 | 2.9 | 0.048 | 0.28 | 0.04 | |
| 181 | 3.7 | 0.012 | No | 0.34 | |
| 180 | 1.0 | 0.006 | 0.10 | 0.05 | Composite Sample 175-180 0.016 % $WO_3$ |
| 179 | 0.4 | No | No | 0.15 | |
| 178 | 1.3 | 0.15 | 0.78 | 3.06 | |
| 177 | 0.3 | No | Tr | 0.05 | |
| 176 | 1.4 | 0.08 | 0.44 | 1.02 | |
| 175 | 2.1 | 0.076 | 0.46 | 1.36 | |
| 169 | 2.3 | 0.048 | No | 0.27 | FW portion |
| 168 | 1.5 | 0.012 | Tr | 0.18 | FW portion |
| 167 | 2.4 | 0.010 | Tr | 0.18 | FW portion |
| 166 | 4.5 | 0.080 | No | 0.09 | |
| 170 | 5.0 | 0.014 | Tr | 0.18 | Composite Sample No. 167-174 (Note does not include Sample No. 166) No $WO_3$ |
| 171 | 1.8 | 0.006 | 0.62 | 0.46 | |
| 172 | 2.3 | 0.010 | No | 0.18 | |
| 173 | 0.4 | 0.008 | No | 0.09 | |
| 174 | 1.6 | 0.160 | 0.20 | 0.82 | |

limonite vein material
quartz + sulfide vein

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

February 18, 1955

Memorandum

To: DMEA Field Team, Region I, Northwest District

From: J. J. Quinlan and D. F. Kellum, Geologists, U. S. Geological Survey

Subject: Interim report, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586

The Sunrise exploration project was inspected January 26 and February 1, 1955.

At the time of the February 1, 1955, inspection, the DMEA drift had been advanced 170 feet north of USBM Survey Station 406 (see attached map). Thus, 492 feet of a total of 550 feet of drifting provided for in the contract had been completed.

The DMEA drift was turned about 30° left or toward the west at USBM Survey Station 406 so as to return to the vein. The vein was encountered about 25 feet north of where the drift was turned and from this point to the face it is exposed in either one or the other wall of the drift. Along this section of the drift the vein is narrow, for the most part ranging in width from 4 inches to about 2 feet. Near the present face, however, the vein appears to split into two strands and the wall rock between both strands is well brecciated and stained with limonite. Here, the vein is 3.7 feet wide if it is considered to be represented by the brecciated and limonitic-stained zone.

A considerable portion of the vein exposed in the last 170 feet of drift is well oxidized as has been the condition of the vein in most of the DMEA drift to date. However, from the point where the vein was encountered 25 feet north of USBM Survey Station 406 to a point 92 feet north of this survey station, the vein is predominately unoxidized. The principal vein minerals in this unoxidized portion of the vein are pyrite, ~~pyrrhotite~~, chalcopyrite, and quartz. Also, a few grains of scheelite are present. For details on oxidization and sampling of the vein in this area see attached map. Although no section of the vein along the last 170 feet of drifting can be considered commercial, it will be noted that the better assay values were obtained

from the unoxidized portion of the vein. Three samples, 175, 176, and 178 cut across dominately sulfide portions of the vein showed the gold content of the vein to vary within limits of 0.076 and 0.15 ounce per ton and the copper content to vary between 1.02 and 3.06 percent.

To check on the tungsten content of the vein, composite samples were made of Samples 167-174 and Samples 175-180. These composite samples, respectively, assayed no tungsten trioxide and 0.16 percent tungsten trioxide.

When the project was inspected January 26, 1955, the operator on company account was opening the portal of the No. 4 adit level which has been caved for many years. The inspectors are a little perplexed as to the reason for opening this portal except that the operator had a bulldozer he wanted to keep busy. The operator has an excellent set of geologic maps (see docket for geologic maps of mine prepared by Preston and Reynolds) of this adit. These maps show the vein to be badly faulted and of little value in this adit. Also, access to this adit for inspection purposes could easily be gained by replacing ladders in a 34-foot vertical raise which connects with an inclined winze from the No. 3 adit level which is accessible. However, as we were in the area the following week and at the operator's insistence that we inspect these workings as soon as possible after he had them open, we returned to the property on February 1, 1955, primarily to examine these workings. Inspection of these workings only confirmed the extremely faulted condition of the ground shown on Preston and Reynolds map.

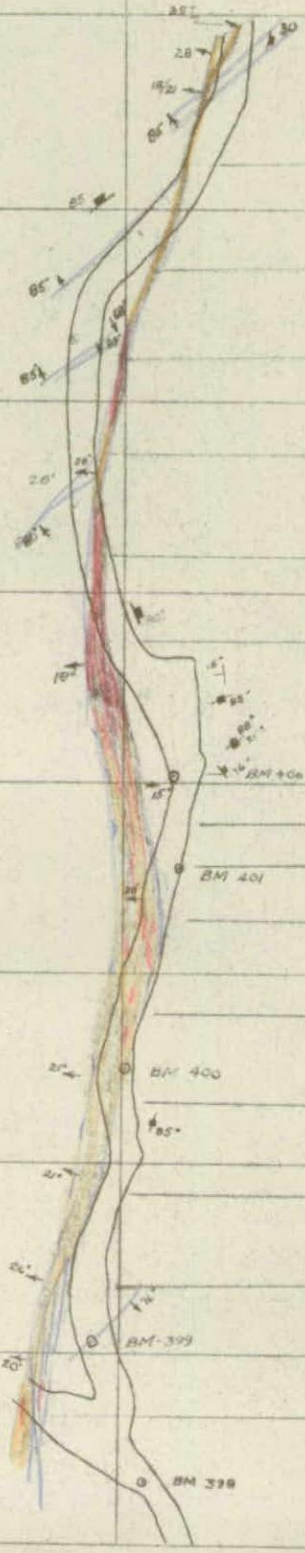
Enclosure

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

DOCKET No. DMEA 393 (Copper)

# SUNRISE MINE
GRANITE COUNTY, MONTANA
Scale 1" = 40'

N




| Sample No. | Width feet | Au oz | Ag oz | Cu % | |
|---|---|---|---|---|---|
| 180 | 1.0 | 0.005 | 0.10 | 0.05 | |
| 179 | 0.4 | No. | No | 0.15 | |
| 178 | 1.3 | 0.15 | 0.78 | 3.06 | |
| 177 | 0.3 | No. | Tr. | 0.05 | Composite Sample 175-180 0.016 % $WO_3$ |
| 176 | 1.4 | 0.08 | 0.44 | 1.02 | |
| 175 | 2.1 | 0.076 | 0.46 | 1.36 | |
| 169 | 2.3 | 0.008 | No. | 0.27 | Fw. portion |
| 168 | 1.5 | 0.012 | Tr. | 0.18 | Fw portion |
| 167 | 2.4 | 0.010 | Tr. | 0.18 | Fw portion |
| 166 | 4.5 | 0.080 | No | 0.09 | |
| 170 | 5.0 | 0.014 | Tr. | 0.18 | |
| 171 | 1.8 | 0.006 | 0.62 | 0.46 | Composite Sample No. 167-174 (Note does not include Sample No. 166) No $WO_3$ |
| 172 | 2.3 | 0.010 | No | 0.18 | |
| 173 | 0.4 | 0.008 | No | 0.09 | |
| 174 | 1.6 | 0.180 | 0.20 | 0.82 | limonite vein material; quartz + sulfide vein |

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~

1201 N. Division St.
Spokane 2, Washington
January 3, 1955

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, Sunrise Mine, Copper Queen Mining Co., Granite County, Montana, Contract Idm-E586, Docket No. DMEA 393 (copper)

A routine inspection of this project was made December 12, 1954, accompanied by Mr. William Howell, one of the Operators.

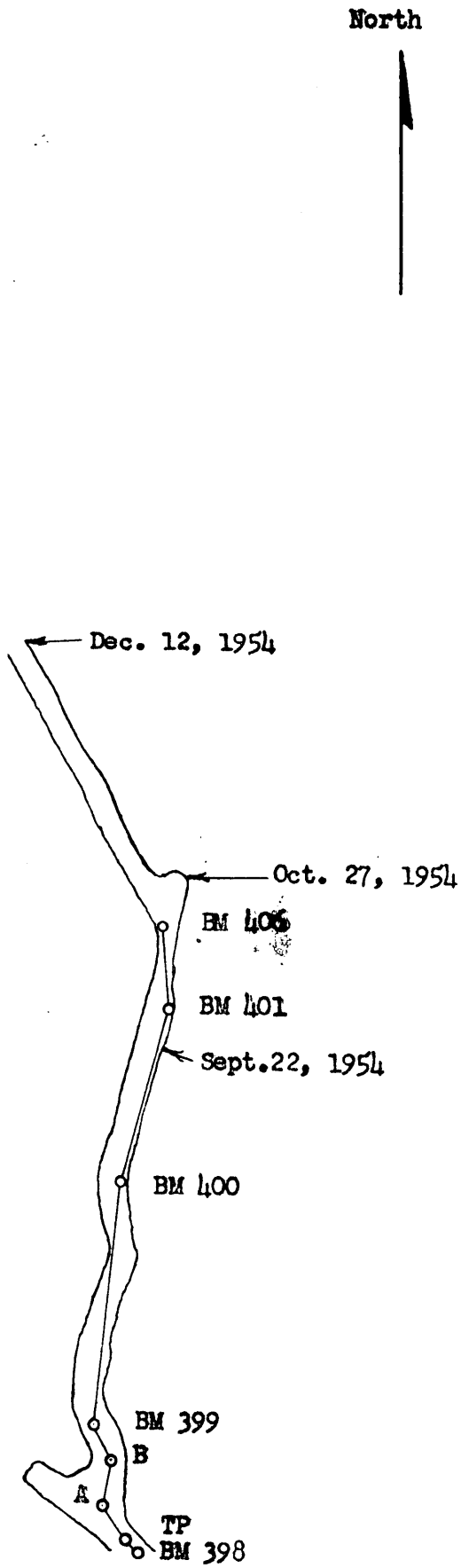
The drift had been advanced about 67 feet since the last inspection on October 27, 1954. It had been turned about 30 degrees toward the west in order to keep the vein completely exposed in the drift. The vein in the face had pinched to about one foot and appeared barren of mineralization.

The Brunton and tape survey was continued and the following measurements recorded:

| | | |
|---|---|---|
| BM 401 to BM 406 | Due North | 20.3 feet |
| BM 406 to face | N. 28° W. | 74 " |

John D. Bardill

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




COPPER QUEEN MINING CO.

SUNRISE MINE

Granite County, Montana

Map No. 2

Docket No. DMEA 393

Contract No. Idm-E586

scale 1" = 40'

J.D.B.

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

December 7, 1954

Memorandum

To: DMEA Field Team, Region II

From: John D. Bardill, Mining Engineer, Bureau of Mines, and James J. Quinlan, Geologist, Geological Survey

Subject: Interim inspection, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

This property was inspected October 27, 1954, by Messrs. Bardill and Quinlan accompanied by Mr. William Howell, one of the company partners.

A Brunton and tape survey was completed from the contract starting point to the drift face and permanent survey points established. The complete survey measurements as of October 27, 1954, were:

| | | |
|---|---|---|
| Contract starting point | | BM 227 + 8 feet |
| BM 227 - BM 402 | | 51.6' |
| BM 402 - BM 403 | | 73.8' |
| BM 403 - BM 398 | | 30.9' |
| | | 156.3' |
| | Less | 8.0' |
| | Subtotal | 148.3' |
| BM 398 - Crosscut face | | 32.5' |
| A - B | | 11.0' |
| B - BM 399 | | 9.0' |
| BM 399 - BM 400 | | 58.0' |
| BM 400 - BM 401 N. 9° E. | | 43.0' |
| BM 401 - Face 10/27/54 | | 45.0' |
| | Total | 346.8' |

The contract allows a total of 550 feet drifting.

Mr. James H. Mellen, one of the partners in the company, accepted these measurements for the purposes of contract footage payments at a meeting with Bardill and Quinlan at Deer Lodge, Montana, October 29, 1954 (see attached map).

Since the inspection of September 22, 1954, the north drift heading has been advanced 55 feet. Forty-five feet back of the present face the strike of the vein changed from about N. 15° E. to N. 7° W. (see attached map). The operator failed to turn the drift with the vein at the point where the change in strike occurred. Although a portion of the footwall of the vein is exposed in the back of the drift to within 5 feet of the face, for all practical purposes the last 20 to 25 feet of drifting has been of little value as little of the vein is exposed.

At the time of the inspection eight samples were cut across the vein exposed in the DMEA workings. These samples, as well as one sample cut during the last routine inspection, are shown on the attached map. All samples were extremely low grade and none showed any values approaching commercial interest; the highest grade sample, No. 174, 1.6 feet wide, assayed 0.18 ounce gold, 0.20 ounce silver, and 0.82 percent copper.

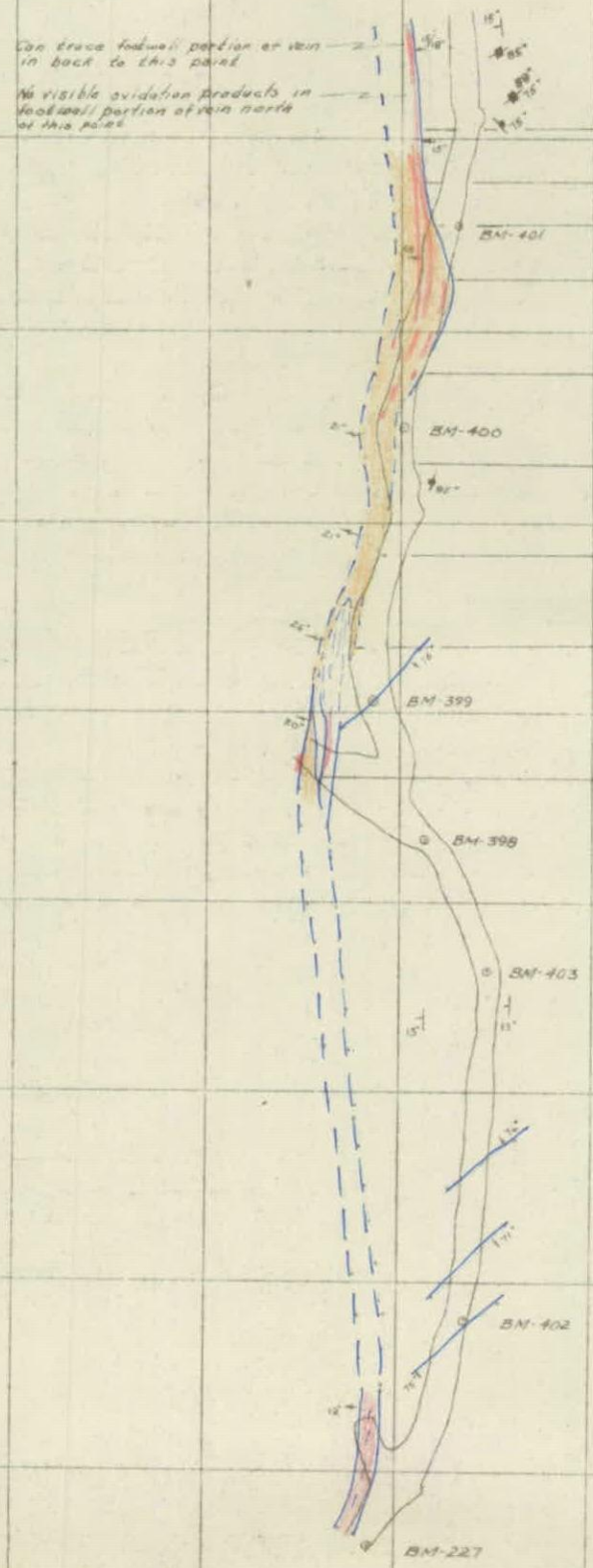
At the time of the inspection project work had been suspended as the mine crew had quit. The operator is attempting to hire a new crew to continue project work.

Mr. Howell and Mr. Mellen were informed that the DMEA was concerned about the poor progress and inadequate supervision of project work. They were advised to turn the drift so as to get back on the vein as soon as possible and after this has been accomplished that the DMEA would pay for only that part of future drifting that followed the vein.

Attachment

Distribution:
DMEA (orig. & 3)
USBM (2)
Docket
Quinlan

DOCKET No. DMEA 393 (Copper)
SUNRISE MINE
GRANITE COUNTY, MONTANA
Scale 1" = 40'




| Sample No | Width feet | Au oz | Ag oz | Cu % | |
|---|---|---|---|---|---|
| 169 | 2.3 | 0.008 | No. | 0.27 | Fw. portion |
| 168 | 1.5 | 0.012 | Tr. | 0.18 | Fw. portion |
| 167 | 2.4 | 0.010 | Tr. | 0.18 | Fw. portion |
| 166 | 4.5 | 0.080 | No | 0.09 | |
| 170 | 6.0 | 0.014 | Tr. | 0.18 | |
| 171 | 1.8 | 0.006 | 0.62 | 0.46 | |
| 172 | 2.3 | 0.010 | No | 0.18 | |
| 173 | 0.4 | 0.008 | No | 0.09 | |
| 174 | 1.6 | 0.180 | 0.20 | 0.82 | |

limonitic vein material
quartz, pyrite and pyrrhotite

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

October 5, 1954

Memorandum

To: DMEA Field Team, Region II.

From: John D. Bardill, Bureau of Mines, Region II, and James J. Quinlan, Geologist, Geological Survey.

Subject: Routine inspection report, Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract Idm-E586, Docket No. DMEA-393 (copper).

A routine inspection was made by the above-named on September 22, 1954, and a Brunton compass-tape survey of the most recent mine workings was made, establishing permanent survey reference points.

The following survey measurements were made:

BM 398 is located about 5 feet southeast of former temporary point "F".

| | | |
|---|---|---|
| BM 398 - crosscut face | N 52° W | 32.5 feet |
| BM 398 - TP | N 52° W | 4.2 " |
| TP - BM 399 | N 15° W | 28.0 " |
| BM 399 - BM 400 | N 6° E | 58.0 " |
| BM 400 - face | N 13° E | 33.0 " |

See attached sketch map No. 2.

At the time of the inspection, project work had temporarily been suspended because the compressor had broken down. The Operator hoped to have the compressor repaired by September 25, 1954, at which time project work would be resumed.

The Operator has followed the vein for about 80 feet in a northerly direction since the DMEA heading was returned to the vein (see attached map No. 1). The vein exposed by this work strikes N. 7° - 19° E. and dips 21° - 28° W. The vein is from 1 to 4.5 feet wide and for the most part it is well oxidized containing much limanitic material. Near the present face two distinct bands containing quartz, pyrite and pyrrhotite occur within the vein which in this area is 4 to 4.5 feet wide. Each band averages about 0.5 foot in width; and the remaining portion of the vein is filled with limonitic and talcy material. A 4.4-foot channel sample across the vein exposed in the face assayed 0.08 ounce gold, no silver and 0.09 percent copper.

The new workings were lamped with an ultraviolet lamp. Only a few small specks of scheelite were noted.

Attachments 2

Distribution:
DMEA (orig. & 3)
USBM (5)
Docket
Quinlan

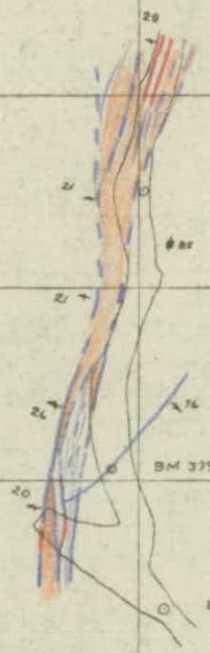
DOCKET No. DMEA 393 (Copper)

SUNRISE MINE

GRANITE COUNTY, MONTANA

Scale: 1" = 40'

N



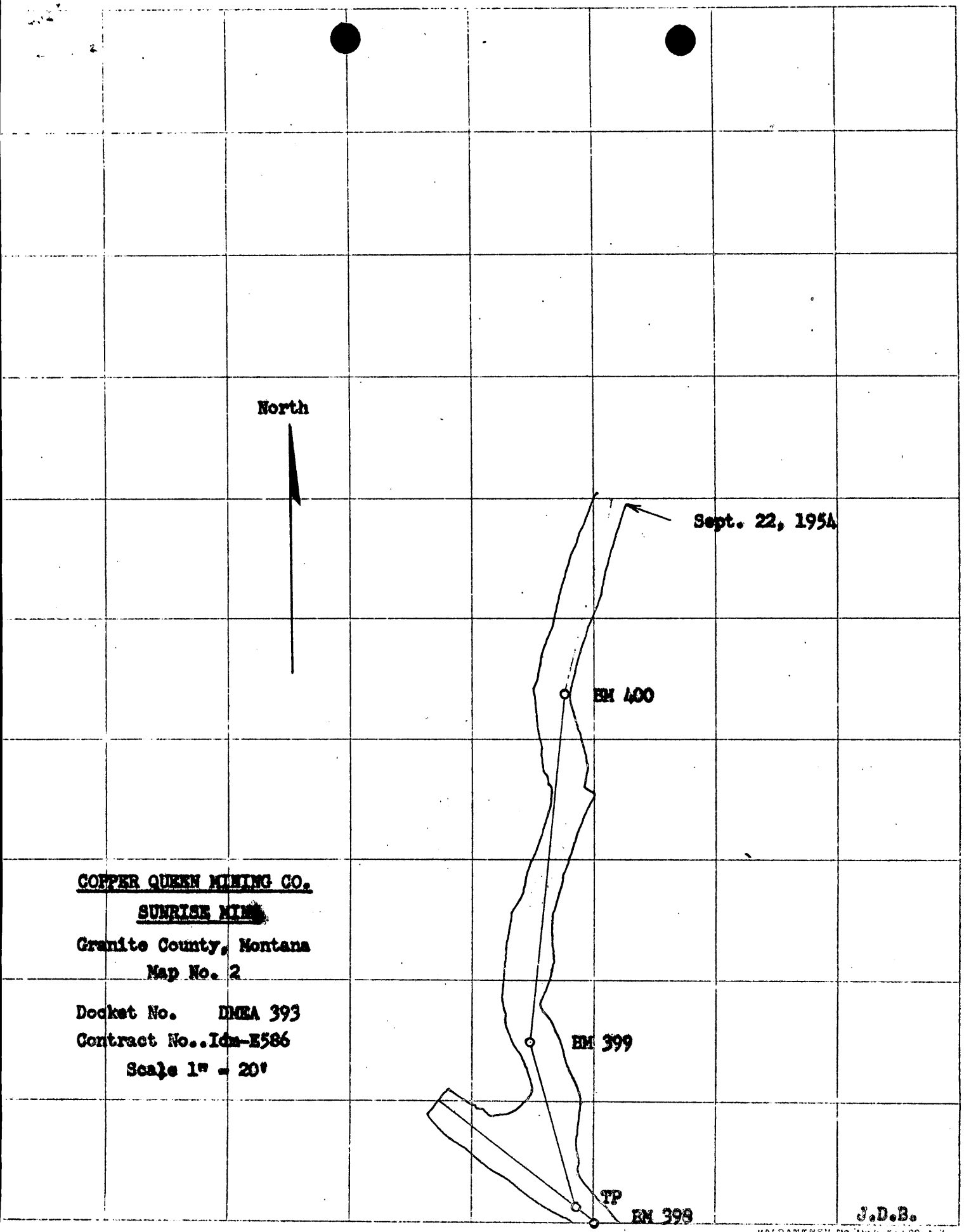

Sample No. 166 4.4 Ft., 0.08 oz. Au, No. Ag, 0.03% Cu.

Isomastic vein material

quartz, Pyrite and pyrrhotite

Map No. 1

"ALBANENE" NO. 190M K&E CO., N.Y. MADE IN U.S.A. MILLOFF




COPPER QUEEN MINING CO.

SUNRISE MINE

Granite County, Montana

Map No. 2

Docket No. DMEA 393

Contract No. Idm-E586

Scale 1" = 20'

"ALDANENE" No. 1006 R. & E. CO., N.Y.
REG. U.S. PAT. OFF.

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

August 19, 1954

Memorandum

To: DMEA Field Team, Region II

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

Subject: Docket No. DMEA-393 (copper), Routine Inspection, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

The property was visited on August 9, 1954, by Don Kellum, geologist, U. S. Geological Survey, and the writer. Mr. Howell was at the property but did not go underground.

The operators have made an elaborate turn to drift on the vein from the crosscut by dropping back to a point about 20 feet from the vein, in the attempt to eliminate what the operator termed a bad curve. Some advance and time were lost in this process. In addition, the miners, who are comparatively inexperienced, blasted the drift too wide. These mistakes will not affect the DMEA but will burden the operator with a greater expense and loss of time. The drift is now on the vein and is about 5' by 7' at the face.

The iron pyrite found in the vein at the crosscut has pinched out; the vein now consists of iron-stained fault gouges at the face.

James Quinlan, geologist, U. S. Geological Survey, will be the DMEA Field Team representative at this property in the future.

Distribution:
DMEA(orig & 3)
USBM(2)
Docket
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

North 1201 Division Street
Spokane 2, Washington
August 20, 1954

Memorandum

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection, Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Docket No. DMEA 393 (copper), Contract Idm-E586

An inspection of this project was made August 5, 1954 accompanied by Mr. William Harold, one of the company stockholders.

At the time of the last inspection on June 23, 1954, the vein was disappearing into the floor at the face of the drift because the drift was directed too far to the west. The vein dips about 20° to the southwest at this point.

In order to keep the hanging wall of the vein in the back of the drift, operator moved back 29 feet from the face and started drifting more to the north thereby following the vein with the hanging wall in the back. The drift had been advanced 48 feet at the time of the inspection. See attached sketch map. (Map will follow with next report)

The entire face of the new drift was in shattered vein formation with about 6 inches to a foot of gauge on the hanging wall. The vein was barren of mineralization.

One shift of two miners have been working 5 days per week since July 9, 1954.

John D. Bardill

Enclosure
cc: Orig & 3 cys Wash.
USGS (2)
DMEA
M/D
AD
JDB:lb

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

July 12, 1954

Memorandum

To: DMEA Field Team, Region II

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

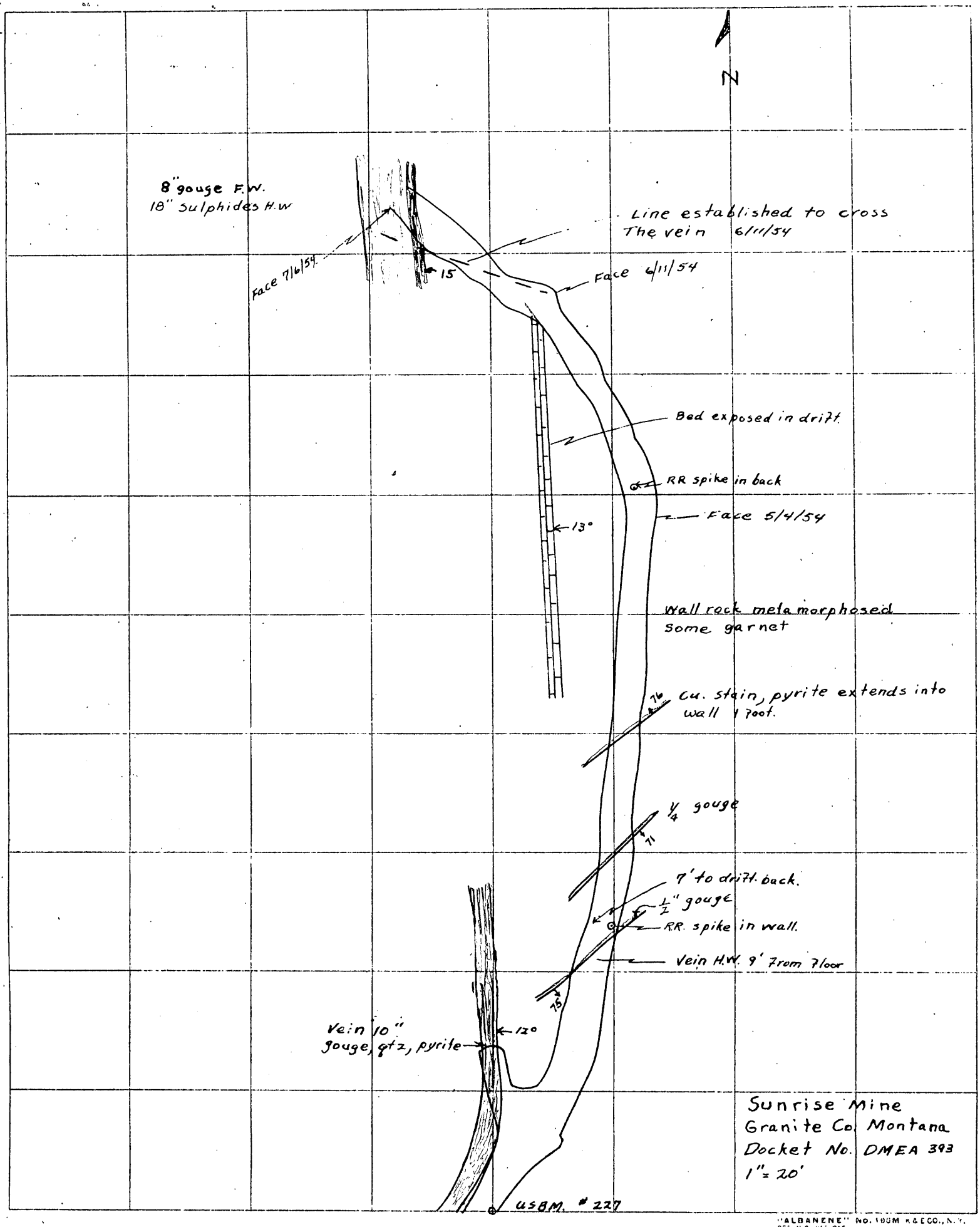
Subject: Routine Inspection, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

The property was visited on July 6, 1954. No one was at the property because Mr. Howell had fired all of the miners.

The drift was advanced 30 feet since June 11, 1954. The vein was intercepted near the face of the drift as shown on the enclosed map. The vein consisted of 6 to 8 inches of iron-stained gouge on the footwall and 18 inches of ore containing a great deal of pyrite and some chalcopyrite. The vein will be sampled by the operator with occasional Field Team samples.

Mr. Howell was attempting to hire another crew. It is believed he hired two men from the Spokane region on July 8, 1954.

Attachment 1
Distribution:
DMEA (orig. & 3)
USBM (2)
Docket
Nickelson




"ALBANENE" No. 100M K&E CO., N.Y.
REG. U.S. PAT. OFF.

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

1201 N. Division St.
Spokane 2, Washington
July 15, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection, Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Docket No. DMEA 393 (copper), Contract Idm-E586

A routine inspection of this project was made June 23, 1954, accompanied by Mr. William Howell, one of the principal stockholders of the company. At the time, no one was working.

A temporary Brunton compass and tape survey was made to determine the progress since the last inspection. Permanent survey points will be located at the time of the next inspection, when holes for plugs will have been drilled.

The following bearings and measurements were made:

BM 227 + 8 ft. - start of contract. The starting point was incorrectly given in the last report.

| | | | |
|---|---|---|---|
| BM 227 to C | N 28° E | 28.0 | feet |
| C to D | N 10° E | 71.7 | " |
| D to E | N 3° W | 38.3 | " |
| E to F | N 42° W | 24.0 | " |
| F to face | N 55° W | 27.6 | " |
| | | 189.6 | " |
| Less | | 8.0 | |
| Advance since start of contract | | 181.6 | feet |

At Sta. F + 13 ft. the vein appears in the back of the drift and dips about 18° to the northwest and is in the bottom of the drift at the face. The vein is sparsely mineralized and has a width of a few inches to about 15 inches.

The drift is directed too far to the west. It will be turned more to the north so that the hanging wall of the vein can be kept in the back of the drift.

Work progress has been poor because of lack of miners who will work regularly.

John D. Bardill

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

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

June 24, 1954

Memorandum

To: DMEA Field Team, Region II

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

Subject: Interim Inspection, Docket No. DMEA-393 (copper)
Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586

The property was inspected on June 11, 1954. Mr. William Howell accompanied the examiner.

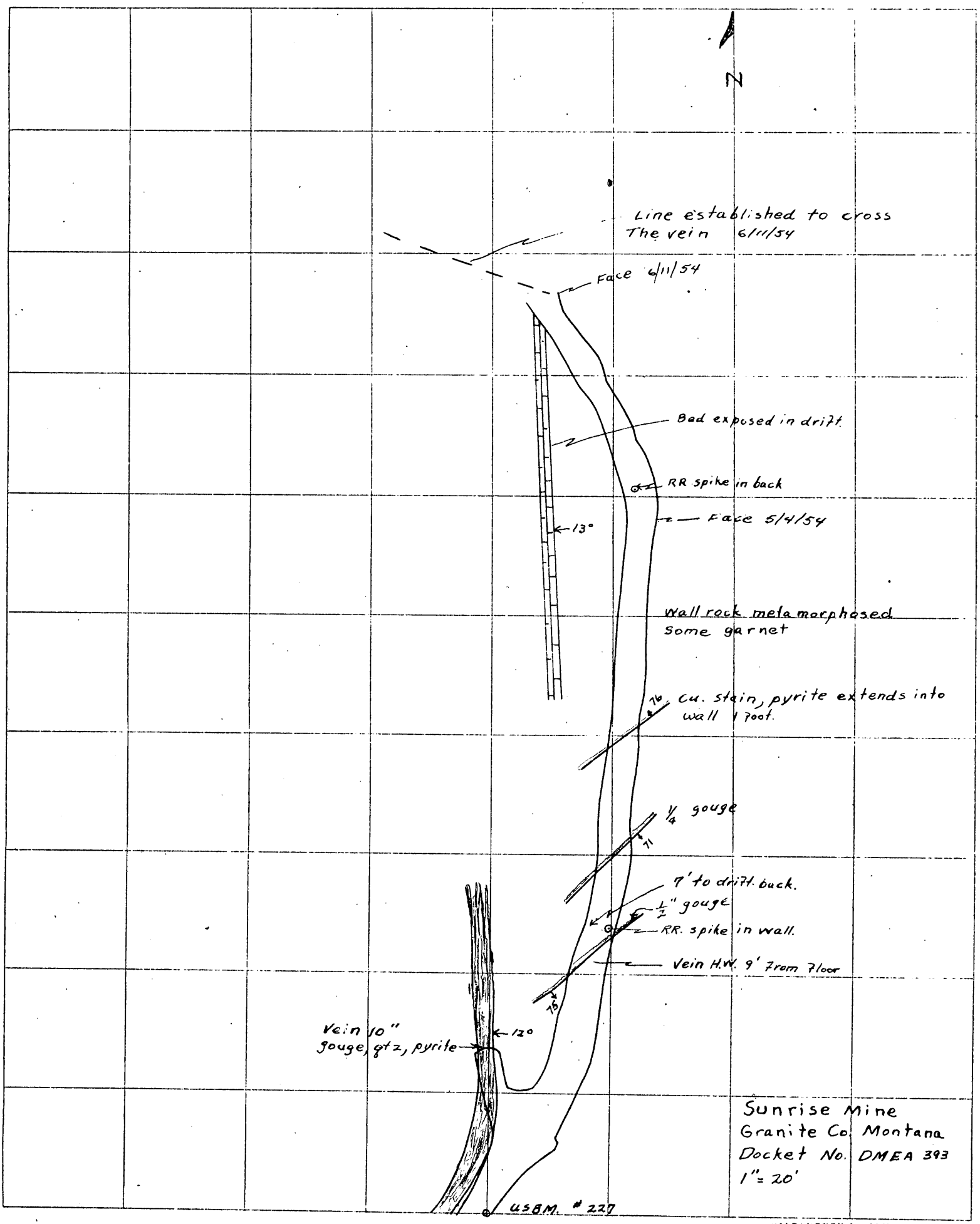
The advance since the last inspection, on May 11, was 40 feet. The low advance can be attributed to the miners missing shifts and quitting. Mr. Howell has told the contract miner that if the advance does not improve he will hire a new crew.

A new jack-leg drill is being used for drifting. A jenny pulls four empty cars to the face, but steep drift grade makes it necessary to hand tram the cars to the surface.

The attached map shows that the last 40 feet of drifting has failed to intersect the vein because the drift has not been turned far enough to the left. A line No. 70° W. was established for the miners to follow, and if this course is followed, the writer expects the vein will be found about 20 to 25 feet from the face.

Enclosure - 1

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




"ALBANENE" No. 190M K&E CO., N.Y.
REG. U.S. PAT. OFF.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

May 14, 1954

Memorandum

To: DMEA Field Team, Region II

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

Subject: Interim inspection, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

The property was inspected on May 11, 1954. No one was at the mine, but project work was discussed with Mr. J. H. Mellon in Drummond, Montana.

The advance has been about 106 feet. The last 68 feet of drift has been driven off the vein structure in the footwall country rock. The operators decreased the size of the drift from 9 by 7 to 7 by 6, but failed to turn the drift left to follow the gently dipping vein which was in the back of the 9 by 7 drift.

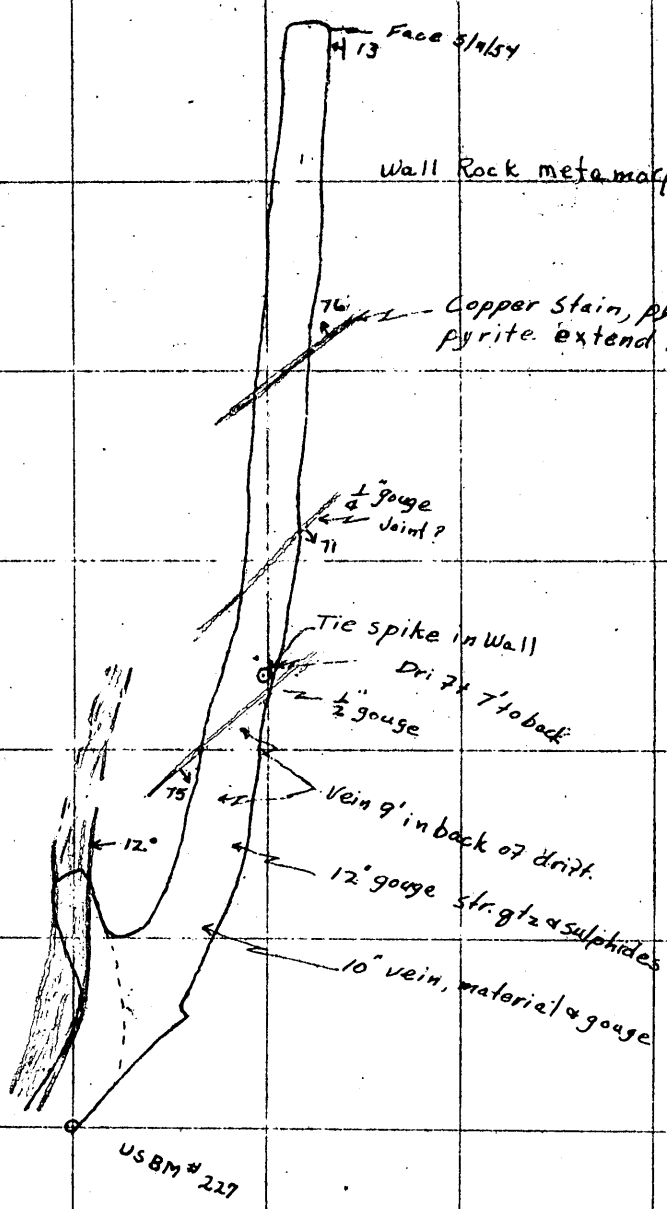
Mr. Mellon was advised to turn the drift to the left or northwesterly to intersect the vein and then continue on the vein.

The ground is a very hard metamorphosed limestone that has resulted in broken drill steel and the use of numerous bits.

Third month in which [illegible] was advised to get on the vein.
No schedule be [illegible] by the Field Team. Field [illegible] be completed as [illegible] for the month in [illegible] be made.
[illegible]

Attachment

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




Sunrise Mine
Granite Co. Montana
Docket No DMEA 393
1" = 20'

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

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

1201 N. Division St.
Spokane 2, Washington
May 4, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines, Region II

Subject: Routine inspection report, Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Docket No. DMEA 393, (copper), Contract Idm-E586

This project was recently transferred from V. Z. Johnson to me.

A routine inspection of this project was made April 30, 1954 accompanied by Mr. James H. Mellen, one of the four principal stockholders of the company.

Work progress was measured since Mr. Johnson's last inspection on March 14, 1954.

Measurements and Brunton compass bearings were made and recorded as follows:

| | | |
|---|---|---|
| BM 227 + 27.5' (starting point of contract) - temporary Pt. X, N. 15° E | | 44 ft. |
| Pt. X to face | due N | 50 ft. |

Advance since the start of the contract has been 94 feet of drift.

Mining is on a two-shift basis when a full complement of miners is available. Living facilities are not especially attractive to good miners.

Starting at a point near the beginning of the contract, the 1-foot, poorly mineralized vein which was dipping about 15° to the west pinched out in the back of the drift at about BM 227 + 61 feet at what appears to be a small fault striking about N. 35° E. and dipping roughly 50° northeast. The bearing may be subject to later correction because of a mucking machine and metallic supplies at the point of measurement.

The vein is not evident between the fault and the face, a distance of about 60 feet. The vein where exposed seemed to be bearing more to the west than the direction of the drift. All agreed that the drift should be gradually turned to the west to locate the vein again. Projecting location of stopes from the next lower level to the present working level indicated that the drift face should be in a poorly mineralized zone.

John D. Bardill

John D. Bardill

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

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

So. 157 Howard Street
Spokane 4, Washington

May 3, 1954

Copper Queen Mining Company
c/o Lyon Construction Company
Clinton, Montana

Re: Docket No. DMA-393X (Copper)
Copper Queen Mining Company, Assignee
of Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Gentlemen:

Enclosed is the Operator's copy of "Assignment of Exploration Project Contract" which has been signed by the Administrator for the Government. This document assigns the above-referenced contract from the Queen Mining Syndicate to the Copper Queen Mining Company.

As stated therein, the Government does not release the Operator, Queen Mining Syndicate, from any of the terms, provisions, and conditions of the said Exploration Project Contract.

Sincerely yours,

Thor H. Kiilsgaard
Acting Member, DMEA
Field Team, Region II

Enclosure

cc: Finance Office w/encl.
USBM (2)
Nicholson
DMEA (2)

FILE COPY
SURNAME:

Hofflund
Griswold
Martin
H. Johnson

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

APR 29 1954

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

Re: Docket No. DMA-393X (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Weissenborn:

Reference is made to your letter to the Operating Committee of April 16 with copies of deeds enclosed. We are now sufficiently advised to approve the assignment of the contract to the Copper Queen Mining Company, a corporation. This we have done by execution of an approval form annexed to the instrument of assignment.

Three copies of the executed assignment form are returned herewith pursuant to your letter of February 26 to the Operating Committee.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (2/2)

Enclosures 3

JLHofflund/emd 4/26/54
Copy to: Docket
Adm. R. File
Op. Comm.
~~RxxWxxGREEN~~
A. R. Kinkel, GSA
C. H. Johnson, BM
W. R. Griswold
J. L. Hofflund
chron.
pending

APPROVED:

J. H. Hedges (2/2)
Member, Bureau of Mines

D. M. Larrabee (2/2)
Member, Geological Survey

R.G.G.

File Copy
Surname

500

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

N/S in R.R.

April 23, 1954

Memorandum

To: Chief Counsel

From: Chief, Base Metals Division

Subject: Docket No. DMEA-393, Queen Mining Syndicate, Contract Idm-E586

The attached letter from Mr. Weissenborn is self-explanatory. Will you kindly advise if the documentation submitted adequately conforms to the stipulations of your March 8 letter.

W. R. Griswold

W. R. Griswold

WRGriwsold/bjl

Copy to: Docket
Base Metals
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

April 21, 1954

Memorandum

To: DMEA Field Team, Region II

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

Subject: Interim inspection, Docket No. DMEA-393 (copper), Copper Queen Mining Company, Sunrise Mine, Granite County, Montana, Contract No. Idm-E586.

The property was inspected on March 17, 1954, accompanied by Mr. J. H. Mellon.

The advance has been about 24 feet from the contract starting point. The structure within the 24 feet ranges in width from 1 foot to 2 feet consisting of brecciated wall rock, gouge and about 4 inches of quartz and pyrite vein material that probably contains some copper minerals. The hanging wall of the structure was 9 feet above the floor of the drift. It was suggested to Mr. Mellon and the contract miner that the drift be turned to the left so the hanging wall of the vein would be about 7 feet above the floor of the drift. This would decrease the size of the drift and save the operators from excavating a larger opening than is required by the contract.

The company has obtained a contract miner who has agreed to drive the drift for a labor cost of $20.00 per foot. The contractor has two employed miners and plans to obtain a third so the work can proceed on two shifts per day. It is hoped the new miners will increase the advance rate so the company can stay within the rate allowed by the contract.

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

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

April 21, 1954

Mr. G. D. Lyon
Copper Queen Mining Company
c/o Lyon Construction Company
Clinton, Montana

Re: Docket No. DMA-393X (Copper)
Copper Queen Mining Company
Assignee of Queen Mining Syndicate
Granite County, Montana
Contract No. Idm-E586

Dear Mr. Lyon:

Reference is made to your March narrative report dated April 7, 1954.

As requested in the last paragraph of this report, Jack Hardill of the Bureau of Mines will be over sometime toward the latter part of next week and will at that time look over your work and check you out on the direction you should take on the vein. We are sorry it was not possible to send someone over to your property before this.

Sincerely yours,

Thor H. Kiilsgaard
Acting Member
DMEA Field Team, Region II

cc: DMEA (2)
USBM (2)
Nickelson

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

April 16, 1954

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

Re: Docket No. DMEA 393X (copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Selfridge:

In accordance with your letter of March 8, I am sending 5 copies each of 3 deeds concerning the Copper Queen Mining Company which have been provided by Mr. Wellman Clark.

Please advise us if these instruments by which the land was transferred are not adequate for the purpose of assigning the exploration contract from the Queen Mining Syndicate to the Copper Queen Mining Company.

Sincerely yours,

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

Enclosure

cc: USBM (2)
Quinlan

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

1201 N. Division St.
Spokane 2, Washington
March 19, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: V. Z. Johnson, Mining Engineer, Bureau of Mines

Subject: Routine inspection, Sunrise Mine, Queen Mining Syndicate, Granite County, Montana, Contract Idm-E586, Docket No. DMEA 393 (copper)

The inspection was made on March 14, 1954. There was no one at the property. The project portal was reached by automobile without chains.

There has been very little project advance since Mr. Zoldok's inspection on January 7, 1954. About 6 feet of project drifting had been completed during the period. Significant deadwork attendant to the rehabilitation reported by the Operator for January remained to be completed in February. Water and air lines are not complete, and the miners are having some difficulty with the existing track. The 12-B size mucker is too large for the one-half ton cars which were used during earlier operations.

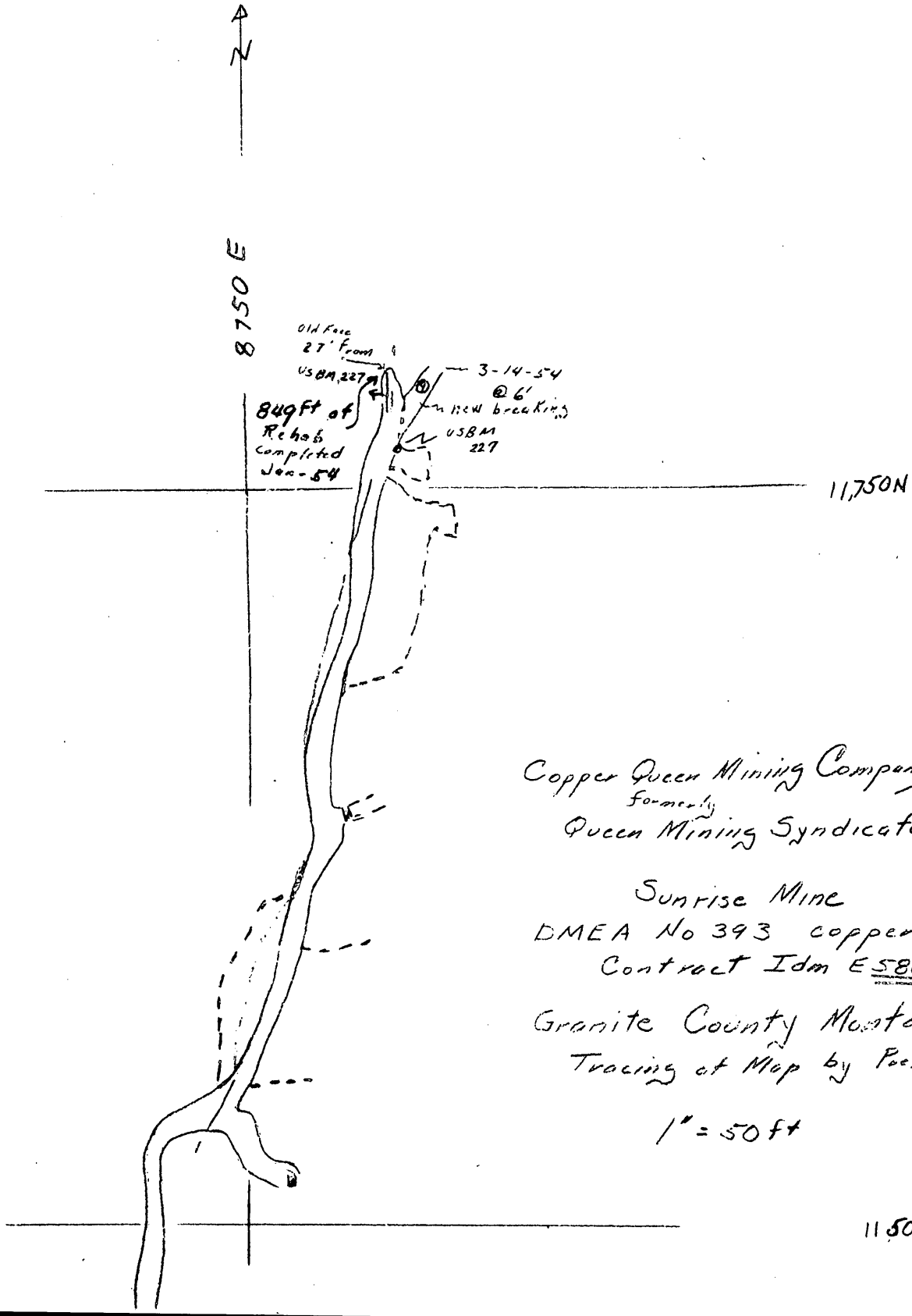
Drift advance for the period was broken further into the footwall than was necessary. Clearance of 7½ feet is required for the mucker, but a flat roof-like hanging wall is now 9½ feet above the floor of the new drift. However, the track is aligned so that the next rounds will be more nearly centered on the vein. There was no apparent change in vein values from the old drift face where a 1.2-foot width assayed 0.10% copper and 0.05% $WO_3$ - DMEA sampling.

Total contract units completed to date are tunnel rehabilitation - 849 feet and drifting - 6 feet.

The workmanship is only fair, and there appears to be some lack of management. Very little supervision will be necessary after drifting gets started, but provisions for water supply and the adaptation of a suitable means for tramming over the existing track will require some thought.

V. Z. Johnson

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




Copper Queen Mining Company
formerly
Queen Mining Syndicate

Sunrise Mine
DMEA No 393 copper
Contract Idm E586

Granite County Montana
Tracing of Map by Preston and Reynolds

1" = 50 ft

FILE COPY
SURNAME:

140

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

MAR 8 1954

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

Re: Docket No. DMEA-393X (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Weissenborn:

This responds to your memorandum dated February 26 which transmitted copies of an assignment of the subject contract from the Queen Mining Syndicate to the Copper Queen Mining Company, subject to approval of the Government, and a copy of a letter dated February 19 from Wellman Clark, attorney, to you concerning the assignment of the contract and the transfer of the land.

No copy of the instrument transferring the land was furnished us. Mr. Clark's letter states that "deeds" were executed transferring the land to the Copper Queen Mining Company. Our last information concerning the status of the land was that Queen Mining Syndicate had contracted to buy the land but that the purchase had not been completed and the title was held in escrow until all payments required under the purchase contract had been completed. In any event, we should be furnished with copies of the instrument by which the land was transferred. As soon as we receive them we will consider approval of the assignment of the exploration contract.

The Government's approval of the assignment of the exploration contract, when given, will not release the Operator, Queen Mining Syndicate, from any obligations under the contract.

HCRubin/emd 3/4/54
Copy to: Docket Base Metals
Adm. R. File JLHofflund
Op. Comm. HCRubin
A. R. Kinkel, GSA
C. H. Johnson, BM

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Approved:

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

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

chron. pending

Griswold

500

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

March 3, 1954

Memorandum

To: Chief Counsel

From: Chief, Base Metals Division

Subject: Assignment of Contract -- Docket No. DMEA-393, Queen Mining Syndicate, Contract No. Idm-5586

The attached material is self-explanatory. If it is in order, please return to this office for distribution.

W. R. Griswold

W. R. Griswold

Attachments

WRGriswold/bjl

Copy to: Docket
Base Metals
Chron.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

February 26, 1954

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

Re: Docket No. DMEA-393X (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract No. Idm-E586

Dear Mr. Selfridge:

Enclosed are 2 copies of a letter dated February 19, 1954, from Wellman Clark, lawyer, stating the Queen Mining Syndicate has incorporated and has transferred the title of the Sunrise mine to the newly formed Copper Queen Mining Company. Also, enclosed are 6 copies of "Assignment of Exploration Project Contract" from the partners of Queen Mining Syndicate to the Copper Queen Mining Company for the Government's approval.

Upon approval and so that our files may be kept current, it is requested that 3 copies be returned to this office--one each for the Field Team, Finance Officer, and Operator.

The Copper Queen Mining Company consists essentially of the members of the former Queen Mining Syndicate. It was decided to incorporate after the death of W. J. Noon, one of the members of the former Queen Mining Syndicate.

Sincerely yours,

A. E. Weissenborn

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

Enclosures
cc: USBM (2)
Hindman
Nickelson

C
O
P
Y

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

Law Offices of
WELLMAN CLARK
711 Hutton Building
Spokane 4, Washington
Riverside 1195

February 19, 1954

Mr. Al Weissenborn,
Executive Officer
DMEA Field Team, Region 2
S. 157 Howard St.
Spokane, Washington

Re: Copper Queen Mining Company

Dear Mr. Weissenborn:

At a meeting of the directors of the above company held on February 15th, deeds were executed transferring to the Copper Queen Mining Company title to the Sunrise Mine.

This company as you have been informed, consists primarily of the members of the Queen Mining Syndicate. At this meeting, they also executed an assignment of the exploration project contract and enclosed herewith you will find 7 copies of the assignment.

We are requesting that this assignment be approved by the government.

Sincerely yours,

/s/ Wellman Clark

WC:gc
enc.

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

1201 N. Division St.
Spokane 2, Washington
January 12, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: S. W. Zoldok, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA 393 (copper), Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Contract Idm-E586

An inspection of the work at the subject property was made on January 7, 1954. No one was at the property during the inspection. Drifting snow made the last two miles of road impassable to a jeep, and it was necessary to walk this distance. One of the mployees was contacted on January 10, and he stated that the road had been cleared of snow the previous day.

The No. 1W tunnel was inspected and was found to be rehabilitated for about 270 feet (non-DMEA).

The Main Tunnel measures 849.0 feet from portal to the present face. The section from 357 to 414 feet is being completely retimbered. In other sections of the tunnel, helper sets and track ties have been placed. Much of the tunnel is narrow and crooked, and it is doubtful that the tunnel could be widened and the curves straightened for the $1,440.00 allotted for the work.

USBM tag No. 227 was placed on the north chute post of the last chute, 27.5 feet behind the present face.

## Surface plant

A 12.5x20.5-ft. compressor shed of light construction and no floor has been built near the portal of the Main tunnel, and a short trestle constructed for muck disposal. The shed houses a G.D. 500 series compressor, Model WHK 2001, Serial No. 157673 (used).

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

S. W. Zoldok
S. W. Zoldok

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

November 12, 1953

Memorandum

To: DMEA Field Team, Region II

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

Subject: Report of visit, Docket DMA 393 (copper), Queen Mining Syndicate, Sunrise Mine, Granite County, Montana Contract Idm-E586

The property was visited on October 6, 1953. No one was at the property, but one miner had been rehabilitating one of the adits on the property. The rehabilitation was measured and a rough sketch drawn of the work. Upon returning to Spokane, the writer discussed the work with James Quinlan, a Survey geologist who made the original field examination, and we found the operators were rehabilitating West No. 1 adit, instead of the Main Queen adit. The routine inspection was held up until this could be definitely confirmed. Steve Zoldok, U. S. Bureau of Mines engineer, visited the property by himself and measured the rehabilitation on West No. 1 adit instead of the Main Queen adit. The rehabilitation at that date amounted to approximately 100 feet. Mr. Zoldok was informed of the mistake in the adits so his report has been held up.

The property was revisited on November 6, 1953 by the writer, accompanied by Mr. J. Mellen, one of the partners. The West No. 1 adit had been opened for a distance of approximately 250 feet. A cave blocked the adit at this point. The Main Queen adit was inspected to the face.

The operator was asked why they had not started work on the Main Queen adit, as so stated by Wellman Clarke, company lawyer, in a letter dated October 21, 1953. The 60-day starting date from the date of the contract had expired on October 20, 1953.

Mr. Mellen stated they had studied the possibility of asking the Government to transfer the DMEA work in the Main Queen adit to the West No. 1 adit and had delayed starting the rehabilitation in the Main Queen adit until they had discussed this possibility for a change in the location of the DMEA work. To justify this change they had hoped to open the West No. 1 adit for our inspection.

West No. 1 adit has never been mapped or sampled and no information except a dotted outline on Preston and Reynolds map exists. A sketch of the two adits is enclosed.

If the West adit No. 1 were open for inspection it might offer better exploration possibilities than the proposed work in the Main adit because it has been advanced about 225 feet north of the Main adit and is 57 feet below the Main adit according to the information on hand. The present 250 feet of rehabilitation has revealed 20-pound rail that is in good shape, and a 3-inch air line. The Main adit has a variety of rail ranging from 6 pound to 16 pound which will require partial replacement because some of it has been badly eaten away by copper water. Several hundred feet of the Main adit drift will require new timber because the existing timber is badly rotted.

I recommend no action on the proposed change until the operators submit a letter to the Field Team asking for a change in the location of the DMEA work. Also, the West No. 1 adit should be opened for an examination and its merits determined by the Field Team before a change of location is approved.

No timber has been secured for the winter operation. Mr. Mellen has agreed to secure another miner to continue with the opening of the West No. 1 adit, and it is hoped they will be able to open this adit within a couple of weeks, at which time the Field Team will be informed. The opening of West No. 1 adit will be done at the complete expense of the operators.

One of the partners, Mr. W. J. Noon, died of a heart attack about a week before the inspection trip.

Work will probably be withheld in the Main adit until a decision is reached by the operators and the Field Team on a change of work location.

Enclosure - 1

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

FILE COPY
SURNAME: CB

140

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

OCT 21 1953

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

Re: Docket No. DMA-393 (copper)
Queen Mining Syndicate
Granite County, Montana
Contract No. Idm-E586

Dear Mr. Weissenborn:

Reference is made to your letter dated October 8, 1953, to the Chairman of the Operating Committee in which you enclosed a copy of the purchase-agreement under which the Operator agrees to purchase the land presently held under lease. A deed to the Operator is in escrow with the Flint Creek Valley Bank to be delivered upon payment of $15,000 on or before January 16, 1954. Consequently, until this payment is made the property is still under lease to the Operator and no change in the contract is necessary. When the deed is finally delivered to the Operator, the contract may be amended to indicate that the Operator is no longer the lessee but the owner of the property.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

AEKane/ema 10-19-53
cc: Mails & Files
Adm. R. File
Op. Comm.
Mr. Thayer
Mr. Hedges
W. R. Griswold
J. L. Hofflund
A. E. Kane
Chron.
Pending

Approved:

J. H. Hedges
Member, Bureau of Mines

D. M. Larrabee
Member, Geological Survey

R.C.G. 10-21-53

FILE COPY
SURNAME:

Griswold

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

N.S. in RR.

October 16, 1953

Memorandum

To: Chief Counsel

From: W. R. Griswold

Subject: Docket No. DMA 393 (Copper) Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Contract Idm-E586

We call to your attention the October 8 letter from Mr. Weissenborn. Will you kindly review the question which he brings up.

W. R. Griswold

Attachment

WRGriswold/hmj
(10-16-53)
CC to: Docket
Base Metals Div.
Chron.

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

October 8, 1953

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

Re: Docket No. DMA 393 (copper)
Queen Mining Syndicate, Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Selfridge:

In accordance with the Operating Committee's letter of August 20, we are enclosing a copy of the purchase agreement which we have just now obtained from the company. If this agreement will require amendment of Article 2 of the contract, please advise us.

Sincerely yours,

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

Enclosure

cc: USBM (2)
Nickelson

LAW OFFICES OF
WELLMAN CLARK
711 HUTTON BUILDING
SPOKANE 4, WASHINGTON
RIVERSIDE 1195

October 7, 1953

DMEA Field Team
Region 2
S. 157 Howard
Spokane, Washington

Re: Docket No. DMA 393 (copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Gentlemen:

Pursuant to your request I have prepared copies of the offer made by the Maury's for the sale of their property to the Queen Mining Syndicate, and a copy of the escrow instructions dated October 2, 1953.

The members of the Queen Mining Syndicate have paid towards the purchase of this property, $10,000.00 and there remains to be paid $15,000.00.

They are very anxious to commence work under this contract and would appreciate your expediting the transmission of the enclosed documents to Washington and their reply to me or direct to my client.

Sincerely yours,

Wellman Clark

WC:gc
enc.

LAW OFFICES OF
WELLMAN CLARK
711 HUTTON BUILDING
SPOKANE 4, WASHINGTON
RIVERSIDE 1195

October 7, 1953

DMEA Field Team
Region 2
S. 157 Howard
Spokane, Washington

Re: Docket No. DMA 393 (copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Gentlemen:

Pursuant to your request I have prepared copies of the offer made by the Maury's for the sale of their property to the Queen Mining Syndicate, and a copy of the escrow instructions dated October 2, 1953.

The members of the Queen Mining Syndicate have paid towards the purchase of this property, $10,000.00 and there remains to be paid $15,000.00.

They are very anxious to commence work under this contract and would appreciate your expediting the transmission of the enclosed documents to Washington and their reply to me or direct to my client.

Sincerely yours,

Wellman Clark

WC:gc
enc.

COPY

October 2nd, 1953

Flint Creek Valley Bank
Philipsburg, Montana

Gentlemen:

There is enclosed in this envelop a deed from James A. Murray, Helen Murray, William D. Murray, Lulu Ann Murray, Charles A. Murray, Thea H. Murray, Howard A. Murray, Josie H. Murray, Edward Murray, and Daphne Murray, Lowndes Maury and Anne H. Maury to J. H. Mellen, W. J. Noon, William Howell, G. D. Lyon, to be held in escrow on the following terms:

If on or before January 16, 1954, the grantees, or any of them, shall pay to you for the credit of the grantors $15,000.00 without interest, then deliver the said deed to the said grantees. Deduct from the payment revenue stamps sufficient for said deed. Deduct from the payment taxes for the year 1953, if not paid. If the payment be not made, return the said deed to Lowndes Maury, Butte, Montana. If the payment be made Lowndes Maury is the owner of one-half of the price and the remainder of the price should be paid to Judge W. D. Murray, who holds Power of Attorney, to make disbursements for all of the half interest owned by the Murrays. Deduct from the payments your usual costs on escrow service.

Thanking you for your courtesies, I remain.

/s/ Lowndes Maury
Grantor

Witness /s/ Peggy Burgess

RECEIVED
OCT 8 1953
U. S. G. S.
SPOKANE, WASH.

COPY

Butte, Montana
June 25, 1953.

Mr. James H. Mellen
Queen Mining Syndicate
Drummond, Montana

I will sell the interest in the land in the Lease to the Queen Mining Syndicate, formerly to Wm. R. McLure, dated June 22, 1946, on the following terms:

$1500.00 cash, receipt of which is hereby acknowledged.

$8500.00 within ten days after title is quieted by the District Court of Granite County, Montana.

$7500.00 one hundred thirty days after title is quieted.

$7500.00 two hundred fifty days after title is quieted.

Deed from Murray owners and myself with our wives will be put in Escrow with Flint Creek Valley Bank, Philipsburg, Montana on payment of the $8500.00.

The present owners, grantors, will pay the expense of the suit to Quiet Title.

The owners will pay the taxes for the year of 1953 which are already a lien on the land.

The suit to Quiet title will determine that the County Road mentioned in the description of the land will be the road South of Henderson Creek.

Very truly yours,

LOWNDES MAURY

/s/ Lowndes Maury
For the Murray-Maury Interests.

W. D. Murray will confirm or check will be returned.

Lowndes Maury

RECEIVED
OCT 8 1953
U. S. G. S.
SPOKANE, WASH.

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

September 22, 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
Granite County, Montana

Dear Mr. Selfridge:

Enclosed are the original and two signed copies of the subject contract; other copies have been distributed in the usual manner.

As per instructions in the Operating Committee's letter of August 20, forwarding the contract to the field for signature, we have advised the Operator to forward to us a copy of the purchase agreement made by the Queen Mining Syndicate with the former owners of the mine. This agreement has apparently not been consummated as of this date, but will be forwarded to the Washington office as soon as it is in our possession.

Sincerely,

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

Enclosure

cc: USBM (2)
Quinlan

cc 9-28

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

1201 N. Division St.
Spokane 2, Washington
August 25, 1953

Mr. G. D. Lyon, Secretary
Queen Mining Syndicate
c/o Lyon Construction Company
Clinton, Montana

Subject: Docket No. DMA 393 (copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Lyon:

Enclosed are the original and five copies of an exploration project contract signed by C. O. Mittendorf, Administrator, DMEA.

If the terms and conditions of this contract are satisfactory to you please sign all copies, retain the copy marked "Operator's Copy" for your files, and return all the remaining copies to this office.

At the time of signing the contracts please initial the change on the face of the contract where the name of W. A. Noon was corrected to read W. J. Noon.

When the new purchase agreement for the property is consummated, this agreement will take the place of the original lease and will require amendment of Article 2 of the contract. A copy of the new agreement should be sent to this office for inspection.

If any part of the contract does not meet with your approval please return all copies with your comments.

Sincerely yours,

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

Enclosure

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

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

1201 N. Division St.
Spokane 2, Washington
August 25, 1953

Mr. G. D. Lyon, Secretary
Queen Mining Syndicate
c/o Lyon Construction Company
Clinton, Montana

Subject: Docket No. DMA 393 (copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana
Contract Idm-E586

Dear Mr. Lyon:

Enclosed are the original and five copies of an exploration project contract signed by C. O. Mittendorf, Administrator, DMEA.

If the terms and conditions of this contract are satisfactory to you please sign all copies, retain the copy marked "Operator's Copy" for your files, and return all the remaining copies to this office.

At the time of signing the contracts please initial the change on the face of the contract where the name of W. A. Noon was corrected to read W. J. Noon.

When the new purchase agreement for the property is consummated, this agreement will take the place of the original lease and will require amendment of Article 2 of the contract. A copy of the new agreement should be sent to this office for inspection.

If any part of the contract does not meet with your approval please return all copies with your comments.

Sincerely yours,

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

Enclosure

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

FILE COPY
SURNAME:

140

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

Rewritten by
Ch. Counsel

Griswold
Kane
Hoffmann
Chandler
Martin

AUG 2 0 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana

Dear Mr. Weissenborn:

With reference to your letter of July 16, 1953, we are enclosing the original and five copies of a contract for the above project which have been signed by the Government.

The mining claims which have been listed in Annex I of the contract are in accord with your letter of December 12, 1952.

It appears from the correspondence that a new purchase agreement has been entered into. When consummated, this agreement will take the place of the original lease, and will require amendment of Article 2 of the contract. A copy of this new agreement should be sent to this office for inspection.

In the event you are not in accord with any of the contract provisions, please return all copies to us with your recommendations. Otherwise, the contract should be executed by the Operator and copies distributed in the usual manner.

Sincerely yours,

W. S. Martin
ESJ
ACTING Chairman, Operating Committee

Enclosures 6

Approved:

C. H. Johnson
ESJ
Member, Bureau of Mines

Dm Larrabee
by ESJ
Member, Geological Survey

WRGriswold:HCR:ep 8-18-53

Copy to: Mails & Files
Admr. R. File
Oper. Comm.
Base Metals (2)
Mr. A. R. Kinkel, USGS, B-242-A, GSA
Mr. C. H. Johnson, B/M Rm 3621
Mr. Hoffmann
Mr. Kane
Mr. Rubin
Chron.
Pending

8-20-53

FILE COPY
SURNAME:

140

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

Rewritten By Ch.Cnsl

Kane
Rubin

M.S. in RR August 18, 1953

Docket

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Chief Counsel

Subject: Queen Mining Syndicate, Docket No. DMA-393 (Copper)

Attached in satisfactory legal form for execution is a contract covering the above-described project.

The Operator apparently has entered into a new agreement to purchase the property, but the sale is not to be consummated until a suit, brought to "quiet title" to the property, has been disposed of. From copies of letters in our possession, it seems that this suit concerns the location of a county road, which will not affect the project, as it does not seem that the road will be anywhere near the work. Nevertheless, a copy of this agreement should be sent to this office for inspection, as, when consummated, the agreement will take the place of the lease, and will require amendment of Article 2.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

AEKane:HCR:ep

Copy to: Mails & Files
Mr. Griswold
Mr. Hofflund
Mr. Kane
Mr. Rubin
Chron.

HHR 8-18-53

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

August 18, 1953

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Chief Counsel

Subject: Queen Mining Syndicate, Docket No. DMA-393 (Copper)

Attached in satisfactory legal form for execution is a contract covering the above-described project.

The Operator apparently has entered into a new agreement to purchase the property, but the sale is not to be consummated until a suit, brought to "quiet title" to the property, has been disposed of. From copies of letters in our possession, it seems that this suit concerns the location of a county road, which will not affect the project, as it does not seem that the road will be anywhere near the work. Nevertheless, a copy of this agreement should be sent to this office for inspection, as, when consummated, the agreement will take the place of the lease, and will require amendment of Article 2.

J. L. Hofflund
Chief Counsel

Attachments

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

August 18, 1953

Memorandum

To: The Administrator
Through: Mr. W. R. Griswold

From: Chief Counsel

Subject: Queen Mining Syndicate, Docket No. DMA-393 (Copper)

Attached in satisfactory legal form for execution is a contract covering the above-described project.

The Operator apparently has entered into a new agreement to purchase the property, but the sale is not to be consummated until a suit, brought to "quiet title" to the property, has been disposed of. From copies of letters in our possession, it seems that this suit concerns the location of a county road, which will not affect the project, as it does not seem that the road will be anywhere near the work. Nevertheless, a copy of this agreement should be sent to this office for inspection, as, when consummated, the agreement will take the place of the lease, and will require amendment of Article 2.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

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

Docket

August 10, 1953

Memorandum

To: Chief Counsel

From: Chief, Base Metals Division

Subject: Docket No. DMA 393 (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana

It is proposed to give an exploration project contract along the lines of the attached contract.

We call your attention to the proposed letter of transmittal, which you may wish to revise.

The map which accompanies the contract is presently being photostated, as are also two more copies of the Owner's Consent to Lien.

W. R. Griswold

Attachments

WRGriswold/hmj
(8/10/53)
CC to: Docket
Base Metals Division
Chron.

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

July 16, 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana

Dear Mr. Selfridge:

Reference is made to your letter of July 3, 1953, requesting that we determine the status of the subject application.

W. J. Noon and G. D. Lyon, two of the four partners making up the Queen Mining Syndicate, called at the Bureau of Mines office July 15 to inform us that their offer to purchase the property had been accepted and that the first payment had been made. The title has not yet been quieted by the owners so the subsequent payments are still pending. Ozalid copies of two letters from Mr. Maury to Mr. Mellen regarding the transaction are enclosed for your information.

Also enclosed are four copies of Owner's Consent to Lien signed by the owners. Mr. Lyon stated that there were six copies originally, and he assumed that Mr. Maury had retained the other two copies. It is hoped that the four copies will suffice, and that additional copies required can be photostated. If not, it will be necessary to write the applicant for the other two copies.

Mr. Lyon is now secretary of the Syndicate, which is a partnership composed of W. J. Noon, G. D. Lyon, J. H. Mellen and William Howell. He asked that all future correspondence regarding the application be directed to him in care of the Lyon Construction Company, Clinton, Montana, rather than to W. A. Noon, who is no longer connected with the organization. He indicated that they wish the application to be considered active and stated that they would like to begin work in about sixty days.

If you need any further information in order to resume processing the application, please inform us or Mr. Lyon.

DMEA Field Team, Region II

Thomas E. Howard

Thomas E. Howard, Acting Exec. Officer
(U. S. Bureau of Mines)

James J. Quinlan

James J. Quinlan, Acting Member
(U. S. Geological Survey)

Enclosure
cc: USBM (2)
Quinlan

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

July 16, 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
Sunrise Mine
Granite County, Montana

Dear Mr. Selfridge:

Reference is made to your letter of July 3, 1953, requesting that we determine the status of the subject application.

W. J. Noon and G. D. Lyon, two of the four partners making up the Queen Mining Syndicate, called at the Bureau of Mines office July 15 to inform us that their offer to purchase the property had been accepted and that the first payment had been made. The title has not yet been quieted by the owners so the subsequent payments are still pending. Omalid copies of two letters from Mr. Maury to Mr. Mellen regarding the transaction are enclosed for your information.

Also enclosed are four copies of Owner's Consent to Lien signed by the owners. Mr. Lyon stated that there were six copies originally, and he assumed that Mr. Maury had retained the other two copies. It is hoped that the four copies will suffice, and that additional copies required can be photostated. If not, it will be necessary to write the applicant for the other two copies.

Mr. Lyon is now secretary of the Syndicate, which is a partnership composed of W. J. Noon, G. D. Lyon, J. H. Mellen and William Howell. He asked that all future correspondence regarding the application be directed to him in care of the Lyon Construction Company, Clinton, Montana, rather than to W. A. Noon, who is no longer connected with the organization. He indicated that they wish the application to be considered active and stated that they would like to begin work in about sixty days.

If you need any further information in order to resume processing the application, please inform us or Mr. Lyon.

DMEA Field Team, Region II

Thomas E. Howard, Acting Exec. Officer
(U. S. Bureau of Mines)

James J. Quinlan, Acting Member
(U. S. Geological Survey)

Enclosure
cc: USBM (2)
Quinlan

LAW OFFICES
MAURY, SHONE & SULLIVAN
THIRD FLOOR HIRBOUR BUILDING
BUTTE, MONTANA

July 10, 1953.

H. LOWNDES MAURY
RES. PHONE 3663
A. G. SHONE
RES. PHONE 3834
SYLVESTER J. SULLIVAN
RES. PHONE 2-7547

OFFICE
TELEPHONE
3833

Mr. J. H. Mellen,
Drummond, Montana.

Dear Sir:

Your letter of July 8th reached me this morning.

I herewith enclose you three copies of the Loan Consent signed by me. I am keeping one for my files. It was agreed that such title as we have to the Protection Claim located by Wm. R. McLure should be included in the sale to the Queen Syndicate.

As you know as to any of the quartz lode locations which are not patented in the group, and that includes this one, we will only Quitclaim. As to the other property that is patented, we will warrant our title.

We have been the owners of this land since some time in the Fall of 1926; in fact, our title goes back a year or two before then.

My taxes are paid up to date and promptly. I asked Mr. Robert Ryan to look up the question of the taxes on the Murray interest. I have also written to Mrs. Neal, the County Treasurer, for some information. I will see to it that the taxes are all paid. I have asked Ryan to get me an estimate on the taxes for this year; that money will be deposited either with the County Treasurer, or with the Flint Creek Valley Bank, when the first payment is made of $8,500.00.

Yours truly,

Lowndes Maury

HLM-E

Enc.

LAW OFFICES
MAURY, SHONE & SULLIVAN
THIRD FLOOR HIRBOUR BUILDING
BUTTE, MONTANA

H. LOWNDES MAURY
RES. PHONE 3603
A. G. SHONE
RES. PHONE 3834
SYLVESTER J. SULLIVAN
RES. PHONE 2-7547

OFFICE
TELEPHONE
3833

July 10, 1953.

Mr. J. H. Mellen,
Drummond, Montana.

Dear Sir:

Your letter of July 8th reached me this morning.

I herewith enclose you three copies of the Loan Consent signed by me. I am keeping one for my files. It was agreed that such title as we have to the Protection Claim located by Wm. R. McLure should be included in the sale to the Queen Syndicate.

As you know as to any of the quartz lode locations which are not patented in the group, and that includes this one, we will only quitclaim. As to the other property that is patented, we will warrant our title.

We have been the owners of this land since some time in the Fall of 1926; in fact, our title goes back a year or two before then.

My taxes are paid up to date and promptly. I asked Mr. Robert Ryan to look up the question of the taxes on the Murray interest. I have also written to Mrs. Neal, the County Treasurer, for some information. I will see to it that the taxes are all paid. I have asked Mr. Ryan to get me an estimate on the taxes for this year; that money will be deposited either with the County Treasurer, or with the Flint Creek Valley Bank, when the first payment is made of $8,500.00.

Yours truly,

Lowndes Maury

HLM-E

Enc.

Butte, Montana,
June 25, 1953.

Mr. James H. Mallon,
Queen Mining Syndicate,
Drummond, Montana.

I will sell the interest in the land in the lease to the Queen Mining Syndicate, formerly to Mr. E. Melaro, dated June 22, 1946, on the following terms:

$1500.00 cash, receipt of which is hereby acknowledged.

$2500.00 within ten days after title is quieted by the District Court of Granite County, Montana.

$7500.00 One hundred thirty days after title is quieted.

$7500.00 Two hundred fifty days after title is quieted.

Deed from Murray owners and myself with our wives will be put in Escrow with Flint Creek Valley Bank, Philipsburg, Montana on payment of the $2500.00.

The present owners, grantors, will pay the expense of the suit to Quiet Title.

The owners will pay the taxes for the year of 1953 which are already a lien on the land.

The suit to Quiet Title will determine that the County Road mentioned in the description of the land will be the road South of Henderson Creek.

Very truly yours,

WITNESS MANN

Lowndes Mann
For the Murray-Mann Interests.

W. D. Murray will confirm
or check will be returned
Lowndes Mann

Butte, Montana,
June 25, 1953.

Mr. James H. Mallon,
Quartz Mining Syndicate,
Drummond, Montana.

I will sell the interest in the land in the lease to the Quartz Mining Syndicate, formerly to Mr. R. McNure, dated June 22, 1946, on the following terms:

$1500.00 cash, receipt of which is hereby acknowledged.

$3500.00 within ten days after title is quieted by the District Court of Granite County, Montana.

$7500.00 One hundred thirty days after title is quieted.

$7500.00 Two hundred fifty days after title is quieted.

Deed from Murray owners and myself with our wives will be put in Escrow with Flint Creek Valley Bank, Philipsburg, Montana on payment of the $8500.00.

The present owners, grantors, will pay the expense of the suit to quiet title.

The owners will pay the taxes for the year of 1953 which are already a lien on the land.

The suit to quiet title will determine that the County Road mentioned in the description of the land will be the road South of Henderson Creek.

Very truly yours,

LOUNDES MURRY

Loundes Murry
For the Murry-Murry Interests.

W. O. Murry, will confirm
or check will be returned
Loundes Murry

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 13 1953

July 7, 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
W. A. Noon, Agent
Granite County, Montana

Dear Mr. Selfridge:

Your letter of July 3 is acknowledged and we are writing the Queen Mining Syndicate to determine the status of the application. Copies of our letter are attached.

Sincerely yours

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

Enclosure 1 (in dupl.)

cc: USBM (2)
Quinlan

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

RECEIVED
JUL 13 1953

July 7, 1953

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

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
W. A. Noon, Agent
Granite County, Montana

Dear Mr. Selfridge:

Your letter of July 3 is acknowledged and we are writing the Queen Mining Syndicate to determine the status of the application. Copies of our letter are attached.

Sincerely yours

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

Enclosure 1 (in dupl.)

cc: USBM (2)
Quinlan

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

July 7, 1953

Mr. W. A. Noon, Agent
Queen Mining Syndicate
Drummond, Montana

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
W. A. Noon, Agent
Granite County, Montana

Dear Mr. Noon:

The application of the Queen Mining Syndicate for the exploration of the Sunrise property in Granite County, Montana has been pending for a considerable time. One of the reasons why it is pending is that you have been unable to obtain owner's consent to lien from the owners of the property.

We have been informed that an offer was made by the Queen Mining Syndicate to purchase the property. If this is so and the offer has been accepted, then the application can be again considered. If this transaction cannot be consummated, then perhaps the only solution would be for you to withdraw the application until such time as satisfactory arrangement could be made regarding the ownership or the consent to lien.

Would you, therefore, please advise me of the status of the application at your earliest convenience.

Sincerely yours

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

cc: USBM (2)
DMEA (2)
Quinlan

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 127 Howard Street
Spokane 4, Washington

July 7, 1953

Mr. W. A. Noon, Agent
Queen Mining Syndicate
Drummond, Montana

Re: Docket No. DMA-393 (Copper)
Queen Mining Syndicate
W. A. Noon, Agent
Granite County, Montana

Dear Mr. Noon:

The application of the Queen Mining Syndicate for the exploration of the Sunrise property in Granite County, Montana has been pending for a considerable time. One of the reasons why it is pending is that you have been unable to obtain owner's consent to lien from the owners of the property.

We have been informed that an offer was made by the Queen Mining Syndicate to purchase the property. If this is so and the offer has been accepted, then the application can be again considered. If this transaction cannot be consummated, then perhaps the only solution would be for you to withdraw the application until such time as satisfactory arrangement could be made regarding the ownership or the consent to lien.

Would you, therefore, please advise me of the status of the application at your earliest convenience.

Sincerely yours

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

cc: USBM (2)
DMEA (2)
Quinlan

FILE COPY
SURN500:

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

Keating
Original
Selfridge
Matter of

JUL 3 1953

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

Re: Docket No. DMA 393 (Copper)
Queen Mining Syndicate
W. A. Noon, Agent
Granite County, Montana

Dear Mr. Weissenborn:

As you know an application was submitted by the subject company some time ago, but delay in its processing has been occasioned by the inadequacy of the information required for proper consideration.

Our files indicate that Mr. Charles Murray, represented to be one of the owners of the property, telephoned this office on April 30, 1953, that the Queen Mining Syndicate had made the owners a definite offer to purchase the property for cash. Mr. Murray stated he was writing his partners in Butte that he was willing to accept this offer.

Mr. Murray further informed us that he was writing Mr. Noon advising him of the pending transaction and that it would be useless to answer Mr. Noon's inquiry of April 25, 1953, until the matter had been decided.

Since we have had no further word from the company, its agent, or the owner, it is suggested that you determine the status of the application and advise this office.

Sincerely yours,

George C. Selfridge (AB)
Chairman, Operating Committee

APPROVED:

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

A. R. Kinkel, Jr. (AB)
Member, Geological Survey

AGKeating/hmj
(7/1/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Div.
Mr. Kinkel
Mr. Bishop
Chron.

R.C.S.
7-3-53

DMA 393x

44852

# Annual Representation

*on* Robinson, Frog, Jennie Y., Gopher-Relocation, May, Heel Calk and Sunol *Mining Claim*

Henderson (unorganized) *Mining District*

Granite *County,*

*State of Montana*

*Filed for Record* December 16

*A. D. 1958 at* 2:05 *o'clock* P.M., *and*

*Recorded in Book* 6 *of*

Annual Representations *on page* 487

*Records of* Granite

*County, Montana.*

H. E. McDougal

*County Recorder.*

Maude Echols

*Deputy.*

*Fees,* $7.00

QM — H-YQ

# Affidavit of Annual Representation of Mining Claim

*STATE OF MONTANA,*
*County of* Granite } ss.

W. A. Noon, Agent for
QUEEN MINING SYNDICATE
*of lawful age, being duly sworn depose..... and say.....:*

*I. That* .....he..is *acquainted with the* Seven quartz *Mining Claim situate; lying and being in* Henderson, (unorganized) *Mining District in the County of* GRANITE *State of Montana*

ROBINSON FROG JENNIE Y.
GOPHER-RELOCATION MAY HEEL OALK
SUNOL

*II. That* .....he..... *did* .....*days work and labor upon said mining claim and placed the following improvements thereon, to-wit:*

Road work to property, cat cuts, etc
surveying & engineering work

*and that the value of said improvements is* in excess of seven hundred *Dollars.*

*III. That said work and labor was done and performed and said improvements were commenced on the* 15th *day of* March *A D. 19*52*, and finished on the* 28th *day of* July *A. D. 19*52

*IV. That said work was done and said improvements were made at the instance and request of* QUEEN MINING SYNDICATE *the owner.... of said mining claim.*

*V. That the actual amount paid for said labor and improvements is* IN EXCESS OF SEVEN HUNDRED *Dollars, lawful money of the United States, and that said sum was paid by* QUEEN MINING SYNDICATE

W. A. Noon
Agent Queen Mining Syndicate.

*Subscribed and sworn to before me this* 16 *day of* Dec *, 19*52

L. B. McDougal
CLERK & RECORDER
Philipsburg, Mont.

Return. Fee + Idel Creek - (Call for back, M.C.)

RECORDED COMPARED AND INDEXED

# Annual Representation

on .....

..... Mining Claim

..... Mining District

..... County,

State of Montana

Filed for Record June 30th

A. D. 1951 at 2 02 o'clock PM and

Recorded in Book 6 of

Annual Rep on page 377

Records of Granite

County, Montana.

H E McDougal

County Recorder.

.....

Deputy.

Fees, $ 1 00

# Affidavit of Annual Representation of Mining Claim

STATE OF MONTANA,
County of GRANITE } ss.

W. A. NOON, agent for
QUEEN MINING SYNDICATE

*of lawful age, being duly sworn deposes and says:*

*I. That* he is *acquainted with the* 7 quartz- *Mining Claims situate; lying and being in* HENDERSON (unorganized) *Mining District in the County of* GRANITE *State of Montana*

ROBINSON, FROG, JENNIE Y,
ARMIDILLA, MAY, HEEL CALK,
SUNOL

*II. That* they *did* [illegible] *work and labor upon said mining claim and placed the following improvements thereon, to-wit:*

Road work to property, repair to drifts and cross cuts, operation of mining and shipments of ore.

*and that the value of said improvements is* in excess of seven hundred *Dollars.*

*III. That said work and labor was done and performed and said improvements were commenced on the* -- *day of* January *A. D. 1951, and finished on the* *day of* May *A. D. 1951*

*IV. That said work was done and said improvements were made at the instance and request of* QUEEN MINING SYNDICATE *the owners of said mining claim.*

*V. That the actual amount paid for said labor and improvements is* in excess of seven hundred *Dollars, lawful money of the United States, and that said sum was paid by* QUEEN MINING SYNDICATE

W. A. Noon

*Subscribed and sworn to before me this* 29th *day of* June, *19*51

[illegible]
NOTARY PUBLIC FOR
STATE OF MONTANA
RESIDING AT DRUMMOND, MONT.

MY COMMISSION EXPIRES OCT. 30, 1952

Drummond, Montana
December 31, 1952

Department of the Interior
USGS Field Team, Region II, DLA
Mr. Thor H. Kilgard
So. 157 Howard St., Spokane

Dear Mr. Kilgard:

In reply to your phone conversation this morning, herewith is enclosed a certified copy of Proof of Work on the mining claims of the QUEEN MINING SYNDICATE referred to, and which extend up towards the top of the Sunrise Mountain.

Also enclosed is a claim map which is the old original map given the QUEEN MINING SYNDICATE when the property was leased from the owners. Referring to the sentence on page No. 2, of the original lease under date of June 22, 1946, "Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims: Robinson, Frog, Heel Calk, Jennie Y, May and Eagle's Nest. Also the following described tract of land----"etc. the owners of the patented claims did not guarantee title to the locations advising that the QUEEN MINING SYNDICATE, as lessees, would have to do the work on the locations if they desired to hold same. This work has been done each year and the "Gopher-relocation" covers the described property in the paragraph in the contract.

The Sunol is a patented claim. The Eagle's nest is of no value to the QUEEN MINING SYNDICATE as it is too far east and out of the mine zone.

These locations are real old locations dating back to the late 90s and may be hard to find in the County Records of Granite County however, since the work has been performed each year on these claims we presume the title is satisfactory. The writer will check the County Records and see if the filing date and location record can be obtained. Will write you as soon as we have obtained the information.

Yours very truly

W. A. Moon
for the QUEEN MINING SYNDICATE

WAM:m
cc. JHM.

Drummond, Montana
December 31, 1952

Department of the Interior
USGS Field Team, Region II, DMA
Mr. Thor H. Kilgard
So. 137 Howard St., Spokane

Dear Mr. Kilgard;

In reply to your phone conversation this morning, herewith is enclosed a certified copy of Proof of Work on the mining claims of the QUEEN MINING SYNDICATE referred to, and which extend up towards the top of the Sunrise Mountain.

Also enclosed is a claim map which is the old original map given the QUEEN MINING SYNDICATE when the property was leased from the owners. Referring to the sentence on page No. 2, of the original lease under date of June 22, 1946, "Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims: Robinson, Troy, Keel Calk, Jennie Y, May and Eagle's Nest. Also the following described tract of land----"etc. the owners of the patented claims did not guarantee title to the locations advising that the QUEEN MINING SYNDICATE, as lessees, would have to do the work on the locations if they desired to hold same. This work has been done each year and the "Gopher-relocation" covers the described property in the paragraph in the contract.

The Sunol is a patented claim. The Eagle's nest is of no value to the QUEEN MINING SYNDICATE as it is too far east and out of the mine zone.

These locations are real old locations dating back to the late 90s and may be hard to find in the County Records of Granite County however, since the work has been performed each year on these claims we presume the title is satisfactory. The writer will check the County Records and see if the filing date and location record can be obtained. Will write you as soon as we have obtained the information.

Yours very truly

W. Gordon
For the QUEEN MINING SYNDICATE

WG:m
cc. JM.

OFFICE OF

H. B. McDOUGAL

COUNTY CLERK AND RECORDER

GRANITE COUNTY

PHILIPSBURG, MONTANA

January 2, 1953

W. A. Noon
Drummond, Montana

Re: Mining Claims
Robinson
Heel Calk
Frog
Jenny Y
May

Dear Mr. Noon:

ROBINSON: Located by Sunrise Mining & Milling Co.
Date of Location: Sept. 26, 1893
Date of Recording: October 4, 1893

HEEL CALK: Located by Sunrise Mining & Milling Co
Date of Location: Sept. 28, 1893
Date of Recording: October 4, 1893

FROG: Located by Sunrise Mining & Milling Co.
Date of Location: September 27, 1893
Date of Recording: October 4, 1893

JENNY Y. Located by Sunrise Mining & Milling Co.
Date of Location: November 15, 1894
Date of Recording: Nov. 19, 1894

I could find no record of the "May", but find a "Marie" located By the Sunrise Mining and Milling Co.
Date of Location Sept. 24, 1893
Date of Recording Octpber 4, 1893.

If further information is desired, do not hesitate to write me.

Yours truly,

H. B. McDougal

Philipsburg, Montana
January 8, 1958

DMA 8.1 (Express)

Department of the Interior
Field Team, Region No. 1
Mr. Thos. Hilsend
Box 1817, Federal Bldg.
Spokane, Washington

DMA 8.1 (Corner)

Dear Mr. Hilsend:

Referring to our letter of December 31st, on the subject of the unpatented claims under lease to the Queen Mining Syndicate.

Unfortunately, we were able to locate the original locations and dates of the Robinson, Noel Calk, Frog and Jennie V, marked on claim map sent you.

We herewith enclose the original letter from the County Clerk and Recorder of Granite County, dated January 2nd, 1958, showing same.

Referring to the Claim "Ray" not shown on the map, we believe this was the "Marie" which was patented, under patent number 24139, August 10, 1906, by the Henderson Mining Co. All these claims of the McLure Estate came into the hands of the Murray-Maury Interests and the Queen Mining Syndicate's lease is from the Murray-Maury interests.

I trust this letter covers the subject of the non-patented claims pertinent to the Sunrise Mine operation.

Yours very truly

[signature]

Notary Public
FOR QUEEN MINING SYNDICATE.

WMHsm
enc

OFFICE OF

H. E. McDOUGAL

COUNTY CLERK AND RECORDER

GRANITE COUNTY

PHILIPSBURG, MONTANA

January 9, 1953

Mr. Jim Quinlan
c/o U. S. Geological Survey
South 157 Howard
Spokane, Washington

Dear Mr. Quinlan:

Relative to our telephone conversation I submit the following:

Robinson Lode Mining Claim--recorded in Book 1 of Quartz Locations at Page 14

Heel Calk--------Book 1, of Quartz Locations at Page 17

Frog ---- Book 1, " " " " " 18

Jenny Y. ----- Book 3, " " " " " 595

Marie ---Book 1, " " " " " 16

Salamander---Recorded in Book 21, Certificate of Locations at Page 447

Gopher-Re-location---recorded in Book 21 of Certificate of Locations at Page 459.

I could find no record of location of the December Lode.

Yours truly,

H. E. McDougal

DRAFT

W. A. Noon, Manager
Queen Mining Syndicate
P.O. Box 333
Drummond, Montana

Re: Docket DMA 393X Tungsten, Copper
Sunrise Mine, Montana
Queen Mining Syndicate

Dear Mr. Noon:

This is to acknowledge your letter of July 30, 1951 transmitting the six copies of the Mortgagor's Subordination Agreement pertaining to the Sunrise Mine. These agreements are returned herewith, as there are several items concerning them and the lease and option which must be clarified before an Exploration Contract can be processed.

Item 1. The examination of the Lease and Option indicates that it expired on June 22, 1951, however, you have furnished a copy of a memorandum dated July 2, 1951 together with a copy of a letter dated July 10, 1951 from H. ~~R.~~ Maury to W. A. Noon which seem to imply that "a new contract extension of the old lease and option" has been executed. It will be necessary for you to furnish a certified copy of the "new contract extension". It is noted that the Lease and Option is made to William R. McLure as lessee, but that the assignment of this lease and/or its extension, from Mr. McLure to the Queen Mining Syndicate has not been filed with this office, yet it is required that you do so.

Item 2. It is not clear whether the Messrs. Murrays and Maury are landlords or mortgagors. If they are landlords, the subordination agreement should have been form MF-202, "Landlord's Subordination Agreement", whereas the agreements returned herewith are Form MF-201, the "Mortgator's Subordination Agreement". You will note that the date "May 28" has been inserted on the fifth line of these returned agreements.

This should have been left balnk until the contract is signed for the Government. Therefore, if the Mortgator Agreement is the correct form to be used for this project you will not be required to make out a new set, but simply have to cross out in ink "May 28" and have the signatories initial below the date to signify their approval of the erasure.

If the first parties of the Lease and Option are Landlords it will be necessary for you to have them execute seven (7) Form MF-202, which are also enclosed just in case that you need them. You will note that the date on the third line should be left blank as this will be filled in by the Government.

From the aforementioned Memorandum and letter from Mr. Maury to you, it appears that you are required to make payments as interest charges on certain sums to the Messrs. Murrays and Maury. This is to advise you that it will be necessary for the owners to subordinate such payments during the period of an Exploration Contract. You understand that the Government cannot participate in any expense which is not directly connected with the actual work of Exploration.

It is noted that you have had mill tests made on placer material to recover tungsten ore, but it is not stated that similar tests have been made on the copper ore from the Sunrise Mine. You will understand that evidence to support an Exploration Contract which includes the production of tungsten should be supported by authentic reports of tests which would indicate that a merchantable tungsten concentrate can be separated from the copper and other minerals of which the rock is composed. Without the reports of such tests, an Exploration Contract on the basis allowable for tungsten cannot be recommended, therefore, under these cir-

cumstances this project is eligible for participation on the basis of copper only.

If you have any need of assistance in preparing this project for further consideration, you are advised to contact the Executive Officer of the DMA Field Team in Spokane, Washington.

Mr. Bookcase

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

September 4, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Docket No. DMA 393X-Tungsten Copper
Sunrise Mine, Queen Mining Syndicate

We have examined the Extension of Lease and Option attached to your recent memo on this subject and consider it adequate for the purposes of the exploration contract application.

The document in question and the other papers forwarded with it are returned herewith in order that they may be kept with the rest of the file on the case.

In addition to the Extension and the information as to the yield of the ore which the letter of August 22, 1951 from Mr. Moon indicates is being obtained, the case requires a subordination agreement on the landlord form signed by the owners of the property.

J. L. Hofflund
General Counsel

Attachment

FILE COPY 400
SURNAME:

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

Blakemore
Mr Hendry

a. E. e.

AUG 14 1951

Queen Mining Syndicate
W. A. Noon, Manager
P.O. Box 333
Drummond, Montana

Re: Docket DMA 393X, Tungsten-Copper
Sunrise Mine, Montana

Gentlemen:

Your letter of July 30, 1951 transmitting six copies of the Mortgator's Subordination Agreement in connection with the subject project has been received. There are, however, several defects in connection with it, as it now stands, which prevent further processing of an exploration contract.

The lease under which you assert the right to conduct the proposed exploration work does not run to you, but to William R. McLure, which lease expired on July 1, 1951. It will therefore be necessary for you to submit a copy of an assignment of the lease from Mr. McLure to the Queen Mining Syndicate. If the lease has been extended, you should send us a copy of the extension. If it has not been extended, you should obtain an extension in the name of the Queen Mining Syndicate and send it to us. If the extension runs to Mr. McLure, you should obtain an assignment of that extension to the Queen Mining Syndicate and send it to us.

It would appear from the lease that the Messrs. Murray and Maury are the owners and lessors of the mining claims on which the proposed exploration work is to be conducted. The subordination agreements which you furnished are, however, Mortgator Subordination Agreements. If, as it appears, you hold this property under an assignment of a lease from the Messrs. Murray and Maury and Mr. McLure, you should submit seven copies of a lessor's subordination agreement signed by the Messrs. Murray and Maury and seven additional copies of the lessor's subordination agreement signed by Mr. McLure. Please do not insert a date on the third line of these forms.

Of course, if there is a mortgage on the property, or if there are any other claims against it, seven copies of the appropriate subordination agreement, that is, the Mortgator's or Landlord's Subordination

Agreement should be obtained from each holder of such claim for attachment to each copy of the Exploration Contract.

The information you have furnished in regard to the tungsten content of the copper ore is not sufficient to justify the granting of an Exploration Contract for tungsten. In order to qualify for the allowances granted for the Exploration of tungsten ores, it will be necessary for you to furnish authentic reports of tests which would indicate that a reasonable recovery of tungsten in the form of a merchantable concentrate can be produced from the rock. The results of mill tests made on placer material to recover tungsten, which you have submitted do not show that similar tests have been made on the copper ore from the Sunrise Mine.

If you should require further information or assistance in preparing the papers and data referred to above, please contact the Executive Officer of the DMA Field Team in Spokane, Washington.

Sincerely yours,

C. O. Mittendorf (J.H.) 8/14

C. O. Mittendorf, Director
Production Expansion Division

PBBlakemore/jem
8-13-51

cc to; Adm. Reading File
Mr. Mittendorf-Olund
Reports & Records
Docket
Field (2)
Mr. Blakemore

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

July 30, 1951

DMA 393 X

Mr. L. F. Strobel
Executive Secretary DMA
Department of the Interior
Washington 25, D.C.

Dear Mr. Strobel:

As per instructions from the Spokane office, DMA, we are enclosing the 6 copies of the Mortgagor's Subordination Agreement, properly signed, by the owners.

Yours very truly

W. A. Noon

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 3 1951

MF-201

# MORTGAGOR'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the owner is the holder of a mortgage, claim, lien, or encumbrance dated June 22, 1946, extension, recorded in Book 10, page xxx, of Miscellaneous records of the county of Granite, State of Montana,

upon that certain parcel of ground described in a certain Exploration Project Contract dated May 28, 1951, between W.A. Noon (acting for QUEEN MINING SYNDICATE, lessee),

of said property and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951.

James A. Murray
Edward E. Murray
W. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact.

Charles A. Murray

Lowndes Maury

U. S. GOVERNMENT PRINTING OFFICE 940767

MF-201

# MORTGAGOR'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the owner is the holder of a mortgage, claim, lien, or encumbrance dated June 22, 1943, extension, recorded in Book 10, page xxx, of Miscellaneous records of the county of Cascade, State of Montana,

upon that certain parcel of ground described in a certain Exploration Project Contract dated May 22, 1951, between W. A. Coon (acting for [illegible] SYNDICATE, lessee),

of said property and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951.

James A. Murray
Edward E. Murray
W. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact.

Charles A. Murray

Lowndes Maury

U. S. GOVERNMENT PRINTING OFFICE 940767

MF-201

# MORTGAGOR'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the owner is the holder of a mortgage, claim, lien, or encumbrance dated June 22, 1946, extension, recorded in Book 10, page xxx, of Miscellaneous records of the county of Granite, State of Montana, upon that certain parcel of ground described in a certain Exploration Project Contract dated May 28, 1951, between W.A. Noon (acting for QUEEN MINING SYNDICATE, lessee.), of said property and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951.

Charles A. Murray

James A. Murray
Edward H. Murray
E. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact.

Lowndes Maury

U. S. GOVERNMENT PRINTING OFFICE 940767

MF-201
(June 1951)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

# SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the holder of a mortgage, claim, lien, or encumbrance identified and described as follows*:

(owners) - Dated June 22, 1946. Extension recorded in Book 10, of Miscellaneous Records, County of Granite, State of Montana.

upon that certain parcel of ground described in a certain Exploration Project Contract dated May 28, 1951, between W. A. Noon (acting for Queen Mining Syndicate, lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951.

Charles A. Murray

*Include date of the instrument, and if recorded, book, page, and county of record.

U. S. GOVERNMENT PRINTING OFFICE 16—64581-2

James A. Murray
Edward E. Murray
W. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact.

Lowndes Maury

MF-201
(June 1951)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

# SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the holder of a mortgage, claim, lien, or encumbrance identified and described as follows*:

( owners) - Dated June 22, 1946. Extension recorded in Book 10, of Miscellaneous Records, County of Granite, State of Montana.

upon that certain parcel of ground described in a certain Exploration Project Contract dated May 28, 1951, between W. A. Noon (acting for Queen Mining Syndicate, lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951

Charles A. Murray

*Include date of the instrument, and if recorded, book, page, and county of record.

U. S. GOVERNMENT PRINTING OFFICE 16—64581-2

James A. Murray
Edward E. Murray
W. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact

Lowndes Maury

MF-201
(June 1951)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

# SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the holder of a mortgage, claim, lien, or encumbrance identified and described as follows*:

( owner) Dated June 22, 1946. Extension recorded in Book 10, of Miscellaneous Records, County of Granite, State of Montana.

upon that certain parcel of ground described in a certain Exploration Project Contract dated May 28, 1951, between W. A. Moon (acting for Queen Mining Syndicate, lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned does by these presents subordinate all of his right, title, and interest in said mortgage, claim, lien, or encumbrance 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 under the provisions of said mortgage, claim, lien, or encumbrance; and

The undersigned agrees to commit no act nor assert any right, title, or interest under said mortgage, claim, lien, or encumbrance that might 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 30th day of July, 1951

Charles A. Murray

*Include date of the instrument, and if recorded, book, page, and county of record.

U. S. GOVERNMENT PRINTING OFFICE 16—64581-2

James A. Murray
Edward E. Murray
E. D. Murray
Howard Murray

by Charles A. Murray
Their Attorney in Fact.

Lowndes Maury

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 28 1951

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

DEPARTMENT OF THE INTERIOR
RECEIVED
AUG 28 1951
Defense Minerals Administration,
Production Expansion Division.

August 22, 1951

Mr. Beakemore

Defense Minerals Administration
Production Expansion Division
C. O. Mittendorf, Director
Washington, D.C.

Dear Sir:

Re; Docket DMA 393X, Tungsten-Copper, Sunrise Mine, Montana

In reply to your letter of August 14th, subject extension of lease from the Murray-Maury interests, which expired on July 1, 1951, and referring to paragraph #2 in said letter, we herewith enclose a copy of the extension of this lease. The extension is drawn directly to the Queen Mining Syndicate from the Murray-Maury interests and is recorded on page 616, Book No. 10, Miscellaneous Records, Granite County, State of Montana, and dated August 2, 1951.

It takes time to get an extension of this type executed as some of the owners live in the east and when we forwarded the first papers on Application 393X we had a written agreement as to the extension but the papers were in the process of being completed. We believe that the form of this extension covers the subject satisfactorily unless the form of the Subordination Agreement is incorrect. We are forwarding the data to the Executive Officer of the Field Team in Spokane and requesting the proper forms in case the ones you have do not apply.

Referring to your letter, paragraph #5, subject tests for "reasonable recovery of tungsten from the rock" for your information we are taking new samples and will have tests made and advise you of the results as quickly as possible.

Yours ~~very truly~~

W. A. Noon

WAN:m

August 22, 1951

Executive Officer D.M.A.
A. E. Weissenborn
South 137 Howard St.
Spokane, Washington

Dear Sir:

Re DMA 393X Sunrise Mine
Tungsten-Copper

We are in receipt of letter from Mr. Mittendorf, Director of the Production Expansion Division, copy of which is hereto attached, together with our reply.

Will you please,check the extension of the lease (which we also attach) and return it to us together with proper "subordination Agreements" if the ones which have been executed do not apply.

Yours very truly

W. A. Noon

encs
WAN:m

Form executed was "Mortgagor's Subordination Agreement"

C O P Y

C O P Y

RECORDED ON PAGE 516 OF BOOK 10 OF MISCELLANEOUS RECORDS GRANITE COUNTY MONTANA, AUGUST 2, 1951

EXTENSION OF LEASE AND OPTION.

THIS AGREEMENT, made and entered into this 2nd day of July, in the year 1951, wherein CHARLES A. MURRAY, WILLIAM D. MURRAY, JAMES A. MURRAY, EDWARD MURRAY, HOWARD MURRAY and LOWNDES MAURY are parties of the first part, and QUEEN SYNDICATE, assignee of William R. McLure, is party of the second part, W I T N E S S E T H:

WHEREAS, on or about the 22nd day of June, 1946, the parties of the first part executed to William R. McLure, the party of the second part therein, a certain lease and option, a copy of which said lease and option is hereunto annexed, marked "Exhibit A"; and,

WHEREAS, the said lease and option has, due to agreements of the parties, been kept in good standing and operative by the payment of Five Thousand ($5,000) Dollars on or before the 2nd day of July, 1951; and,

WHEREAS, it is the desire of the parties of the first part and Queen Syndicate, aforesaid, to continue its operations on the property described in the said "Exhibit A"; now, the parties to the said lease and option do agree with Queen Syndicate, or any assignee of Queen Syndicate of the lease and option, "Exhibit A", that the purchase price of the said property is to be Fifty Thousand ($50,000) Dollars, of which Five Thousand ($5,000) Dollars on the principal has already been paid, leaving a balance of Forty-five Thousand ($45,000) Dollars, and interest from July 1, 1951, to be paid as hereinafter set out:

The parties do agree that the said lease and option is now extended, by the payment of the said sum of Five Thousand ($5,000) Dollars, for one year, and until July 1, 1952.

5,000

If additionally Five Thousand ($5,000) Dollars, with interest at six (6%) per cent. per annum from July 1, 1951, be paid on or before July 1, 1952, then the said lease and option shall be extended for another year, until July 1, 1953.

5000

If additionally Ten Thousand ($10,000) Dollars, with interest at six (6%) per cent. per annum from July 1, 1951, be paid on or before July 1, 1953, then the said lease and option will be extended for another year, until July 1, 1954.

10,000

If additionally Ten Thousand ($10,000) Dollars, with interest at six (6%) per cent. per annum from July 1, 1951, be paid on or before July 1, 1954, then the said lease and option will be extended for another year, until July 1, 1955.

10,000

If, additionally, Ten Thousand ($10,000) Dollars, with interest at six per cent. per annum from July 1, 1951, be paid on or before July 1, 1955, then the said lease and option will be extended for another year, to July 1, 1956.

And then, the full remaining sum of Ten Thousand ($10,000) Dollars due on the purchase price, together with interest at six (6%) per cent. per annum from July 1, 1951, shall be paid on or before July 1, 1957, and on such payment being made, good and sufficient deeds to the said property described therein, according to the tenor of the said lease and option, will be delivered to the said Queen Syndicate, or its or their assignees.

On written request to the first parties, they will, as soon as they reasonably can, execute a deed to the Queen Syndicate of the said property, and place the same in escrow with the First National Bank of Butte to be delivered to the said Queen Syndicate when/if the foregoing payments are made.

TIME is of the essence of this agreement, and of all of its terms.

WITNESS the hands of the parties hereto this 2nd day of July, 1951.

(s) LOWNDES MAURY

(s) Charles A. Murray

(s) William D. Murray

(s) James A. Murray

(s) Edward Murray

(s) Howard Murray

By: (s) Charles A. Murray
Their Attorney-in-Fact
L E S S O R S.

QUEEN MINING SYNDICATE,
ASSIGNEE
By: (s) J. H. Mellen

STATE OF MONTANA )
) ss.
COUNTY OF GRANITE )

On this, the 31st day of July, 1951, before me Francis M. Durfee, a Notary Public for the State of Montana, residing at Drummond, Montana, personally appeared James H. Mellen, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

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

(s) F. M. Durfee
Notary Public for the State
of Montana, residing at
Drummond, Montana
My Commission expires Oct. 30, 1952

SEAL

"EXHIBIT A".

LEASE AND OPTION.

THIS LEASE AND AGREEMENT, made and entered into this 22nd day of June, 1946, wherein CHARLES A. MURRAY, WILLIAM D. MURRAY, JAMES A. MURRAY, EDWARD MURRAY, HOWARD MURRAY and LOWNDES MAURY are parties of the first part, and WILLIAM R. McLURE is the party of the second part,

W I T N E S S E T H: That for and in consideration of the sum of One ($1.00) Dollar, to the first parties in hand paid, and the further consideration of the rents and royalties hereinafter set out to be paid, and the covenants as to work on the property hereinafter set out to be kept and performed, do lease and to mine let for the period of five years from and after the first day of July, 1946, unless sooner terminated by some breach of covenant on the part of the lessee, his heirs and assigns, all of the following described property in Granite County, Montana, to-wit:

Sunday Quartz Lode Mining Claim,
Survey 4692

Free Trade Quartz Lode Mining Claim,
Survey 4582

Nugget Quartz Lode Mining Claim,
Survey 4689

Russell Quartz Lode Mining Claim,
Survey 4688

Pine Quartz Lode Mining Claim,
Survey 4475

Protection Quartz Lode Mining Claim,
Survey 4476

Queen Quartz Lode Mining Claim
Survey 4392

Toe Calk Quartz Lode Mining Claim
Survey 4395

Float Quartz Lode Mining Claim
Survey 4540

Inbetween Quartz Lode Mining Claim,
Survey 4539

Treble Quartz Lode Mining Claim,
Survey 4541

Armadilla Quartz Lode Mining Claim,
Survey 4555

Sunol Quartz Lode Mining Claim,
Survey 4394

Sunrise Quartz Lode Mining Claim,
Survey 2697

Oakland Quartz Lode Mining Claim,
Survey 4690

Ire Quartz Lode Mining Claim,
Survey 4562

Marie Quartz Lode Mining Claim,
Survey 7241

All that portion of the Maud S Quartz Lode Mining Claim, Survey 4393, which is North of the South line of the County Road.

All that portion of the Gaylord Quartz Lode Mining Claim which is North of the South line of the County Road.

Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims:

Robinson

Frog

Heel Calk

Jennie Y

May

Eagle's Nest

Also the following described tract of land starting at corner No. 2 of the Queen Quartz Lode, Survey No. 4392; thence South 35° 47' East 961.5 feet; thence South 49° 45' West, West 380.5 feet; thence West 271.8 feet; thence North 1,025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. The said tract lying in Section Thirty-five (35), Township Nine (9) North, Range Fourteen (14) West, M. P. M..

Also:

The Addie Quartz Lode Mining Claim,
Survey 6342

Nellie Quartz Lode Mining Claim,
Survey 6343

Sunflower Quartz Lode Mining Claim,
Survey 5394

+ Bellflower Quartz Lode Mining Claim,
Survey 5393

All of said property being in Granite County, Montana.

The conditions of the said lease which must be faithfully kept and performed, TIME being of the essence of this contract, both as to the lease, and as to the option hereinafter set out, are:

On all direct shipping ores, the lessee shall pay a royalty of eight (8) per cent. of the net smelter returns, but on all ores that may be milled from the said property, at any point in Granite County, by the lessee, or his assigns, the royalty shall be five (5) per cent. of the net smelter returns on concentrates. In computing net smelter returns, the railroad freight from Stone Station to any smelter or sampling works, shall be deducted from the smelter returns, and also if the lessee shall decide to ship by truck alone, without railroad service, there shall be deducted from the smelter returns for such trucking service an amount equal to the then established railroad freight rate from Stone Station to the Washoe Sampler in Butte.

All royalties paid under the foregoing paragraph shall be applied on, and in reduction of, the purchase price hereinafter set out.

The lessee shall commence work on the said property on or before the 15th day of September, 1946, and he shall continuously cause to be done at least forty shifts per calendar month throughout the term of this lease, unless prevented by strikes and lockouts, or undue mining casualty, such as to be classed as an Act of God, and before any shipment is made to any smelter, a copy of this lease and option shall be filed with the company to which shipment shall be made, and such copy is furnished the lessee, and such royalty shall be paid direct by said smelter to the First National Bank of Butte, Montana, for the use and benefit of:

One-half to Lowndes Maury
One-tenth to Charles A. Murray
One-tenth to William D. Murray
One-tenth to James A. Murray
One-tenth to Edward Murray
One-tenth to Howard Murray

The lessee agrees to insure his servants against mine casualty under some plan of the Workmen's Compensation Act of Montana.

The lessee agrees to do all work on the said property with reasonable care, and in accord with decent, good mining.

The lessee extends to the lessors, or to any of them, or to any agent of the lessors, the right to inspect any underground workings at all times.

And, whereas, the party of the second part expects to obtain capital to aid him in working the said property, this lease, and the option hereinafter set out, are both assignable, and also undivided interests in this lease and option may be sold and assigned, provided that before any undivided interest, or entire interest, in this lease and option is sold or assigned, a registered letter, giving the name

and address of the assignee or assignees, be mailed to Lowndes Maury, Butte, Montana.

The party of the second part, or any assignee, shall have the right and privilege of removing from the property all tools, equipment and machinery of every kind placed thereon under this lease within ninety days after the expiration of this lease, either by the lapse of time, or by failure to perform the conditions of the lease.

## O P T I O N.

And so long as, but no longer than, the foregoing lease is kept and performed, without breach of any covenant therein set out, the parties of the first part extend to the party of the second part the exclusive right and option to buy all of the said property at the price of Fifty Thousand ($50,000.00) Dollars, and such royalties as are paid shall be applied upon, and in reduction of the said purchase price, but if for any reason the foregoing lease expires, the right to purchase expires, and all royalties then paid shall be deemed rent for the property, and the property of the parties of the first part.

When, and if, the sum of One Thousand ($1,000.00) Dollars is paid as royalty, the parties of the first part will execute and deliver, in escrow to the First National Bank, of Butte, good and sufficient deed of conveyance of the said property, upon written request being made to the parties of the first part to do so.

TIME is strictly of the essence of the foregoing option, and of the foregoing lease, and all of the terms of both.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands this _____ day of June, 1946.

LOWNDES MAURY

(s) Charles A. Murray

(s) William D. Murray

(s) James A. Murray

(s) Edward Murray

(s) Howard Murray

By: (s) Charles A. Murray
Their Attorney in Fact,
Lessors.

WILLIAM R. McLURE,
Lessee.

C O P Y

Ama-393 X C O P Y

EXHIBIT "A"

LEASE AND OPTION

THIS LEASE AND AGREEMENT, made and entered into this 22nd day of June, 1946, wherein CHARLES A MURRAY, WILLIAM D. MURRAY, JAMES A MURRAY, EDWARD MURRAY, HOWARD MURRAY and LOWNDES MAURY are the parties of the first part, and WILLIAM R. McLURE is the party of the second part,

W I T N E S S E T H: That for and in consideration of the sum of one ($1.00) dollar, to the first parties in hand paid, and the further consideration of the rents and royalties hereinafter set out to be paid, and the covenants as to work on the property hereinafter set out to be kept and performed, do lease and to mine let for the period of five years from and after the first day of July, 1946, unless sooner terminated by some breach of covenant on the part of the lessee, unto the lessee, his heirs and assigns, all of the following described property in Granite County, Montana, to-wit:

Sunday Quartz Lode Mining Claim
Survey 4692

Free Trade Quartz Lode Mining Claim,
Survey 4582

Nugget Quartz Lode Mining Claim,
Survey 4689

Russell Quartz Lode Mining Claim,
Survey 4688

Pine Quartz Lode Mining Claim,
Survey 4475

Protection Quartz Lode Mining Claim,
Survey 4476

Queen Quartz Lode Mining Claim,
Survey 4392

Toe Calk Quartz Lode Mining Claim,
Survey 4395

Float Quartz Lode Mining Claim,
Survey 4540

Inbetween Quartz Lode Mining Claim,
Survey 4539

Treble Quartz Lode Mining Claim,
Survey 4541

Armadilla Quartz Lode Mining Claim,
Survey 4555

Sunol Quartz Lode Mining Claim,
Survey 4394

Sunrise Quartz Lode Mining Claim,
Survey 2697

Oakland Quartz Lode Mining Claim,
Survey 4690

Irce Quartz Lode Mining Claim,
Survey 4562

Marie Quartz Lode Mining Claim,
Survey 7241

All that portion of the Maud S Quartz Lode Mining Claim, Survey 4393, which is North of the South line of the County Road.

All that portion of the Gaylord Quartz Lode Mining Claim which is North of the South line of the County Road.

Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims:

Robinson

Frog

Heel Calk

Jennie Y

May

Eagle's Nest

Also the following described tract of land starting at corner No. 2 of the Queen Quartz Lode, Survey No. 4392; thence South 35° 47' East 961.5 feet; thence South 49° 45' West, West 380.5 feet; thence West 271.8 feet; thence North 1,025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. The said tract lying in Section Thirty-five (35), Township Nine (9) North, Range Fourteen (14) West, M.P.M.

Also:

The Addie Quartz Lode Mining Claim,
Survey 6342

Nellie Quartz Lode Mining Claim,
Survey 6343

Sunflower Quartz Lode Mining Claim,
Survey 5394

Bellflower Quartz Lode Mining Claim,
Survey 5393

All of said property being in Granite County, Montana.

The conditions of the said lease which must be faithfully kept and performed, TIME being of the essence of this contract, both as to the lease, and as to the option hereinafter set out, are:

On all direct shipping ores, the lessee shall pay a royalty of eight (8) percent of the net smelter returns, but on all ores that may be milled from the said property, at any point in Granite County, by the lessee, or his assigns, the royalty shall be five (5) per cent of the net smelter returns on concentrates. In computing net smelter returns, the railroad freight from Stone Station to any smelter or sampling works, shall be deducted from the smelter returns, and also if the lessee shall decide to ship by truck alone, without railroad service, there shall be deducted from the smelter returns for such trucking service an amount equal to the then established railroad freight rate from Stone Station to the Washoe Sampler in Butte.

All royalties paid under the foregoing paragraph shall be applied on, and in reduction of, the purchase price hereinafter set out.

The lessee shall commence work on the said property on or before the 15th day of September, 1946, and he shall continuously cause to be done at least forty shifts per calendar month throughout the term of this lease, unless prevented by strikes and lockouts, or undue mining casualty, such as to be classed as an Act of God, and before any shipment is made to any smelter, a copy of this lease and option shall be filed with the company to which shipment shall be made, and such copy is furnished the lessee, and such royalty shall be paid direct by said smelterto the First National Bank of Butte, Montana, for the use and benefit of:

One-half to Lowndes Maury
One-tenth to Charles A. Murray
One-tenth to William D. Murray
One-tenth to James A. Murray
One-tenth to Edward Murray
One-tenth to Howard Murray

The lessee agrees to insure his servants against mine casualty under some plan of the Workman's Compensation Act of Montana.

The lessee agrees to do all work on the said property with reasonable care, and in accord with decent, good mining.

The lessee extends to the lessors, or to any of them, or to any agent of the lessors, the right to inspect any underground workings at all times.

And, Whereas, the party of the second part expects to obtain capital to aid him in working the said property, this lease, and the option hereinafter set out, are both assignable, and also undivided interests in this lease and option may be sold and assigned, provided that before any undivided interest, or entire interest, in this lease and option is sold or assigned, a registered letter, giving the name and address of the assignee or assignees, be mailed to Lawndes Maury, Butte, Montana.

The party of the second part, or any assignee, shall have the right and privilege of removing from the property all tools, equipment and machinery of every kind placed thereon under this lease within ninety days after the expiration of this lease, either by the lapse of time, or by failure to perform the conditions of the lease.

## OPTION

And so long as, but no longer than, the foregoing lease is kept and performed, without breach of any covenant therein set out, the parties of the first part extend to the party of the second part the exclusive right and option to buy all of the said property at the price of Fifty Thousand (50,000.00) Dollars, and such royalties as are paid shall be applied upon, and in reduction of the said purchase price, but if for any reason the foregoing lease expires, the right to purchase expires, and all royalties then paid shall be deemed rent for the property, and the property of the parties of the first part.

When, and if, the sum of One Thousand ($1,000.00) Dollars is paid as royalty, the parties of the first part will execute and deliver, in escrow to the First National Bank of Butte, good and sufficient deed of conveyance of the said property, upon written request being made to the parties of the first part to do so.

TIME is strictly of the essence of the foregoing option, and of the foregoing lease, and all of the terms of both.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands this 22nd day of June, 1946.

LOWNDES MAURY
JAMES A MURRAY
WILLIAM D. MURRAY
EDWARD E. MURRAY
HOWARD A. MURRAY
CHARLES A. MURRAY
By: CHARLES A. MURRAY
Their Attorney in Fact
L E S S O R S.

WILLIAM R. McLURE
L E S S E E.

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

July 24, 1951

Air Mail
Through: L. F. Strobel

Mr. C. O. Mittendorf, Director
Production Expansion Division
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Re: Docket DMA 393X
Tungsten and Copper
Sunrise Mine, Montana
Queen Mining Syndicate

Dear Mr. Mittendorf:

In answer to your letter of July 18, the following are answers to your listed items:

1. The Operator's (W. A. Noon) mailing address is Box 333, Drummond, Montana.

2. A copy of the original lease is enclosed plus a notarized copy of a letter and a memorandum showing that it has been extended for a period of 4½ years as of July 1, 1951. The original lease was assigned by W. R. McClure to the Queen Mining Syndicate. A confirmation can be obtained from Charles A. Murray in the office of Honorable James E. Murray, Senator from Montana.

3. In a telephone conversation with W. A. Noon, he stated that the Subordination Agreement was being sent directly to your office as it had been forwarded to Washington for the signature of the Honorable James E. Murray and Charles A. Murray, who would send it on to your office.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 27 1951
LANDON F. STROBEL
Executive Secretary

The applicant, W. A. Noon, has been inquiring about equipment for the exploration of the Sunrise Mine and quotes the following figures on purchase price and rent and conditional sales contracts:

Gardner Denver air compressor, 360 cu. ft., direct connected 75 H.P., 860 RPM, approximately $300 per month (Overhauled, in good condition, purchase price $3,750, conditional sales contract $1,250 down, $250 per month).

EMCO 12B mucking machine, new, approximately $250 per month. ($2,950 plus $100 freight, conditional sales contract $1,000 down, $200 per month).

Air trammer, new, size 8'4" long, 6 H.P. motor, 26" x 84" tank, rent approximately $200 per month (Price $1,805 plus $75 freight, conditional sales contract $750 down and $150 per month).

Two air slushers, used, approximately $200 per month each. (In good condition approximately $1,350 each). Used slusher bucket approximately $250 each. Not needed for drifting, to be used in making raise.

Mine cars, used, can be purchased for from $150 to $400, depending upon capacity.

The applicant strongly proposes that the air stopers and feed drifters be bought outright as the rental rate is too high.

The figures on rental are in line with quotations by local machinery companies. As the time schedule shows that the project will run for approximately one year and since the rent for that length of time almost equals the purchase price of the equipment, it would seem to be to the Government's advantages to agree to the purchase of this machinery and realize something from the salvage. Mr. Noon is willing to agree on the renting of some of of the equipment. Items that might will be rented are the slushers as they will be used during only part of the project. However, it seems advantageous to purchase the rest of the equipment.

Sincerely yours,

Allan B. Griggs

Allan B. Griggs
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

H. L. MAURY
ATTORNEY AT LAW
BUTTE, MONTANA

C
O
P
Y

July 10, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 27 1951
LELAND P. GRIGSBEL
Executive Secretary

Mr. W. A. Noon
Drummond, Montana

Dear Bill:

The lease and option on the Sunrise Group has been in force now five years, and the lessee and his assigns have paid only $5,000.00

I got your letter about releasing future payments from interest. I am not going to release the interest feature of the new contract extension of the old lease and option. The interest is going to be six percent, on all future payments, and the six percent is going to be from the first of July, 1951, until paid. This kind of a contract will be put in the First National Bank of Butte.

I am sending a deed to Charles A. Murray, and also an escrow contract, and when they are returned, the deed and the contact will be placed in the First National Bank of Butte; there will be no modification of the terms, and all communications thereafter had just as well be addressed to the Bank as to me.

Cordially yours.

(S) Lowndes Maury

HLM:E

STATE OF MONTANA )
COUNTY OF GRANITE) ss

I, W. A. Noon, being first duly sworn, do hereby certify that the above instrument as written is a true and correct copy of of the original instrument now in my possession.

W. A. Noon

On the 21st day of July, 1951, before me, a Notary Public of the State of Montana, appeared W. A. Noon, known to me to be the person whose name is subscribed to the above certification and acknowledged to me that he executed the same. In witness whereof, I have hereunto set my hand and affixed my official seal, this 21st day of July, 1951.

Residing at Drummond, Mont.

F. B. Dunfee

My commission expires 10/30/52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 27 1951
[illegible] R. [illegible]
Executive Secretary

COPY OF MEMORANDUM July 2nd, 1951

Received in all $5,000.00 (five thousand dollars) payment on Sunrise Group in Granite County.

Further payments;-

| | |
|---|---|
| $5,000.00 | one year from date |
| $10,000.00 | two years from date |
| $10,000.00 | three years from date |
| $10,000.00 | four years from date |
| $10,000.00 | five years from date |

All payments bear 6% (six percent) per year interest; full price $50,000.00 (fifty thousand dollars).

Signed- Lowndes Maury

PS-
Will put this in a contract and escrow in First National Bank if desired.

STATE OF MONTANA )
COUNTY OF GRANITE ) ss

I, W. A. Noon, being first duly sworn, do hereby certify that the above memorandum is a true and correct copy of the original instrument as written and now in my possession.

W. A. Noon

On the 21st day of July, 1951, before me, a Notary Public of the State of Montana, appeared W. A. Noon, known to me to be the person whose name is subscribed to the above certification and acknowledged to me that he executed same. In witness whereof, I have hereunto set my hand and affixed my official seal this 21st day of July, 1951.

F. W. Dunlee
My commission expires 10/30/52

Residing at Drummond, Mont.

C O P Y

C O P Y

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 27 1951
LANDON F. CRICBEL
Executive Secretary

EXHIBIT "A"

LEASE AND OPTION

THIS LEASE AND AGREEMENT, made and entered into this 22nd day of June, 1946, wherein CHARLES A MURRAY, WILLIAM D. MURRAY, JAMES A MURRAY, EDWARD MURRAY, HOWARD MURRAY and LOWNDES MAURY are the parties of the first part, and WILLIAM R. McLURE is the party of the second part,

W I T N E S S E T H: That for and in consideration of the sum of one ($1.00) dollar, to the first parties in hand paid, and the further consideration of the rents and royalties hereinafter set out to be paid, and the covenants as to work on the property hereinafter set out to be kept and performed, do lease and to mine let for the period of five years from and after the first day of July, 1946, unless sooner terminated by some breach of covenant on the part of the lessee, unto the lessee, his heirs and assigns, all of the following described property in Granite County, Montana, to-wit:

Sunday Quartz Lode Mining Claim
Survey 4692

Free Trade Quartz Lode Mining Claim,
Survey 4582

Nugget Quartz Lode Mining Claim,
Survey 4689

Russell Quartz Lode Mining Claim,
Survey 4688

Pine Quartz Lode Mining Claim,
Survey 4475

Protection Quartz Lode Mining Claim,
Survey 4476

Queen Quartz Lode Mining Claim,
Survey 4392

Toe Calk Quartz Lode Mining Claim,
Survey 4395

Float Quartz Lode Mining Claim,
Survey 4540

Inbetween Quartz Lode Mining Claim,
Survey 4539

Treble Quartz Lode Mining Claim,
Survey 4541

Armadilla Quartz Lode Mining Claim,
Survey 4555

Sunol Quartz Lode Mining Claim,
Survey 4394

Sunrise Quartz Lode Mining Claim,
Survey 2697

Oakland Quartz Lode Mining Claim,
Survey 4690

Iroe Quartz Lode Mining Claim,
Survey 4562

Marie Quartz Lode Mining Claim,
Survey 7241

All that portion of the Maud S Quartz Lode Mining Claim, Survey 4393, which is North of the South line of the County Road.

All that portion of the Gaylord Quartz Lode Mining Claim which is North of the South line of the County Road.

Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims:

Robinson

Frog

Heel Calk

Jennie Y

May

Eagle's Nest

Also the following described tract of land starting at corner No. 2 of the Queen Quartz Lode, Survey No. 4392; thence South 35° 47' East 961.5 feet; thence South 49° 45' West, West 380.5 feet; thence West 271.8 feet; thence North 1,025.9 feet to the place of beginning, containing 7.3 acres, more or less, together with the right to use all existing roads, provided proper and suitable gates are installed and maintained. The said tract lying in Section Thirty-five (35), Township Nine (9) North, Range Fourteen (14) West, M.P.M.

Also:

The Addie Quartz Lode Mining Claim,
Survey 6342

Nellie Quartz Lode Mining Claim,
Survey 6343

Sunflower Quartz Lode Mining Claim,
Survey 5394

Bellflower Quartz Lode Mining Claim,
Survey 5393

All of said property being in Granite County, Montana.

The conditions of the said lease which must be faithfully kept and performed, TIME being of the essence of this contract, both as to the lease, and as to the option hereinafter set out, are:

On all direct shipping ores, the lessee shall pay a royalty of eight (8) percent of the net smelter returns, but on all ores that may be milled from the said property, at any point in Granite County, by the lessee, or his assigns, the royalty shall be five (5) per cent of the net smelter returns on concentrates. In computing net smelter returns, the railroad freight from Stone Station to any smelter or sampling works, shall be deducted from the smelter returns, and also if the lessee shall decide to ship by truck alone, without railroad service, there shall be deducted from the smelter returns for such trucking service an amount equal to the then established railroad freight rate from Stone Station to the Washoe Sampler in Butte.

All royalties paid under the foregoing paragraph shall be applied on, and in reduction of, the purchase price hereinafter set out.

The lessee shall commence work on the said property on or before the 15th day of September, 1946, and he shall continuously cause to be done at least forty shifts per calendar month throughout the term of this lease, unless prevented by strikes and lockouts, or undue mining casualty, such as to be classed as an Act of God, and before any shipment is made to any smelter, a copy of this lease and option shall be filed with the company to which shipment shall be made, and such copy is furnished the lessee, and such royalty shall be paid direct by said smelterto the First National Bank of Butte, Montana, for the use and benefit of:

One-half to Lowndes Maury
One-tenth to Charles A. Murray
One-tenth to William D. Murray
One-tenth to James A. Murray
One-tenth to Edward Murray
One-tenth to Howard Murray

The lessee agrees to insure his servants against mine casualty under some plan of the Workman's Compensation Act of Montana.

The lessee agrees to do all work on the said property with reasonable care, and in accord with decent, good mining.

The lessee extends to the lessors, or to any of them, or to any agent of the lessors, the right to inspect any underground workings at all times.

And, Whereas, the party of the second part expects to obtain capital to aid him in working the said property, this lease, and the option hereinafter set out, are both assignable, and also undivided interests in this lease and option may be sold and assigned, provided that before any undivided interest, or entire interest, in this lease and option is sold or assigned, a registered letter, giving the name and address of the assignee or assignees, be mailed to Lawndes Maury, Butte, Montana.

The party of the second part, or any assignee, shall have the right and privilege of removing from the property all tools, equipment and machinery of every kind placed thereon under this lease within ninety days after the expiration of this lease, either by the lapse of time, or by failure to perform the conditions of the lease.

## OPTION

And so long as, but no longer than, the foregoing lease is kept and performed, without breach of any covenant therein set out, the parties of the first part extend to the party of the second part the exclusive right and option to buy all of the said property at the price of Fifty Thousand (50,000.00) Dollars, and such royalties as are paid shall be applied upon, and in reduction of the said purchase price, but if for any reason the foregoing lease expires, the right to purchase expires, and all royalties then paid shall be deemed rent for the property, and the property of the parties of the first part.

When, and if, the sum of One Thousand ($1,000.00) Dollars is paid as royalty, the parties of the first part will execute and deliver, in escrow to the First National Bank of Butte, good and sufficient deed of conveyance of the said property, upon written request being made to the parties of the first part to do so.

TIME is strictly of the essence of the foregoing option, and of the foregoing lease, and all of the terms of both.

IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands this 22nd day of June, 1946.

LOWNDES MAURY
JAMES A MURRAY
WILLIAM D. MURRAY
EDWARD E. MURRAY
HOWARD A. MURRAY
CHARLES A. MURRAY
By: CHARLES A. MURRAY
Their Attorney in Fact
L E S S O R S.

WILLIAM R. McLURE
L E S S E E.

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

DOCKET [redacted]MEA 393X

COMMODITY Copper

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

# EXPLORATION PROJECT CONTRACT [1]

Proposed contract used for mining claims

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Queen Mining Syndicate

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Granite, described as follows: [3] The Sunrise Mine, consisting of 21 patented lode claims, 6 unpatented lode claims, and a tract of homestead land containing 7.3 acres in T. 9 N., R. 14 W., Sec. 35. located in Granite County Montana. See Exhibit and Annex I attached hereto and made a part hereof.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: Queen Mining Syndicate leases the property.

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for [5] copper

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $10,725.00, which is 50 percent of $21,450.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(Operator)

By _____

By _____

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

_____

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
QUEEN MINING SYNDICATE
SUNRISE MINE
GRANITE COUNTY, MONTANA

DMA 393X

Exhibit "A"

Estimated time schedule: 0--6 months

DESCRIPTION OF WORK

1. Rehabilitate and straighten 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel.

ESTIMATED COST OF PROJECT
*Allowable maximum

Unit Costs: 900' rehabilitate @ 1.5 1,375.—
550 feet of drift at $~~35.20~~ 35.69 per foot including all costs except assaying 19,635
~~$21,010.00*~~

The Government will contribute to the cost of drifting on the basis of this agreed estimated unit cost in lieu of actual costs. The rest of the described work and those items of the cost of drifting which are excluded therefrom will be contributed to by the Government on the basis of the actual costs specified in Article 6(a) of the contract from, schedule of which are set forth below:

1. Independent Contracts

None.

2. Labor, supervision, consultants

Schedule waived.

3. Operating materials and supplies

Schedule waived.

4. Operating equipment

Schedule waived.

5. Rehabilitation and repairs

Schedule waived.

6. New buildings, improvements, installations

None.

7. Miscellaneous

| | |
|---|---|
| Assays - 110 at $4/ea. | $ 440.00* |
| Total estimated cost | $21,450.00 |
| Government's contribution at 50% | $10,725.00 |

~~LIST OF CLAIMS IN THE SUNRISE~~

Annex I
Patented lode mining claims

Sunday Quartz Lode Mining Claim, Survey 4692

Free Trade Quartz Lode Mining Claim, Survey 4582

Nugget Quartz Lode Mining Claim, Survey 4689

Russell Quartz Lode Mining Claim, Survey 4688

Pine Quartz Lode Mining Claim, Survey 4475

Protection Quartz Lode Mining Claim, Survey 4476

Queen Quartz Lode Mining Claim, Survey 4392

Toe Calk Quartz Lode Mining Claim, Survey 4395

Float Quartz Lode Mining Claim, Survey 4540

Inbetween Quartz Lode Mining Claim, Survey 4539

Treble Quartz Lode Mining Claim, Survey 4541

Memo for Files 4/30/53

DMA 393X

Fone call from Mr. Chas Murray one of the owners of the property . He informs us that the Queen Mining sundicate has made the owners a definite offer of $35,000.00 in cash for the property and that he is writing his partners in Butte etc. that he is willing to accept. Should this deal go through we could discard all the correspondence concerning the owners consent to lien and deal directly with the new owners who would then not need a ny Owners Consent to Lien.

Mr. Murray also informed us that he is writing Noon informing him that he has told us about this impending deal and that there would be no use in our answering his last letter dated April 25.

Therefore on this a uthority we will not need to answer this letter

Mr. Chas Murray was in this office for a conference with Mr. Ka ne and Ellis and Schmidt on tuesday 4/28 at which time he took notes as to what was rsquired to complete data for contract. The above mentioned deal puts a new light on everything except a map showing all the cla ims. if the new owners put ina an application.

Schmidt

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 140
WASHINGTON 25, D. C.

April 30, 1953

Memorandum for the Files

Subject: W. A. Noon, Docket No. DMA-393X

Queen Syndicate Mines Company is a partnership composed of four or five individuals, of whom J. H. Mellon appears to be the principal figure. W. A. Noon is only the agent of Queen Syndicate.

On June 22, 1946, Charles A., William D., James A., Edward, and Howard Murray (who together own a 50 percent interest) and Lowndes Maury leased, with an option to purchase, to William R. McLure, among others, the following patented mining claims:

| | |
|---|---|
| Marie | Sunol |
| Queen | Russell |
| Toe Calk | Sunrise |

and "such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims:

| | |
|---|---|
| Robinson | Heel Calk |
| Frog | Jennie Y" |
| Gopher | |

No one knows who has title to the four unpatented claims, but it seems that these claims were located by Sunrise Mining & Milling Company, which was bought out by the Murrays and Maury.

The project is to include the Gopher and December unpatented claims, which do not appear in any lease, but are really unessential to the project. The Lockspur claim referred to on the map seems to be essential to the project, but there is no indication as to its ownership.

McLure assigned his right in this lease to the Queen Syndicate, but the assignment does not appear in the documents.

On July 2, 1951, the lessors extended the lease directly with the Queen Syndicate as assignee of McLure, to 1957, provided $5,000 was paid on July 1, 1952, and $10,000

on July 1, 1953, 1954, 1955, and 1956, at which latter date the property would be paid for. The money due in 1952 was unpaid, and a $15,000 payment on July 1, 1953 is needed to keep the lease in good standing.

There is a "Subordination Agreement" in the file dated July 30, 1951, signed by Charles A. Murray for all the Murrays and Lowndes Maury. The form states that the signers hold a mortgage, but written in ink it states that they are the "owners"; it also states that an extension dated June 22, 1946 was recorded in Book 10 of Miscellaneous Records. This refers to the extension of lease.

There is similarly a mortgagor's "Subordination Agreement" signed. This should be a mortgagee's Subordination Agreement, but there is no indication that the Murrays and Maury are other than the owners of the property.

A new Owner's Consent-to-Lien form should be signed by the Murrays and their wives (who own 50 percent of land) or by an attorney-in-fact for them.

A guaranty should be signed by J. H. Mellon or another, as lease is only for 5 years—unless lease is changed to a 10-year lease.

AEKane

for J. L. Hofflund
Chief Counsel

AEKane:ep

Copy to: Mails & Files
Mr. Hofflund
Mr. Kane
Mr. Ellis
[redacted]
Chron.

Mr. Ellis



April 30, 1953

Memorandum for the Files

Subject: W. A. Noon, Docket No. DMA-393X

Queen Syndicate Mines Company is a partnership composed of four or five individuals, of whom J. H. Mellon appears to be the principal figure. W. A. Noon is only the agent of Queen Syndicate.

On June 22, 1946, Charles A., William D., James A., Edward, and Howard Murray (who together own a 50 percent interest) and Lowndes Maury leased, with an option to purchase, to William R. McLure, among others, the following patented mining claims:

| | |
|---|---|
| Marie | Sunol |
| Queen | Russell |
| Toe Calk | Sunrise |

and "such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims:

| | |
|---|---|
| Robinson | Heel Calk |
| Frog | Jennie Y" |

No one knows who has title to the four unpatented claims, but it seems that these claims were located by Sunrise Mining & Milling Company, which was bought out by the Murrays and Maury.

The project is to include the Gopher and December unpatented claims, which do not appear in any lease, but are really unessential to the project. The Lookspur claim referred to on the map seems to be essential to the project, but there is no indication as to its ownership.

McLure assigned his right in this lease to the Queen Syndicate, but the assignment does not appear in the documents.

On July 2, 1951, the lessors extended the lease directly with the Queen Syndicate as assignee of McLure, to 1957, provided $5,000 was paid on July 1, 1952, and $10,000

on July 1, 1953, 1954, 1955, and 1956, at which latter date the property would be paid for. The money due in 1952 was unpaid, and a $15,000 payment on July 1, 1953 is needed to keep the lease in good standing.

There is a "Subordination Agreement" in the file dated July 30, 1951, signed by Charles A. Murray for all the Murrays and Lowndes Maury. The form states that the signers hold a mortgage, but written in ink it states that they are the "owners"; it also states that an extension dated June 22, 1946 was recorded in Book 10 of Miscellaneous Records. This refers to the extension of lease.

There is similarly a mortgagor's "Subordination Agreement" signed. This should be a mortgagee's Subordination Agreement, but there is no indication that the Murrays and Maury are other than the owners of the property.

A new Owner's Consent-to-Lien form should be signed by the Murrays and their wives (who own 50 percent of land) or by an attorney-in-fact for them.

A guaranty should be signed by J. H. Mellon or another, as lease is only for 5 years—unless lease is changed to a 10-year lease.

J. L. Hofflund
Chief Counsel

AEKane:ep

Copy to: Mails & Files
Mr. Hofflund
Mr. Kane
Mr. Ellis
[redacted]
Chron.

4/27/53

W. A. NOON
~~3944 S. E. ANKENY~~
~~XXXXXXXXXXX~~
PORTLAND, OREGON

Drummond, Montana
April 25, 1953

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

Docket DMA 393X
Copper-Sunrise Mine
Granite Co. Mont.

Dear Mr. Mittendorf:

Will you please refer to the above Docket and your letter of January 28th, which we answered through the Spokane Office, and you have probably been advised by them that one of the owners of the SUNRISE MINE refused to sign the "consent to lien" although he signed the original form which was sent here for his signature and that is in the file in Washington.

We are advised that there is another proceedure which may be substituted in case an owner will not sign said "consent to lien" and we have asked the Spokane Office to proceed under this form. We have not heard from them on the subject and are anxious to go ahead with the development work if it can be made possible.

We are also advised that another form has been issued. Will you please check this file and wire us collect at Drummond, c/o W.A.Noon, what can be done about it to expediate the work. The writer can also be reached by phone at Drummond, No. 2741.

Thanking you for anything you can do to assist in the matter, beg to remain

Yours very truly

W. A. Noon, for
QUEEN MINING SYNDICATE

WAN:m

4/10/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

April 6, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 9 1953

Mr. W. A. Moon

Drummond, Montana

Re: Docket No. 3931 (Copper)
Sunrise Mine
Granite County, Montana

Dear Mr. Moon:

Please excuse the delay in replying to your letter of March 12, 1953. I was in the field when your letter arrived, and it has just been called to my attention.

I have been informed that you and Mr. Weissenborn discussed, during a telephone conversation March 13, 1953, the matter concerning Mr. Maury's failure to sign the "Owner's Consent to Lien Agreement." At that time, Mr. Weissenborn advised that you should prepare a letter explaining the difficulty and that he would forward it to Washington for their consideration and action. Consequently, upon receipt of your letter of March 13, it was forwarded on March 21. You should hear from Washington in the near future concerning this matter.

In regards to where you should write for U. S. Geological Survey maps of Granite County, Montana, I am sorry to inform you that all reports containing geologic maps of the area are out of print. However, on my next visit to Drummond, I will bring from our library for your inspection several publications which might be of interest.

As you are interested in publications and maps of the Survey, I suggest that you write to the Director, U. S. Geological Survey, Washington 25, D. C., for a free copy of "Publications of the Geological Survey" and supplements thereto. This book contains a complete list of Survey publications, including maps and charts, and also explains how they may be obtained.

Sincerely yours,

James J. Quinlan
for A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEP(2)
DMEA(2)
Quinlan

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

April 6, 1953

Mr. W. A. Moon

Drummond, Montana

Re: Docket No. 3931 (Copper)
Sunrise Mine
Granite County, Montana

Dear Mr. Moon:

Please excuse the delay in replying to your letter of March 12, 1953. I was in the field when your letter arrived, and it has just been called to my attention.

I have been informed that you and Mr. Weissenborn discussed, during a telephone conversation March 13, 1953, the matter concerning Mr. Maury's failure to sign the "Owner's Consent to Lien Agreement." At that time, Mr. Weissenborn advised that you should prepare a letter explaining the difficulty and that he would forward it to Washington for their consideration and action. Consequently, upon receipt of your letter of March 13, it was forwarded on March 21. You should hear from Washington in the near future concerning this matter.

In regards to where you should write for U. S. Geological Survey maps of Granite County, Montana, I am sorry to inform you that all reports containing geologic maps of the area are out of print. However, on my next visit to Drummond, I will bring from our library for your inspection several publications which might be of interest.

As you are interested in publications and maps of the Survey, I suggest that you write to the Director, U. S. Geological Survey, Washington 25, D. C., for a free copy of "Publications of the Geological Survey" and supplements thereto. This book contains a complete list of Survey publications, including maps and charts, and also explains how they may be obtained.

Sincerely yours,

James J. Quinlan
for A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA(2)
DMEA(2)
Quinlan

3/30/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

March 21, 1953

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 25 1953

Re: Docket No. DMA-393X (Copper)
Queen Mining Syndicate
Granite County, Montana

Dear Mr. Selfridge:

I am enclosing a letter received from Mr. W. A. Noon from the Queen Mining Syndicate in which he states that he is unable to obtain the signature of Mr. Lowndes Maury to cover his interest in the claims on which the contract work will be done. I have informed Nr. Noon that I had no authority to act in this case but would refer the matter to you. It would appear that we would either have to accept the original subordination agreement forwarded on August 5, 1951 and signed by Mr. Maury at that time or that we would have to waive the requirement of the Owner's Consent to Lien. Will you please advise Mr. Noon what your decision on this is as soon as possible.

Sincerely yours

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

Enclosure
cc: USBM (2)
Quinlan

C O P Y

W. A. NOON
3944 S. E. Ankeny
Portland, Oregon

Drummond, Montana
March 13, 1953

A.E.Weisenborn
Executive Officer, DMEA
Field Team, Region II
So. 157 Howard St.
Spokane 4, Washington

DMA-393x

Dear Mr. Weisenborn

On going over our files we note that on August 5th, 1951, we mailed six copies of a "Mortgagers Subordination Agreement" to Mr. Strobel, then Executive Secretary DMA, as requested, all signed by the Murrays and Mr. Lowndes Maury. It was with the greatest difficulty that we got him to sign at that time, and these were the forms then currently in use. It now seems to be impossible to get him to sign again, as I explained to you on the phone this morning.

In this particular case, would there not be some way that the DMEA could be satisfied to grant the contract on the basis of the papers already signed, particularly as the amount involved in which the Government is concerned is not very large and this loan has been in process since early spring, 1951.

On January 28th we received, unsolicited, a letter from C. O. Mittendorf, Administrator DMEA, a copy of which we enclose. We answered that we were interested and were just waiting the return of the "Owners' Consent to Lien" which the Murray interests had forwarded to Mr. Lowndes Maury, in Butte, for his signature.

Hope you can straighten this out so we can get busy operating this year.

Yours very truly

(s) W. A. Noon
W. A. Noon, for
QUEEN MINING SYNDICATE

WAN:m
enc.

C O P Y

W. A. NOON
3944 S. E. Ankeny
Portland, Oregon

Drummond, Montana
March 13, 1953

A.E.Weisenborn
Executive Officer, DMEA
Field Team, Region II
So. 157 Howard St.
Spokane 4, Washington

DMA-393x

Dear Mr. Weisenborn

On going over our files we note that on August 5th, 1951, we mailed six copies of a "Mortgagers Subordination Agreement" to Mr. Strobel, then Executive Secretary DMA, as requested, all signed by the Murrays and Mr. Lowndes Maury. It was with the greatest difficulty that we got him to sign at that time, and these were the forms then currently in use. It now seems to be impossible to get him to sign again, as I explained to you on the phone this morning.

In this particular case, would there not be some way that the DMEA could be satisfied to grant the contract on the basis of the papers already signed, particularly as the amount involved in which the Government is concerned is not very large and this loan has been in process since early spring, 1951.

On January 28th we received, unsolicited, a letter from C. O. Mittendorf, Administrator DMEA, a copy of which we enclose. We answered that we were interested and were just waiting the return of the "Owners' Consent to Lien" which the Murray interests had forwarded to Mr. Lowndes Maury, in Butte, for his signature.

Hope you can straighten this out so we can get busy operating this year.

Yours very truly

(s) W. A. Noon
W. A. Noon, for
QUEEN MINING SYNDICATE

WAN:m
enc.

2/4/53 gla

W. A. NOON
3048 S.E. ANKENY
PORTLAND, OREGON

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1953

Drummond, Montana
February 2, 1953

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

DMA 393X (Copper)
Granite Co. Montana

Dear Sir:

Replying to your inquiry of January 28, in regard to the "Owners' Consent to Lien" on the above docket, be advised that on receipt of the six copies of the form we immediately forwarded them to Washington D. C. for the owners' signatures and same have to be forwarded to Butte from there for another signature. We are advised this has been done.

Upon our receipt of the signed papers we will forward them to Mr. Volin as instructed and we understand that he will then forward them to you so that proposed contract can be executed. Thanking you for your interest and trusting this answers your inquiry.

Yours very truly

W. A. Noon, for
QUEEN MINING SYNDICATE

WAN:m
cc. MEV,

FILE COPY
SURNAME:

700

Schmidt
Ellis

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

JAN 2 8 1953

Mr. E. A. Noon, Operating Manager
Queen Mining Syndicate
Drummond, Montana

Re: Docket No. [illegible]-393[illegible] (Copper)
Granite County, Montana

Dear Mr. Noon:

Our file on the subject application shows that your letter of December 27, 1952, addressed to Mr. Volin acknowledges receipt of the six copies of Owner's Consent to Lien which were filled out for your convenience, and forwarded from this office.

These papers properly executed are required as part of the proposed contract. Since they have not been returned to us, we are anxious to know whether you are still interested in our completing this contract. We wish to cooperate with you and are making this inquiry to ascertain the status of the matter and the cause of the present delay.

If there is any way in which we can be of assistance to you we will be pleased to hear further from you.

Sincerely yours,

C. O. Mittendorf
Administrator

(for) E.S. 1-28-53

F. Schmidt/jem
1/28/53
cc to: Adm. heading File Docket
Messrs. CHJohnson-3621
ARKinkel-4234 GSA
Ellis Schmidt
Field Team, Region II (2)

1/23/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

January 12, 1953

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Dept. of Interior
Washington 25, D. C.

Re: Docket No. DMA-393X (Copper)
W. A. Noon (Sunrise Mine)
Granite County, Montana

Dear Mr. Johnson:

This is in reply to your letter of December 30, 1952 wherein clarification of certain points with regards to the subject application is requested. These same points were posed by Mr. Schmidt of the legal division during a telephone conversation with Mr. A. E. Weissenborn December 31, 1952.

Mr. W. A. Noon was contacted by telephone December 31, 1952 and requested to submit the desired information. Enclosed are two letters from Mr. Noon, a letter to Mr. Noon, and a letter to Mr. Quinlan from Mrs. H. E. McDougal, County Clerk and Recorder for Granite County, Montana, photostatic copies of Annual Representation of Mining Claims for 1951 and 1952, and a claim map on which is shown the important mine workings and proposed exploration. Most of the points requiring clarification are covered by these documents; however, each point is covered in detail below.

See Legal Sub File

"1. There is no descriptive data as to the six unpatented claims, such as the book and page numbers where descriptions are recorded."

Mr. Noon was asked to provide the book and page numbers of the six unpatented claims. However, he provided us with the letter from the County Clerk showing when four of the claims were located and recorded. Mr. Noon's letter of January 3, 1953 states that they believe the May and Marie Claims are one and the same. Mr. Noon's letter of December 31, 1952 states that the Eagle Nest (Salamander) claim is of no value to the Queen Mining Syndicate as it is too far east and out of the mine zone. Mr. Noon also has

provided us with a copy of the Annual Representation of Mining Claims.

We called the County Clerk of Granite County, Montana requesting that she furnish us with recording data as to book and page number on five of the six claims mentioned in the Lease and Option Agreement. We requested information on only five of these claims as Mrs. McDougal's letter of January 2, 1953 to Mr. Noon shows that she could find no record of the May Claim. As the claim map submitted by Mr. Noon showed the Eagle Nest Claim to be renamed or re-staked the Salamander, information on this claim was requested. We also requested recording data on the Gopher-Relocation claim which is shown on the Annual Representation of Mining Claims for 1952. We did not request recording data on the Sunol shown on the Annual Representation of Mining Claims for 1952 because Mr. Noon's letter of December 31, 1952 states that this claim is patented. The requested recording data is contained in H. E. McDougal's letter of January 9 to Mr. Jim Quinlan.

"2. The following statement appears in the Lease and Option, Exhibit A, concerning these unpatented claims: "Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims." Obviously, no exploration project contract can include any land in which the lessor does not have a sufficient interest for the purpose of the contract. It is noted in the letter of December 12 that these claims are shown only in their approximate locations."

Mr. Noon's letter of December 31, 1952 states the above quoted sentence means that: "the owners of the patented claims did not guarantee title to the locations advising that the Queen Mining Syndicate, as lessees, would have to do the work on the locations if they desired to hold same." Mr. Noon further states: "This work has been done each year and the "Gopher-relocation" covers the described property in the paragraph in the contract." It is believed that the legal division will have to determine if Mr. Noon's interpretation of the sentence is valid.

"3. The map does not show the present workings nor the proposed work on a claim map. There is a dashed line 2,000 feet

long on the map; however, the proposed work is only 550 feet long."

The enclosed map should clarify this point.

"4. The location of the underground work on a map accompanying the application, entitled "Assay Plan North Portion Main Tunnel Level Sunrise Mine," is shown in relation to a system of co-ordinates. There is, however, such a great discrepancy between the location of the present workings by co-ordinates in these two maps that they cannot be reconciled."

The map entitled "Assay Plan North Portion Main Tunnel Level Sunrise Mine" was prepared by the Field Team. The co-ordinates shown on this map are the same as those used in Preston and Reynolds' engineering and geology report on the Sunrise mine, a copy of which was submitted with the application.

The map accompanying Mr. Kiilsgaard's letter of December 12, 1952 was taken from U. S. Bureau of Mines RI 4689, Investigation of the Sunrise Copper-Gold Mine, Granite County, Montana. The unpatented claims were added to this map by Mr. Kiilsgaard. The co-ordinates used on this map were set up by the U. S. Bureau of Mines and are different than those used by Preston and Reynolds.

At your suggestion a new map is submitted showing the claims, underground workings, and proposed exploration. This claim map was obtained from Mr. Noon, and the workings and proposed exploration added by this office. It will be noted there is a slight discrepancy in the location of the patented claims shown on this map and the map submitted with Mr. Kiilsgaard's letter of December 12, 1952. However, it is believed that this new map is probably more accurate; at any rate, it is the only map we know of that more or less accurately shows the location of both the patented and unpatented claims.

Sincerely yours

For: James J. Quinlan
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures (as listed above)
cc: USBM (2)
Quinlan

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

No. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

January 12, 1953

Mr. F. E. Johnson, Chairman
Operating Committee, DMA
Dept. of Interior
Washington 25, D. C.

Re: Docket No. DMA-393X (Copper)
W. A. Noon (Sunrise Mine)
Granite County, Montana

Dear Mr. Johnson:

This is in reply to your letter of December 30, 1952 wherein clarification of certain points with regards to the subject application is requested. These same points were posed by Mr. Schmidt of the legal division during a telephone conversation with Mr. A. E. Holcrenbern December 31, 1952.

Mr. W. A. Noon was contacted by telephone December 31, 1952 and requested to submit the desired information. Enclosed are two letters from Mr. Noon, a letter to Mr. Noon, and a letter to Mr. Quinlan from Mrs. M. E. McDougal, County Clerk and Recorder for Granite County, Montana, photostatic copies of Annual Representation of Mining Claims for 1951 and 1952, and a claim map on which is shown the important mine workings and proposed exploration. Most of the points requiring clarification are covered by these documents; however, each point is covered in detail below.

"1. There is no descriptive data as to the six unpatented claims, such as the book and page numbers where descriptions are recorded."

Mr. Noon was asked to provide the book and page numbers of the six unpatented claims. However, he provided us with the letter from the County Clerk showing when four of the claims were located and recorded. Mr. Noon's letter of January 3, 1953 states that they believe the May and Marie Claims are one and the same. Mr. Noon's letter of December 31, 1952 states that the Eagle Nest (Salamander) claim is of no value to the Queen Mining Syndicate as it is too far east and out of the mine zone. Mr. Noon also has

provided us with a copy of the Annual Representation of Mining Claims.

We called the County Clerk of Granite County, Montana requesting that she furnish us with recording data as to book and page number on five of the six claims mentioned in the Lease and Option Agreement. We requested information on only five of these claims as Mr. Moon's letter of January 2, 1953 to Mr. Moon shows that she could find no record of the May Claim. As the claim map submitted by Mr. Moon showed the Eagle Nest Claim to be renamed or re-staked the Salamander, information on this claim was requested. We also requested recording data on the Co-lor-Relocation claim which is shown on the Annual Representation of Mining Claims for 1952. We did not request recording data on the Dahol shown on the Annual Representation of Mining Claims for 1952 because Mr. Moon's letter of December 31, 1952 states that this claim is patented. The requested recording data is contained in R. J. McDonald's letter of January 9 to Mr. Jim Quinlan.

"2. The following statement appears in the Lease and Option, Exhibit A, concerning these unpatented claims: "Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims." Obviously, no exploration project contract can include any land in which the lessor does not have a sufficient interest for the purpose of the contract. It is noted in the letter of December 12 that these claims are shown only in their approximate locations."

Mr. Moon's letter of December 31, 1952 states the above quoted sentence means that: "the owners of the patented claims did not guarantee title to the locations advising that the Queen Mining Syndicate, as lessees, would have to do the work on the locations if they desired to hold same." Mr. Moon further states: "This work has been done each year and the "Co-lor-relocation" covers the described property in the paragraph in the contract." It is believed that the legal division will have to determine if Mr. Moon's interpretation of the sentence is valid.

"3. The map does not show the present workings nor the proposed work on a claim map. There is a dashed line 2,000 foot

long on the map; however, the proposed work is only 550 feet long."

The enclosed map should clarify this point.

"4. The location of the underground work on a map accompanying the application, entitled "Assay Plan North Portion Main Tunnel Level Sunrise Mine," is shown in relation to a system of co-ordinates. There is, however, such a great discrepancy between the location of the present workings by co-ordinates in these two maps that they cannot be reconciled."

The map entitled "Assay Plan North Portion Main Tunnel Level Sunrise Mine" was prepared by the Field Team. The co-ordinates shown on this map are the same as those used in Preston and Reynolds' engineering and geology report on the Sunrise mine, a copy of which was submitted with the application.

The map accompanying Mr. Hillegaard's letter of December 12, 1952 was taken from U. S. Bureau of Mines MI 4639, Investigation of the Sunrise Copper-Gold Mine, Granite County, Montana. The unpatented claims were added to this map by Mr. Hillegaard. The co-ordinates used on this map were set up by the U. S. Bureau of Mines and are different than those used by Preston and Reynolds.

At your suggestion a new map is submitted showing the claims, underground workings, and proposed exploration. This claim map was obtained from Mr. Moon, and the workings and proposed exploration added by this office. It will be noted there is a slight discrepancy in the location of the patented claims shown on this map and the map submitted with Mr. Hillegaard's letter of December 12, 1952. However, it is believed that this new map is probably more accurate; at any rate, it is the only map we know of that more or less accurately shows the location of both the patented and unpatented claims.

Sincerely yours

James J. Quinlan
For: A. E. Weissenborn
Executive Officer, DMM
Field Team, Region II

Enclosures (as listed above)
cc: UMM (2)
Quinlan

1/13/53 jm

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1953

January 2, 1953

Memorandum

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

From: J. J. Quinlan, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA-393 (Copper), Queen Mining Syndicate, Sunrise Mine, Granite County, Montana.

I called Mr. W. A. Noon December 31, 1952 in reference to questions posed by Mr. Schmidt during your telephone conversation December 24, 1952.

Mr. Noon advised that he will submit photostatic copies of the unpatented claim location notices as well as the requested recording data. A claim map showing the location of the unpatented claims with reference to the patented claims will also be submitted.

Mr. Noon will furnish a statement as to the meaning of the following quotation from the lease and option agreement. "Also such titles or rights as the first parties may have without asserting any rights to the following unpatented lode claims."

JJQ

J. J. Quinlan
Geologist

Dist:
Orig. & 3-DMEA
USBM (2)
Docket
Quinlan

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Sp. 157 Howard Street
Spokane 8, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1953

January 2, 1953

Memorandum

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

From: J. J. Quinlan, Geologist, U. S. Geological Survey

Subject: Docket No. [illegible]-393 (Copper), Green Mountain Syndicate, Sunset Mine, Granite County, Montana.

I called Mr. W. A. Ross December 31, 1952 in reference to questions raised by Mr. Kendall during your telephone conversation December 24, 1952.

Mr. Ross advised that he will submit photostatic copies of the unpatented claim location notices on file in the recorded records, Deer Lodge. A claim map showing the location of the unpatented claims with reference to the patented claims will also be submitted.

Mr. Ross will furnish a statement as to the records of the following questions from the Ross and other accounts. "Also such office or rights as the first parties may have without asserting any rights to the following unpatented lode claims."

J. J. Quinlan
Geologist

Enc:
(2) L. S. [illegible]
[illegible] (2)
Docket
Quinlan

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

[illegible]
[illegible]

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1953

January [illegible], 1953

Memorandum

To: A. [illegible], [illegible], [illegible] Field Team, Region II

From: J. J. [illegible], Geologist, U. S. Geological Survey

Subject: Docket No. DMA-3[illegible] (Copper), [illegible], [illegible] Mine, [illegible] County, [illegible].

I called Mr. [illegible] December [illegible], 1952 in reference to questions raised by Mr. [illegible] during [illegible] telephone conversation December [illegible], 1952.

Mr. [illegible] advised that he will submit photostatic copies of the unpatented claim location notices [illegible] to the required recording time. A claim map showing the location of the unpatented claims with reference to the patented claims will also be submitted.

Mr. [illegible] as to the [illegible] of the following quotation from the lease and option agreement. "[illegible] such titles or rights as the [illegible] may have [illegible] any rights to the following unpatented lode claims."

J. J. [illegible]
Geologist

Dist.:
Orig. [illegible]
[illegible] (2)
[illegible]
[illegible]

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 12 1953

[illegible]

[illegible]

January 2, 1953

[illegible]

To: A. [illegible], Director, [illegible], Region [illegible]

From: [illegible], Geologist, [illegible]

Subject: Notice No. [illegible]-302 (Copper), [illegible], [illegible], [illegible], [illegible], Arizona.

Replied to [illegible] December 31, 1952 in reference to [illegible] [illegible] [illegible] [illegible] [illegible] January 2, 1953.

It was advised that in this minor photostatic copies of the unpatented claim location notices as well as the reported location data. A claim map showing the location of the unpatented claims with reference to the patented claims will also be submitted.

It was also desired a statement as to the nature of the following question: Are the lands not open to the filing of the latter as rights on the land portion by the latest amended by rights to the [illegible] unpatented [illegible] claim?

[illegible]
Geologist

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Spokane, Washington
January 7, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 - 1953

Mr. W. A. Noon, Operating Manager
Queen Mining Syndicate
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine, Granite County, Montana

Dear Mr. Noon:

Reference is made to your letter of December 27, 1952, in which you refer to "Owner's Consent to Lien" forms previously submitted in connection with the subject application.

Our files indicate that the only document of this type submitted was a mortgagor's Subordination Agreement which was inadequate; you were informed of this by the Washington, D. C. office of the Defense Minerals Exploration Administration. Copies of correspondence from that office in our files do not show that an "Owner's Consent to Lien" was ever received.

In any event, the forms previously used are out of date and are no longer useful. The forms mailed to you with my letter of December 24 were sent to us by the Washington, D. C. office with instructions to have them completed. When these forms are returned to Washington, processing of a contract can be continued.

Regarding your questions concerning "this new project", it is evident that some confusion must exist as a result of your various telephone conversations with Field Team representatives. The only project of which this office is cognizant is that proposed by the Queen Mining Syndicate to explore for copper and tungsten, ruled by the Chief of the Rare and Miscellaneous Metals Division of DMEA to be on the 50-50 sharing basis for copper because it is the predominant metal on which the proposal is based.

The Field Team has no way of learning the details of a contract prior to the time it is sent to the Operator for signature as all contracts are prepared in Washington, D.C. For your information, however, we have recommended that a contract, if approved, should be on the short form basis at an agreed estimated cost of $35 per foot for drifting. The details of this estimate, of which you have a copy, were discussed with you by H. T. Reno of this office. In our opinion, $35 per foot is a realistic estimate, and a contract providing for reimbursement on this basis would be fair and equitable.

It is our impression from your letter of October 23, 1952, that the members of the Queen Mining Syndicate agreed that $35 per foot is a fair rate. If there has been some misunderstanding causing the members of the Queen Mining Syndicate to disagree with this estimated unit cost, please inform us immediately so that proper action can be taken.

The new short form contract provides for Government assistance on the basis of the agreed estimated cost for work actually performed. In such a contract the agreed estimated unit cost includes all costs incurred in performing the work, including the items mentioned in your letter of rail, timber and equipment furnished. No separate allowances are made. The Government reimburses the Operator only for units of work actually accomplished at, in the case of a copper project, one-half the agreed estimated unit cost. In other words, if a contract for $35 per foot is approved, the Government would contribute $17.50 for each foot of drift advanced. No payments would be made prior to the start of drifting.

Regarding your question concerning ore removed during the contract operations, it is permissible to ship such ore but, if a discovery is certified as a result of the project, all ore removed from the area covered by the contract after date of contract is subject to royalty repayment. This royalty may be paid at the time the ore is shipped, or in lieu of that, an accurate account of shipments can be maintained and the royalties paid after the discovery is certified. If no discovery is made, repayment is not required. In anticipation of a certification of discovery, DMEA operators generally elect to have the royalties deductions made from each shipment to the smelter.

A pamphlet further explaining the Defense Minerals Exploration program is enclosed for your information.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey
157 South Howard Street

M. E. Volin, Member
U. S. Bureau of Mines
1201 N. Division St.

Enclosure

cc: DMEA, Wash. (2)
USGS (2)
DMEA
M/D
DF

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 1953

C
O
P
Y

W. A. Noon

Drummond, Montana
December 27, 1952

Mr. M. E. Volin
DMEA Field Team, Region II
1201 N. Division St.
Spokane 2, Washington

DMA 393X (copper)
Sunrise Mine
Granite County, Mont.

Dear Mr. Volin:

We are in receipt of your letter to the Queen Mining Syndicate (W. A. Noon) of December 24th, in reference to the above Docket No. and in which you enclose six copies of "Owner's Consent to Lien".

As I remember it you already have in your file the Owner's Consent to Lien on another form. Now, if we have to send this form back east for signatures of the Murray family, believe we should have more detail to submit with the request, if the driving of the main tunnel ahead 500 ft. and straightening same is to be regarded as the primary step in developing this mine.

Does the $35.00 per ft. allowance on your contract arrangement include any air equipment furnished, additional rails for the tunnel work, timbers if necessary and any other equipment to be furnished for the work? How about ore taken from the drift while tunnel is being advanced?

Since most of the plans for this new project have been handled by long distance telephone, a detailed statement of your proposal will be of help to us in presenting the papers to the owners for signature.

Will appreciate your assistance in this regard.

Yours very truly,

W. A. Noon /s/

W. A. Noon
For Queen Mining Syndicate

WAN:m

Dec. 27, 1952

LIST OF PARTNERS MAKING UP THE QUEEN MINING SYNDICATE.

Mr. Jas. H. Mellen (Pres.) Drummond, Montana

Mr. Geo. D. Lyon, 1639 Helena Ave., Missoula, Mont.

Mr. William Howell, Drummond, Montana

Mr. W. J. Noon, Elk City, Idaho

(Wm. D. McLure's interest was purchased by the other partners.)

(W. A. Noon is not a partner. Is acting as Operating Manager.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON, D.C.~~

Spokane, Washington
January 7, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 - 1953

Mr. W. A. Noon, Operating Manager
Queen Mining Syndicate
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine, Granite County, Montana

Dear Mr. Noon:

Reference is made to your letter of December 27, 1952, in which you refer to "Owner's Consent to Lien" forms previously submitted in connection with the subject application.

Our files indicate that the only document of this type submitted was a mortgagor's Subordination Agreement which was inadequate; you were informed of this by the Washington, D. C. office of the Defense Minerals Exploration Administration. Copies of correspondence from that office in our files do not show that an "Owner's Consent to Lien" was ever received.

In any event, the forms previously used are out of date and are no longer useful. The forms mailed to you with my letter of December 24 were sent to us by the Washington, D. C. office with instructions to have them completed. When these forms are returned to Washington, processing of a contract can be continued.

Regarding your questions concerning "this new project", it is evident that some confusion must exist as a result of your various telephone conversations with Field Team representatives. The only project of which this office is cognizant is that proposed by the Queen Mining Syndicate to explore for copper and tungsten, ruled by the Chief of the Rare and Miscellaneous Metals Division of DMEA to be on the 50-50 sharing basis for copper because it is the predominant metal on which the proposal is based.

The Field Team has no way of learning the details of a contract prior to the time it is sent to the Operator for signature as all contracts are prepared in Washington, D.C. For your information, however, we have recommended that a contract, if approved, should be on the short form basis at an agreed estimated cost of $35 per foot for drifting. The details of this estimate, of which you have a copy, were discussed with you by H. T. Reno of this office. In our opinion, $35 per foot is a realistic estimate, and a contract providing for reimbursement on this basis would be fair and equitable.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Spokane, Washington
January 7, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 - 1953

Mr. W. A. Noon, Operating Manager
Queen Mining Syndicate
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine, Granite County, Montana

Dear Mr. Noon:

Reference is made to your letter of December 27, 1952, in which you refer to "Owner's Consent to Lien" forms previously submitted in connection with the subject application.

Our files indicate that the only document of this type submitted was a mortgagor's Subordination Agreement which was inadequate; you were informed of this by the Washington, D. C. office of the Defense Minerals Exploration Administration. Copies of correspondence from that office in our files do not show that an "Owner's Consent to Lien" was ever received.

In any event, the forms previously used are out of date and are no longer useful. The forms mailed to you with my letter of December 24 were sent to us by the Washington, D. C. office with instructions to have them completed. When these forms are returned to Washington, processing of a contract can be continued.

Regarding your questions concerning "this new project", it is evident that some confusion must exist as a result of your various telephone conversations with Field Team representatives. The only project of which this office is cognizant is that proposed by the Queen Mining Syndicate to explore for copper and tungsten, ruled by the Chief of the Rare and Miscellaneous Metals Division of DMEA to be on the 50-50 sharing basis for copper because it is the predominant metal on which the proposal is based.

The Field Team has no way of learning the details of a contract prior to the time it is sent to the Operator for signature as all contracts are prepared in Washington, D.C. For your information, however, we have recommended that a contract, if approved, should be on the short form basis at an agreed estimated cost of $35 per foot for drifting. The details of this estimate, of which you have a copy, were discussed with you by H. T. Reno of this office. In our opinion, $35 per foot is a realistic estimate, and a contract providing for reimbursement on this basis would be fair and equitable.

It is our impression from your letter of October 23, 1952, that the members of the Queen Mining Syndicate agreed that $35 per foot is a fair rate. If there has been some misunderstanding causing the members of the Queen Mining Syndicate to disagree with this estimated unit cost, please inform us immediately so that proper action can be taken.

The new short form contract provides for Government assistance on the basis of the agreed estimated cost for work actually performed. In such a contract the agreed estimated unit cost includes all costs incurred in performing the work, including the items mentioned in your letter of rail, timber and equipment furnished. No separate allowances are made. The Government reimburses the Operator only for units of work actually accomplished at, in the case of a copper project, one-half the agreed estimated unit cost. In other words, if a contract for $35 per foot is approved, the Government would contribute $17.50 for each foot of drift advanced. No payments would be made prior to the start of drifting.

Regarding your question concerning ore removed during the contract operations, it is permissible to ship such ore but, if a discovery is certified as a result of the project, all ore removed from the area covered by the contract after date of contract is subject to royalty repayment. This royalty may be paid at the time the ore is shipped, or in lieu of that, an accurate account of shipments can be maintained and the royalties paid after the discovery is certified. If no discovery is made, repayment is not required. In anticipation of a certification of discovery, DMEA operators generally elect to have the royalties deductions made from each shipment to the smelter.

A pamphlet further explaining the Defense Minerals Exploration program is enclosed for your information.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey
157 South Howard Street

M. E. Volin, Member
U. S. Bureau of Mines
1201 N. Division St.

Enclosure

cc: DMEA, Wash. (2)
USGS (2)
DMEA
M/D
DF

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 1953

C
O
P
Y

W. A. Noon

Drummond, Montana
December 27, 1952

Mr. M. E. Volin
DMEA Field Team, Region II
1201 N. Division St.
Spokane 2, Washington

DMA 393X (copper)
Sunrise Mine
Granite County, Mont.

Dear Mr. Volin:

We are in receipt of your letter to the Queen Mining Syndicate (W. A. Noon) of December 24th, in reference to the above Docket No. and in which you enclose six copies of "Owner's Consent to Lien".

As I remember it you already have in your file the Owner's Consent to Lien on another form. Now, if we have to send this form back east for signatures of the Murray family, believe we should have more detail to submit with the request, if the driving of the main tunnel ahead 500 ft. and straightening same is to be regarded as the primary step in developing this mine.

Does the $35.00 per ft. allowance on your contract arrangement include any air equipment furnished, additional rails for the tunnel work, timbers if necessary and any other equipment to be furnished for the work? How about ore taken from the drift while tunnel is being advanced?

Since most of the plans for this new project have been handled by long distance telephone, a detailed statement of your proposal will be of help to us in presenting the papers to the owners for signature.

Will appreciate your assistance in this regard.

Yours very truly,

W. A. Noon /s/

W. A. Noon
For Queen Mining Syndicate

WAN:m

Dec. 27, 1952

LIST OF PARTNERS MAKING UP THE QUEEN MINING SYNDICATE.

Mr. Jas. H. Mellen (Pres.) Drummond, Montana

Mr. Geo. D. Lyon, 1639 Helena Ave., Missoula, Mont.

Mr. William Howell, Drummond, Montana

Mr. W. J. Noon, Elk City, Idaho

(Wm. D. McLure's interest was purchased by the other partners.)

(W. A. Noon is not a partner. Is acting as Operating Manager.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~

Spokane, Washington
January 7, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN. 1 1953

Mr. W. A. Noon, Operating Manager
Queen Mining Syndicate
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine, Granite County, Montana

Dear Mr. Noon:

Reference is made to your letter of December 27, 1952, in which you refer to "Owner's Consent to Lien" forms previously submitted in connection with the subject application.

Our files indicate that the only document of this type submitted was a mortgagor's Subordination Agreement which was inadequate; you were informed of this by the Washington, D. C. office of the Defense Minerals Exploration Administration. Copies of correspondence from that office in our files do not show that an "Owner's Consent to Lien" was ever received.

In any event, the forms previously used are out of date and are no longer useful. The forms mailed to you with my letter of December 24 were sent to us by the Washington, D. C. office with instructions to have them completed. When these forms are returned to Washington, processing of a contract can be continued.

Regarding your questions concerning "this new project", it is evident that some confusion must exist as a result of your various telephone conversations with Field Team representatives. The only project of which this office is cognizant is that proposed by the Queen Mining Syndicate to explore for copper and tungsten, ruled by the Chief of the Rare and Miscellaneous Metals Division of DMEA to be on the 50-50 sharing basis for copper because it is the predominant metal on which the proposal is based.

The Field Team has no way of learning the details of a contract prior to the time it is sent to the Operator for signature as all contracts are prepared in Washington, D.C. For your information, however, we have recommended that a contract, if approved, should be on the short form basis at an agreed estimated cost of $35 per foot for drifting. The details of this estimate, of which you have a copy, were discussed with you by H. T. Reno of this office. In our opinion, $35 per foot is a realistic estimate, and a contract providing for reimbursement on this basis would be fair and equitable.

Dec. 27, 1952

LIST OF PARTNERS MAKING UP THE QUEEN MINING SYNDICATE.

Mr. Jas. H. Mellen (Pres.) Drummond, Montana

Mr. Geo. D. Lyon, 1639 Helena Ave., Missoula, Mont.

Mr. William Howell, Drummond, Montana

Mr. W. J. Noon, Elk City, Idaho

(Wm. D. McLure's interest was purchased by the other partners.)

(W. A. Noon is not a partner. Is acting as Operating Manager.)

12/24/52

The substance of this letter was foned to Weissenborn today.

700 FILE COPY
SURNAME:

Schmidt
Ellis
Gaffney
Hoffman
Matthewson

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

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

DEC 30 1952

Re: Docket No. DMA-393X (Copper)
W. A. Noon (Sunrise Mine)
Granite County, Montana

Dear Mr. Weissenborn:

This acknowledges receipt of a letter by Mr. Kiilsgaard of December 12, 1952, listing the claims involved in the subject application. Six copies of a claim map were enclosed. Before any further progress can be made with this application the following points require clarification:

1. There is no descriptive data as to the six unpatented claims, such as the book and page numbers where descriptions are recorded.

2. The following statement appears in the Lease and Option, Exhibit A, concerning these unpatented claims: "Also such title or right as the first parties may have, without asserting any right, to the following unpatented lode claims." Obviously, no exploration project contract can include any land in which the lessor does not have a sufficient interest for the purpose of the contract. It is noted in the letter of December 12 that these claims are shown only in their approximate locations.

3. The map does not show the present workings nor the proposed work on a claim map. There is a dashed line 2,000 feet long on the map; however, the proposed work is only 550 feet long.

4. The location of the underground work on a map accompanying the application, entitled "Assay Plan North Portion Main Tunnel Level Sunrise Mine", is shown in relation to a system of coordinates. There is, however, such a great discrepancy between the location of the present workings by coordinates in these two maps that they cannot be reconciled.

Because of the confusion involved in the foregoing, it is suggested that a claim map showing all the claims accurately, and the underground work, and the proposed work, be prepared and submitted to us, so that it will be possible to select the area to be included in the contract.

Sincerely yours,

Frank E. Johnson

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

FSSchmidt/gla 12-22-52
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. A. R. Kinkel, Rm. 4234 GSA
C. H. Johnson, Rm. 3621
Mr. Ellis
Mr. Schmidt
DMEA Field Team, Region II

12-30-52

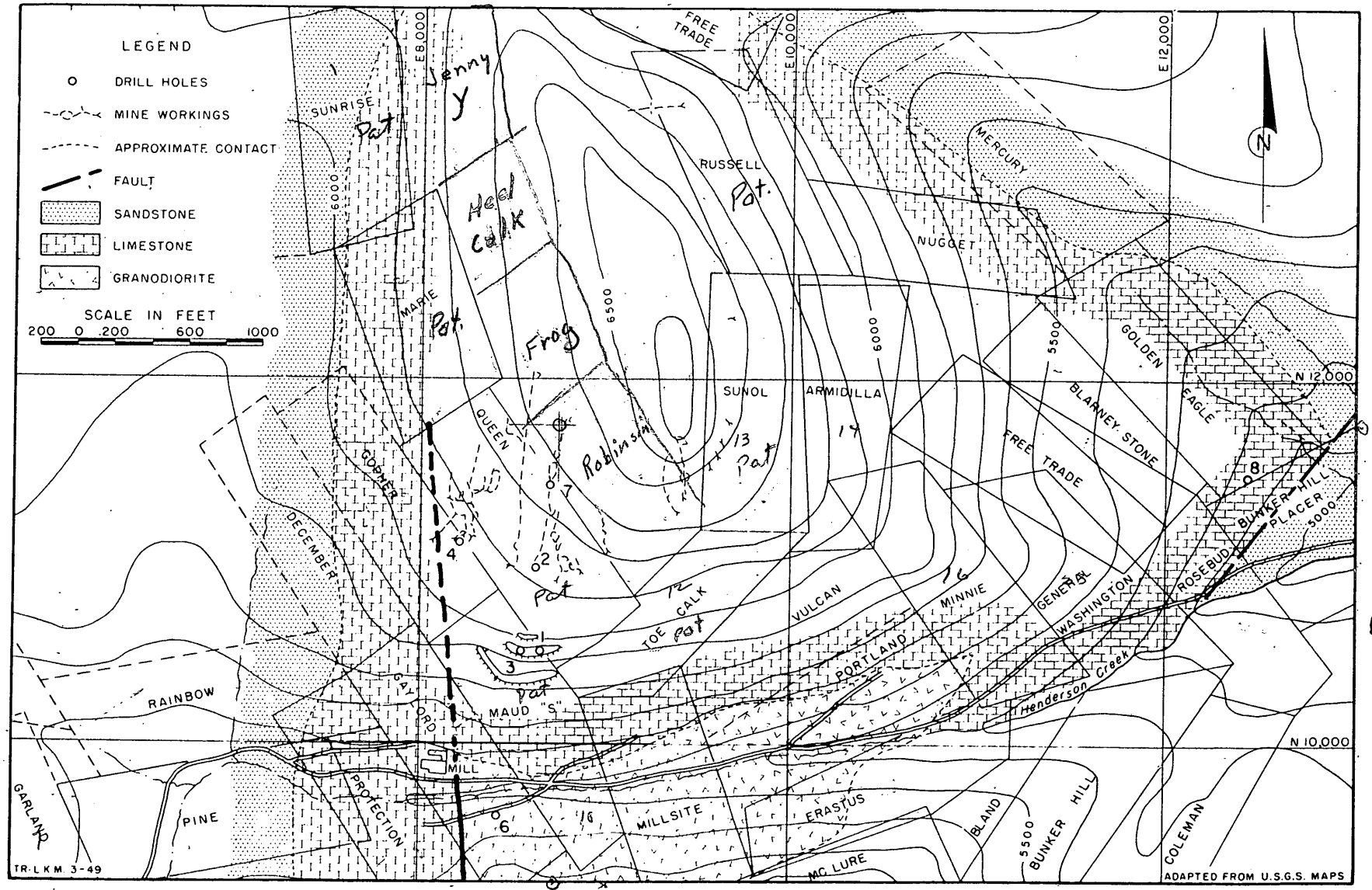



FIG. 2. TOPOGRAPHY, GEOLOGY, PROPERTY, AND DRILL HOLES, SUNRISE MINE, GRANITE COUNTY, MONT.

87.50 9.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1953

December 24, 1952

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

Enclosed are six copies of Owner's Consent to Lien for the subject application which are to be dated and signed by all the owners, or their agents, and returned to this office for forwarding to the Washington, D. C. office of the Defense Minerals Exploration Administration.

In addition, that office has requested that we obtain the names of all the partners making up the Queen Mining Syndicate as all of the names must be shown in the contract.

Upon receipt of this information and the above mentioned papers, processing of an exploration project can proceed.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team, Region II

Enclosures

cc: DMEA Wash., - 2
USGS - 2
DMEA
D/F

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
1952

December 24, 1952

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Subject: Docket No. DMA 393X (copper)
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

Enclosed are six copies of Owner's Consent to Lien for the subject application which are to be dated and signed by all the owners, or their agents, and returned to this office for forwarding to the Washington, D. C. office of the Defense Minerals Exploration Administration.

In addition, that office has requested that we obtain the names of all the partners making up the Queen Mining Syndicate as all of the names must be shown in the contract.

Upon receipt of this information and the above mentioned papers, processing of an exploration project can proceed.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team, Region II

Enclosures

cc: DMEA Wash., - 2
USGS - 2
DMEA
D/F

700 FILE COPY
SURNAME:

Schmidt
Ellis
Kinkel

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

Mr. A. E. Weissenborn
Executive Officer, Region II DEC 17 1952
DMEA Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMA-393X (Copper)
E. A. Moon
Sunrise Mine
Granite County, Montana

Dear Mr. Weissenborn:

Enclosed are six copies of Owner's Consent to Lien for the subject application which are to be dated and signed by all the owners, or their agents, and returned to this office. As the Queen Mining Syndicate appears to be a partnership, it will be necessary for us to have the names of all the partners.

It is understood from a telephone conversation with Mr. Kiilsgaard on December 12, that the map of the mining claims involved in this contract showing the present and proposed workings is being prepared for this office.

As soon as the above-mentioned papers are received the contract can be completed along the lines recommended by your office.

Sincerely yours,

SIGNED

12-17-52

(JVG)

Chairman, Operating Committee

Enclosures

APPROVED:

(JVG)

Member, Bureau of Mines

(JVG)

Member, Geological Survey

FSSchmidt/gla 12-15-52
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. C.H.Johnson, Rm. 3621
A.R.Kinkel, Rm. 4234 GSA
Mr. Ellis
Mr. Schmidt
DMEA Field Team, Region II

12/16/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 16 1952

December 12, 1952

Mr. F. A. Schmidt
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Queen Mining Syndicate
Granite County, Montana
Docket DMEA 393X

Dear Mr. Schmidt:

Enclosed are six copies of the geology, topography, and property map of the Sunrise Mine, Granite County, Montana. These are being forwarded to you as per our telephone conversation of December 12, 1952.

In a telephone call to Mr. W. A. Noon, I was informed of the following information concerning mining claims:

Patented Mining Claims

Marie
Queen
Toe Calk
Sunol
Russell
Sunrise

Unpatented Mining Claims

Robinson
Heel Calk
Frog
Jennie Y

On one copy of the map I have marked the six patented mining claims that might be affected by the contract. I have also marked the four unpatented mining claims in their approximate location as given me by Mr. Noon.

The Gopher and December unpatented claims are located on the enclosed map. These claims cover the 7.3 acres of homestead land mentioned in your telephone call.

It is recommended that the above listed six patented claims, the four unpatented claims, and the Gopher claim be included as claims which might be involved in the proposed contract.

Mr. Noon states that the owners of the property will willingly sign the Owner's Consent to Lien agreement as mentioned in your telephone conversation. He also states that the Queen Mining Syndicate is comprised of a partnership of five people. We will send you more information on this matter upon receipt.

Sincerely yours,

Thor H. Kiilsgaard

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

Enclosure

cc: USBM (2)

DMA 393 X

Notes by Schmidt

The original application by Queen Mining Syndicate dated 2/26/51 Sunrise Mine, Granite County, Montana for $60,000 for copper and tungsten on 75% participation. Work to be

Main drift to be driven 500 feet on the vein. Drift one west ahead 150 feet If no good then drive three west. Plan is to block out enough ore to warrant 150 ton mill Raise 210 feet from one west to main tunnel

Review of this application 6/27/51 by Gowen and ~~Holdrens~~ Holderer recommends that contradt be written on 75% basis

Another review of application by Gentry dated 2/14/52 lists points to be considered and objects to 75% participation because of metalurgical troubles saving tungsten

Memo 12/11/51 by Bardill on metalurgy of tungsten claims "this can hardly be considered a tungsten ore."

Undated draft of contract by Keller for $60,000 on 50% basis but 880 ft of drifti g and 210 ft of raising.

Oct 15, 1952

Field Team report- 50%. No reason for giving credit for tungsten in the 50% participation. also Noon must take up proposed contract with his directors. Now reduced to $21,450 on 50% basis for drifting 550 ft and straightening main tunnel-no ra ising Oct 31. Weissenborn sends report on Sunrise Mine by Rosenbloom and Quinlan 7/29/52 cost estimates ad specimen contract.

Nov 25/52 Newcomb Commodity committee concurs with field teams recommendation for approval

Dec. 1,1952 Chas Johnson "application should be approved"

12/5/52

Call Weissenborn and ask for map of claims. There is not a single map showing the location of any of the claims and the relative position of the present workings on the claims and the proposed work.

There may be some further trouble about the Owners Consent to Lien but at this time do not have legal opinion on that but they can be getting busy on the map in the meantime.

12/17. Owners consent to Lien (6 copies) filled out by Legal (Rubin) sent to Weissenborn.

12/15 - Recd 6 copies of a very unsatisfactory claim map.

12/22 Writing Weissenborn for proper map.

Conference with Bill Broadgate 12/4/52

Fone conversation. He was asking for Senator Murray about the status of the contract but said he was not rushing us. I explained that I had just started on the case and thought that since the field team and the commodity men had reported that we could bring the thing to a head in a few days and that incidentally from what I had seen that I thought a contract would be written. ad that he should fone me again in a week. The reports all recommend the project so it was apparent that we would go ahead with the project.

He understood that it was a 50% participation and that the work consisted only of 550 ft of drifting and straightening out the working tunnel.

12/2/52 gla

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

December 1, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 2 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: Docket DMA 393 (Copper) W. A. Noon, Sunrise Mine, Granite County, Montana

I have reviewed the reports submitted to the Operating Committee by Region II field team on October 31. The proposed drifting project appears to be justified by the possibilities of developing ore reserves and the cost estimates look reasonable.

The ore is close to the marginal line but possibly something better may be found and in any event the ore probably will be economic in the not too distant future, if not immediately. I am of the opinion the application should be approved.

I believe it ~~not~~ would be a good thing to add to Item 2 of "Description of Work" the phrase "...and sample all copper and tungsten-bearing portions of the drift at suitable regular intervals to delimit oreshoots."

The file furnished by Mr. Schmidt November 26 is returned herewith.

C. H. Johnson
C. H. Johnson

Copy to - Mr. Kinkel - Room 4232
Minerals Division
Base Metals Branch
Mr. Johnson
Files

700 FILE COPY
SURNAME:

Schmidt

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

November 26, 1952

Memorandum

To: Mr. E. L. Newcomb, Geologist
Geological Survey

From: F. Sommer Schmidt, Mining Engineer
Rare and Misc. Metals Division

Subject: Docket No. DMA-393 (Copper)
W. A. Noon
Sunrise Mine
Granite County, Montana

In connection with comments prepared by you on November 25, 1952, on the DMEA Field Team, Region II, report dated October 31, 1952, in the above matter, and from a review of the material attached to the original report in our docket file, it is apparent that you were not furnished a complete set of the attachments for purposes of preparing your comments. Accordingly, herewith attached are copies of the following items, numbered to coincide with the items enumerated in the Field Team's letter to Mr. Frank E. Johnson, Chairman, Operating Committee, on October 31:

(2) A cost estimate report of the proposed exploration work by W. S. Anderson, U. S. Bureau of Mines.

(3) A copy of a specimen contract submitted for consideration.

(4) An ozalid print of a letter dated October 23, 1952, from Mr. W. A. Noon indicating agreement of the Queen Mining Syndicate to the proposed exploration program.

(5) A copy of a proposed map to be attached to copies of the contract.

If you desire to amend your comments dated November 25, we should like to be advised. Kindly return the attached material to this office, in any event.

F. Sommer Schmidt

cc to: Mr. C. H. Johnson
with attachments

GLAult/gla

11/25/52 gla

IN REPLY REFER TO:

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

November 25, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Recommendation for approval

Re: DMA-393
Sunrise Mine
Granite County, Montana
$21,450
Copper

The applicant requested Government assistance to explore the Sunrise mine for tungsten and copper. Because of the low tungsten content of the crude ore and the complex metallurgy involved in extracting the tungsten a 75-25 proposal was denied. It was believed that the property might qualify for assistance on a proposal based on exploration for copper.

The field team recommends that the applicant be granted a copper exploration contract. The proposed work involves extending the Main level drift 550 feet northward on the Sunrise vein.

Sampling by the field team near the north end of the Main level indicates that the grade of ore on the Sunrise vein ranges between 0.10 and 2.32% copper. The average width of the vein is about 3.3 feet. Sampling results and inspection of workings indicate that only 30-50% of the vein attains a grade of 2%. The orebodies are small and must be selectively mined.

Shipping records of sulfide ore produced from 1913-1947 show that the ore averaged about 2.4% copper. Car shipments in 1951 assayed about 2% copper. The grade of shipped ore is comparable to assays taken by the field team from the richer oreshoots.

The proposed exploration can be expected to find additional oreshoots of a grade at least comparable to the average grade of past production. I concur with the field team's recommendation for approval.

E. L. Newcomb
E. L. Newcomb
Geologist

FILE COPY
SURNAME:

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

Rare & Miscellaneous Metals Division, DMEA

November 6, 1952

Iron and Ferro-Alloy Division, DMEA

Transfer of docket
Docket No. DMA 393X - Copper
W. A. Moon
Sunrise Mine
Granite County, Montana

The subject application, after lengthy discussion with the Operator, has been determined to be a copper project. Because this application has been held in abeyance awaiting a decision regarding commodity classification for over a year, the docket is not now familiar to the staff of the Iron and Ferro-Alloy Division.

The subject docket, therefore, is herewith transmitted to the Rare and Miscellaneous Metals Division for further processing as a copper project.

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

Attachment

FARutledge:lm
11/6/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
G. C. Selfridge
F. A. Rutledge

STANDARD FORM NO. 64

11/7/52 gla 400

# Office Memorandum • UNITED STATES GOVERNMENT

TO : Rare & Miscellaneous Metals Division, DMEA DATE: November 6, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Transfer of docket
Docket No. DMA 393X - Copper
W. A. Noon
Sunrise Mine
Granite County, Montana

The subject application, after lengthy discussion with the Operator, has been determined to be a copper project. Because this application has been held in abeyance awaiting a decision regarding commodity classification for over a year, the docket is not now familiar to the staff of the Iron and Ferro-Alloy Division.

The subject docket, therefore, is herewith transmitted to the Rare and Miscellaneous Metals Division for further processing as a copper project.

G. C. Selfridge.

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

Attachment

11/7/52 glr

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

October 31, 1952

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

Re: Docket No. DMA-393X (Copper and Tungsten)
Sunrise Mine
Granite County, Montana

Dear Mr. Johnson:

Enclosed are the following:

(1) Four copies of a report on the Sunrise mine by J. J. Quinlan and E. H. Roseboom, U. S. Geological Survey.
(2) Four copies of a cost estimate report of the proposed exploration work by W. S. Anderson, U. S. Bureau of Mines.
(3) Two copies of a specimen contract submitted for consideration.
(4) Four ozalid prints of a letter dated October 23, 1952, from Mr. W. A. Noon indicating agreement of the Queen Mining Syndicate to the proposed exploration program.
(5) Six copies of a proposed map to be attached to copies of the contract.

In a letter to your office dated October 15, 1952, Mr. Weissenborn advised that submittal of field reports and docket data were being held at this office because the Queen Mining Syndicate had not officially indicated agreement to a proposed exploration program worked out by Mr. W. A. Noon and DMEA field representatives. Mr. Noon's letter of October 23, 1952, gives the Syndicate's approval to the program; consequently, all field data pertinent to the subject docket are being forwarded herewith.

The Field Team agrees that assay data from the Sunrise mine indicates it is of marginal grade and that the tungsten content is not high enough to consider it for a tungsten contract. It may, however, be considered as a marginal copper producer, and as such, is considered

worthy of some exploration. It is therefore recommended that the Queen Mining Syndicate be granted an exploration contract on the Sunrise mine to explore for copper mineralization, and that consideration be given the enclosed specimen contract.

By DMEA Field Team, Region II

A. E. Weissenborn

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

M. E. Volin

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

Enclosures as indicated

cc: USBM (2)
Quinlan

11/12/52

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

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

October 31, 1952

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

Re: Docket No. DMA-393X (Copper and Tungsten)
Sunrise Mine
Granite County, Montana

Dear Mr. Johnson:

Enclosed are the following:

(1) Four copies of a report on the Sunrise mine by J. J. Quinlan and E. H. Roseboom, U. S. Geological Survey.
(2) Four copies of a cost estimate report of the proposed exploration work by W. S. Anderson, U. S. Bureau of Mines.
(3) Two copies of a specimen contract submitted for consideration.
(4) Four ozalid prints of a letter dated October 23, 1952, from Mr. W. A. Moon indicating agreement of the Queen Mining Syndicate to the proposed exploration program.
(5) Six copies of a proposed map to be attached to copies of the contract.

In a letter to your office dated October 15, 1952, Mr. Weissenborn advised that submittal of field reports and docket data were being held at this office because the Queen Mining Syndicate had not officially indicated agreement to a proposed exploration program worked out by Mr. W. A. Moon and DMEA field representatives. Mr. Moon's letter of October 23, 1952, gives the Syndicate's approval to the program; consequently, all field data pertinent to the subject docket are being forwarded herewith.

The Field Team agrees that assay data from the Sunrise mine indicates it is of marginal grade and that the tungsten content is not high enough to consider it for a tungsten contract. It may, however, be considered as a marginal copper producer, and as such, is considered

Reviewed by
DMEA OPERATING COMMITTEE
11-10-52
(date)

worthy of some exploration. It is therefore recommended that the Queen Mining Syndicate be granted an exploration contract on the Sunrise mine to explore for copper mineralization, and that consideration be given the enclosed specimen contract.

By DMRA Field Team, Region II

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

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

Enclosures as indicated

cc: DMRA (2)
Quinlan

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

RECEIVED

July 29, 1952

Memorandum

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

From: J. J. Quinlan and E. H. Roseboom, Geologists, U.S.G.S.

Subject: Docket No. DMA-393X (Tungsten-Copper), Sunrise Mine, Granite County, Montana

This memorandum concerns a field examination of the Sunrise mine in sec. 35, T. 9 N., R. 14 W., M.P.M., Granite County, Montana. This examination was made July 5, 1952, with the express purpose of evaluating the tungsten possibilities of the property with particular reference to the geologic questions raised in the DMEA's "Review of Application for Exploration Assistance" on the subject property dated February 14, 1952.

Because of the low tungsten content of the crude ore and the difficult metallurgy involved in recovering scheelite from the Sunrise ores, it is recommended that if any exploration aid is granted the Sunrise mine, it should be based upon exploration for copper, with the Government participation at 50 percent of the estimated cost.

Except for a small amount of stoping, no further exploration or development work has been done since Preston and Reynolds mapped the mine in 1947. The Main tunnel has not been extended since that date. The maps of Preston and Reynolds were found to be accurate, and aside from a few minor modifications, seem to be quite adequate. Any further remapping of the mine at this time would be needless repetition.

The distribution of scheelite in the Main tunnel and Russell working was studied with the aid of an ultra-violet lamp. Thirteen samples of the vein were cut in the north portion of the Main tunnel and one sample cut in the Russell workings.

Reviewed by
DMA OPERATING COMMITTEE
11-10-52
(Case)

In light of Mr. Moom's claim that "the Sunrise mine (north portion of Main tunnel) has just come into the tungsten ore shoot," the distribution of scheelite in the Main tunnel and connected stopes was carefully studied. Traces of scheelite were observed throughout the workings in "oxidized", "leached copper", and "sulphide" zones. The scheelite is very spotty and irregular in its distribution. Small pockets of relatively high-grade material (high grade when compared with the average vein material) are scattered at intervals of 10 to 30 feet throughout the vein. One of these pockets was sampled and assayed 0.68 percent $WO_3$. However, none of these pockets would contain more than a few pounds of ore. There did not appear to be any increase in size, scheelite content, or relative abundance of these small pockets in any particular portion of the workings examined. The accompanying assay map shows the results of the sampling along the north portion of the Main tunnel and confirms the conclusion arrived at from visual inspection.

The Russell workings were also examined with the ultra-violet lamp. These workings did not lamp as well as the Main tunnel workings; however, the same random distribution of scheelite was observed. One sample cut across the vein in the Russell winze assayed 0.03 percent $WO_3$.

A copy of the shipping records for 1951 accompanies this memorandum. There have been no further shipments. The tungsten content of these shipments bear out the sporadic distribution of the scheelite through the ore body.

The samples taken during this examination were assayed for copper and gold in addition to $WO_3$. The sampling indicates that the copper and gold content of the ores also fluctuates to a considerable degree. The copper content of the vein was found to range from 0.10 percent to 2.32 percent, and the gold values range from a trace to 0.22 ounces per ton. However, all recent car shipments assayed above 2 percent copper and 0.13 ounces of gold. Apparently only certain portions of the vein are of minable grade. This is borne out by the irregular shapes and distributions of the stopes. It is also interesting to note that the variations in the $WO_3$ content do not appear to be related to the variations in copper content. Thus, ore of high copper content may or may not show tungsten values.

In the U. S. Bureau of Mines report on the beneficiation of the Sunrise mine, copper-tungsten ore, Mr. F. H. Floyd states: "The tungsten metallurgy is questionable from the standpoint that sufficient value may not be present in the ore to pay for the additional expense of recovering it * * *". The ore sample used in the metallurgical test assayed 0.105 percent $WO_3$. The 1951 ore shipments averaged 0.049 percent $WO_3$. The weighted average of the

samples taken from the north portion of the Main tunnel (omitting the one which was purposely high graded) show the grade of the tungsten to be 0.051 percent $WO_3$. As the average grade of the ore shows no indication of improving and the shipping records and sample data indicated that the grade of the ore is only half that used in the metallurgical test, Mr. Floyd's statement might be said to be "doubly true."

On several occasions the DMEA has expressed an interest in granting a copper exploration loan to explore the Sunrise mine. This property is considered to be a worthy copper exploration project if the DMEA is interested in a small 2 percent copper, 0.2 ounce gold ore body.

Shipping records of all sulfide ore produced from 1913 to 1947 (7,396 tons) show the average grade of ore to be 2.38 percent copper, 0.212 ounce gold, and 1.33 ounces silver. Recent shipments are approximately of the same grade. Inspection of the stopes in the sulfide zone above the Main tunnel level shows that this ore has been mined from the richer portions of the vein. It is estimated that these richer shoots constitute 30 to 50 percent of the vein. The appearance of the ore indicates that it would be difficult to improve the grade by hand sorting. In fact, there is no evidence that this was done. Therefore, it may be assumed that the grade of the ore shipped is the same as the grade mined. If this be the case, it is quite likely that the proposed exploration will find other similar small ore shoots of equal grade along the vein and would also provide information as to the percentage of the vein in the sulfide zone which might be of minable grade. Such small ore shoots would be of definite interest to a small mine operator.

The applicant believes that the property may be able to support a 150 to 200 tons a day operation. This might be true if the whole vein would average better than 2 percent copper and 0.2 ounce of gold. However, limited exploration in the sulfide zone has shown that only 30 to 50 percent of the vein is of this grade. If sufficient ore to justify a mill can be found by exploration, we believe the nature of the deposit is such that a 50 to 75 tons a day operation is a more realistic estimate of the potential possibilities of the property.

The "Review of Application for Exploration Assistance" indicates that there is not enough information furnished in the application to write a contract. It also requests information as to manpower, equipment and supplies, accessibility, water, power, and competency of applicant. These points were covered in the Field Team's memorandum of June 15, 1951, and specimen contract of June 18, 1951. However, as it has been over a year since this information was compiled, the U. S. Bureau of Mines is preparing a memorandum and new specimen contract for a proposed copper exploration program.

The Bureau of Mines has suggested that the proposed exploration be confined to the main level. This is a reasonable suggestion and one in which we concur. The extention of the Main level drift 550 feet north on the Sunrise vein will provide valuable information concerning the copper possibilities in the sulfide zone.

The review also asks if it is necessary to straighten out the Main tunnel at a cost of $2,500 for exploration work. Before any type of efficient mining operation can be carried on through the Main tunnel, it will be necessary to straighten it out. The U. S. Bureau of Mines is preparing a cost estimate for straightening the tunnel.

J. J. Quinlan
Geologist

E. H. Roseboom
Geologist

Enclosure 1
cc: DMEA (4)
USBM (1)
USGS (SRO)

CAR SHIPMENTS FROM SUNRISE MINE FOR QUEEN MINING SYNDICATE, 1951

| Date | N.P. Car Number | Pounds Gross | Percent Water | Pounds Dry | $WO_3$ | Per-cent Copper | Ounces Silver | Ounces Gold | Treatment Charge | Price Per Ton | Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-51 | 53495 | 91,060 | 1.8 | 89,421 | .00 | 2.26 | 0.75 | 0.145 | 5.14 | 6.92 | $309.40 |
| 1-9-51 | 53455 | 98,500 | 2.0 | 96,530 | .00 | 2.56 | 0.8 | 0.135 | 5.17 | 7.88 | 380.33 |
| 1-22-51 | 50047 | 102,020 | 1.9 | 100,082 | .06 | 2.31 | 0.6 | 0.180 | 5.11 | 8.32 | 416.34 |
| 2-5-51 | 50623 | 93,080 | 1.8 | 91,405 | .00 | 2.89 | 1.2 | 0.205 | 5.50 | 11.57 | 528.78 |
| 2-16-51 | 50295 | 77,040 | 1.8 | 75,653 | .065 | 3.07 | 2.1 | 0.200 | 5.50 | 12.86 | 486.45 |
| 2-28-51 | 50228 | 107,180 | 2.4 | 104.608 | .00 | 2.70 | 1.05 | 0.170 | 5.14 | 9.70 | 507.35 |
| 3-7-51 | 50485 | 123,140 | 3.4 | 118,953 | .039 | 2.49 | 1.40 | 0.195 | 5.45 | 9.61 | 571.57 |
| 3-30-51 | 53134 | 92,200 | 2.4 | 90,079 | .00 | 2.69 | 1.60 | 0.275 | 5.50 | 13.28 | 598.12 |
| 4-12-51 | 50241 | 99,620 | 2.3 | 97,329 | .134 | 2.46 | 0.80 | 0.190 | 5.09 | 9.33 | 454.04 |
| 4-20-51 | 50169 | 88,900 | 2.0 | 87,122 | .00 | 2.33 | 0.60 | 0.195 | 5.01 | 9.00 | 392.05 |
| 5-2-51 | 50050 | 79,000 | 2.2 | 77,242 | .085 | 2.05 | 1.3 | 0.210 | 5.24 | 8.43 | 325.66 |
| 5-14-51 | 50123 | 95,240 | 3.1 | 92,238 | .00 | 2.26 | 0.8 | 0.200 | 5.10 | 8.77 | 382.76 |
| 5-22-51 | 50395 | 86,620 | 2.6 | 84,368 | .26 | 2.17 | 0.6 | 0.180 | 5.46 | 8.64 | 289.97 |

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

COPY

October 29, 1952

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

Dear Mr. Johnson:

In a recent phone conversation between Mr. M. E. Volin and Mr. Keller about another matter, Mr. Keller requested information on the status of five dockets which are still pending. Following is the information which Mr. Keller has requested.

Docket No. DMEA-393X. W. A. Moon, Sunrise Mine. An exploration proposal has been worked out with the Operator and a tentative contract was drawn up on a unit cost basis. This was sent to the Operator some time ago to find out whether he would be agreeable to the costs that were stipulated. There was a long delay while Mr. Moon was apparently taking this up with his board of directors. In response to a very recent letter from me, he has stated that the terms of the proposed contract are satisfactory to his compnay. The report plus the tentative contract has already gone forward to you.

Docket No. DMEA-2109. The Mineral King. The applicant has shown little interest in discussing this proposal with us presumably because he has been dickering with a mining company for the sale of the property. We have noted recently in the papers that the property has been sold to the A. S. and R. Since then we have been trying to contact the Operator to get written confirmation of this so that the application can be withdrawn. We are writing him again to this effect and will state that if we do not hear from him, we will consider the application withdrawn.

Docket No. DMEA-2339. H. T. O'Reilly, Bo Gulch, Powell Co., Montana. This was denied in July with the proviso that if bulldozing then in progress showed up anything, the application could be reconsidered. Mr. M. R. Klepper of this office has been in the general area and has been keeping an eye on the work at Bo Gulch. As I have not heard from Mr. Klepper recently, I presume that either the bulldozing has not been done, or the results were so unfavorable that Mr. Klepper did not think any further action was required.

Unfortunately, Mr. Klepper is on leave at the moment. On his return, I will obtain final word so that the matter can be closed.

Docket No. DMEA-2217, Clark Mines Inc. The applicant was to inform us when the shaft has been unwatered. He has never done so. We will contact him again and either insist on unwatering the shaft so that an examination can be made, or will deny the application.

Docket No. DMEA-2496, Golden Anchor Mine; Powell County, Montana. The same status as some of the others described above. A proper appraisal of the proposal could not be made until some old workings had been cleaned out. The applicant was to advise us when this was done. One of our men is now in the field checking on this.

In reviewing the situation, it is clear that we have been making an error in our treatment of some of these dockets. Some of them look pretty hopeless, but our field men hesitate to make a negative recommendation because if a shaft were unwatered, an old working cleaned out, or a pit or two dug so that some definite information were available, there is a bare chance that something might be worked out. The applicant usually states he will do this, but quite as commonly fails to fullfill his promise. As a result, the field man usually makes two or three attempts to find out what has happened, and when no progress is reported, he is inclined to drop the whole matter forgetting that the record is on our book as an unfinished examination. This perhaps does no great harm, but it clutters up our records and makes it appear that we are taking too long to examine a property. I think in most cases this can be avoided by the Field Team making a definite negative recommendation on the basis that the information presented is insufficient to properly appraise the applicant's proposal. A statement can be made that if the applicant will do a certain specified amount of work, say, to pump out a shaft or make workings safe for inspection, the case can be reconsidered. In other words, we should strive to make this the applicant's responsibility to present the necessary information, and if he does not do so, then the docket will be considered dead until and unless he does so. I think this would save us quite a lot of trouble and remove a lot of dead wood from our unfinished files. This is not the only reason for the delay in getting in reports to you, of course, but a number of dockets are in this condition.

I would appreciate your opinion on this matter.

Sincerely yours

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

cc: USBM(2)
DMEA(2)

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

COPY

October 29, 1952

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

Dear Mr. Johnson:

In a recent phone conversation between Mr. M. E. Volin and Mr. Keller about another matter, Mr. Keller requested information on the status of five dockets which are still pending. Following is the information which Mr. Keller has requested.

Docket No. DMEA-393X. W. A. Moon, Sunrise Mine. An exploration proposal has been worked out with the Operator and a tentative contract was drawn up on a unit cost basis. This was sent to the Operator some time ago to find out whether he would be agreeable to the costs that were stipulated. There was a long delay while Mr. Moon was apparently taking this up with his board of directors. In response to a very recent letter from me, he has stated that the terms of the proposed contract are satisfactory to his compnay. The report plus the tentative contract has already gone forward to you.

Docket No. DMEA-2109. The Mineral King. The applicant has shown little interest in discussing this proposal with us presumably because he has been dickering with a mining company for the sale of the property. We have noted recently in the papers that the property has been sold to the A. S. and R. Since then we have been trying to contact the Operator to get written confirmation of this so that the application can be withdrawn. We are writing him again to this effect and will state that if we do not hear from him, we will consider the application withdrawn.

Docket No. DMEA-2339. H. T. O'Reilly, Bo Gulch, Powell Co., Montana. This was denied in July with the proviso that if bulldozing then in progress showed up anything, the application could be reconsidered. Mr. M. R. Klepper of this office has been in the general area and has been keeping an eye on the work at Bo Gulch. As I have not heard from Mr. Klepper recently, I presume that either the bulldozing has not been done, or the results were so unfavorable that Mr. Klepper did not think any further action was required.

Unfortunately, Mr. Klepper is on leave at the moment. On his return, I will obtain final word so that the matter can be closed.

Docket No. DMSA-2217, Clark Mines Inc. The applicant was to inform us when the shaft has been unwatered. He has never done so. We will contact him again and either insist on unwatering the shaft so that an examination can be made, or will deny the application.

Docket No. DMSA-2496. Golden Anchor Mine: Powell County, Montana. The same status as some of the others described above. A proper appraisal of the proposal could not be made until some old workings had been cleaned out. The applicant was to advise us when this was done. One of our men is now in the field checking on this.

In reviewing the situation, it is clear that we have been making an error in our treatment of some of these dockets. Some of them look pretty hopeless, but our field men hesitate to make a negative recommendation because if a shaft were unwatered, an old working cleaned out, or a pit or two dug so that some definite information were available, there is a bare chance that something might be worked out. The applicant usually states he will do this, but quite as commonly fails to fullfill his promise. As a result, the field man usually makes two or three attempts to find out what has happened, and when no progress is reported, he is inclined to drop the whole matter forgetting that the record is on our book as an unfinished examination. This perhaps does no great harm, but it clutters up our records and makes it appear that we are taking too long to examine a property. I think in most cases this can be avoided by the Field Team making a definite negative recommendation on the basis that the information presented is insufficient to properly appraise the applicant's proposal. A statement can be made that if the applicant will do a certain specified amount of work, say, to pump out a shaft or make workings safe for inspection, the case can be reconsidered. In other words, we should strive to make this the applicant's responsibility to present the necessary information, and if he does not do so, then the docket will be considered dead until and unless he does so. I think this would save us quite a lot of trouble and remove a lot of dead wood from our unfinished files. This is not the only reason for the delay in getting in reports to you, of course, but a number of dockets are in this condition.

I would appreciate your opinion on this matter.

Sincerely yours

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

cc: USBM(2)
DMSA(2)

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

DOCKET NO. DMEA 392X

COMMODITY Copper

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

# EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Queen Mining Syndicate

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Granite, described as follows:[3] The Sunrise Mine, consisting of 21 patented lode claims, 5 unpatented lode claims, and a tract of homestead land containing 7.3 acres in T. 9 N., R. 14 W., Sec. 35.

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: Queen Mining Syndicate leases the property.

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for[5] copper

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay ____50____ percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $__10,725.00__, which is ____50____ percent of $__21,450.00__, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final [illegible] certifica- [illegible]erals [illegible]

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

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

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

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

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

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

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

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

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

---

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

EXPLORATION PROJECT CONTRACT
QUEEN MINING SYNDICATE
SUNRISE MINE
GRANITE COUNTY, MONTANA

DMA 393X

Exhibit "A"

Estimated time schedule: 0—6 months

DESCRIPTION OF WORK

1. Rehabilitate and straighten 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel.

ESTIMATED COST OF PROJECT
*Allowable maximum

Unit Costs:

550 feet of drift at $38.20 per foot including all costs except assaying $21,010.00*

The Government will contribute to the cost of drifting on the basis of this agreed estimated unit cost in lieu of actual costs. The rest of the described work and those items of the cost of drifting which are excluded therefrom will be contributed to by the Government on the basis of the actual costs specified in Article 6(a) of the contract from, schedule of which are set forth below:

1. Independent Contracts

None.

2. Labor, supervision, consultants

Schedule waived.

3. Operating materials and supplies

Schedule waived.

4. Operating equipment

Schedule waived.

5. Rehabilitation and repairs

Schedule waived.

6. New buildings, improvements, installations

None.

7. Miscellaneous

| | |
|---|---|
| Assays - 110 at $4/ea. | $ 440.00* |
| Total estimated cost | $21,450.00 |
| Government's contribution at 50% | $10,725.00 |

**W. A. NOON**
PHONE 2551 OR 2741
DRUMMOND, MONTANA

Oct. 23, 1952

U. S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D.C.
S. 157 Howard Street, Spokane 4, Wash.
A. E. Weisenborn, Executive Officer,
Field Team, Region II

Docket DMEA 393
~~Tungsten- Sunrise Mine~~

Dear Mr. Weisenborn:

Answering your letter of October 15th regarding above Docket, I immediately took the matter up with the members of the Queen Mining Syndicate and they have asked me to have you draw the contract for driving the tunnel-extension in the Sunrise Mine according to your last suggestion. They would like to have you send the contract for approval as they have decided to go ahead and have the funds available.

There might be a few minor changes to be worked out between the parties.

Yours very truly

W. A. Noon

WAN:m

10/30/52 gla

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

So. 157 Howard Street
Spokane 4, Washington

October 15, 1952

Mr. C. O. Mittendorf
Administrator, DMEA
Department of Interior
Washington 25, D. C.

Re: Docket No. DMA 393X
Copper and Tungsten
Sunrise Mine
Grant County, Montana

Dear Mr. Mittendorf:

This is in reply to your letter of October 3 requesting the field report so that you could proceed with the processing of the subject application as a copper project. I have reviewed the files on this matter and find the following rather pertinent recent developments on the subject docket.

(1) Re-examination of the property was made by Quinlan and Roseboom of the Geological Survey in July. The conclusion reached was that there was no justification for considering the property as a tungsten prospect, but that it has some possibilities as a small, probably marginal copper producer, and as such, would be worth some exploration.

(2) A ~~special little~~ specimen contract was worked out by the Bureau of Mines engineers in cooperation with Mr. Noon, the Operator, in August. Mr. Noon was in accord with the terms of the contract in which the estimated costs were put on a unit cost basis, but he felt that he would have to discuss the matter with his Board of Directors.

(3) On September 22, Mr. Reed of the Bureau of Mines wrote to Mr. Noon pointing out that we required a letter from the Queen Mining Syndicate indicating agreement with the proposed exploration before any further progress could be made in processing the application. I am informed that our field engineers have been advised verbally by Mr. Noon that he will indicate this agreement, but to date we have had no official word from him; and consequently,

I have been holding the docket here until such word was received. I am writing to Mr. Noon stating that if we do not hear from him in the near future, we will assume that he has no further interest in the application.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM (2)
Quinlan

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

So. 157 Howard Street
Spokane 4, Washington

October 15, 1952

Mr. C. O. Mittendorf
Administrator, DMEA
Department of Interior
Washington 25, D. C.

Re: Docket No. DMA 395X
Copper and Tungsten
Sunrise Mine
Grant County, Montana

Dear Mr. Mittendorf:

This is in reply to your letter of October 3 requesting the field report so that you could proceed with the processing of the subject application as a copper project. I have reviewed the files on this matter and find the following rather pertinent recent developments on the subject docket.

(1) Re-examination of the property was made by Quinlan and Roseboom of the Geological Survey in July. The conclusion reached was that there was no justification for considering the property as a tungsten prospect, but that it has some possibilities as a small, probably marginal copper producer, and as such, would be worth some exploration.

(2) A ~~special little~~ specimen contract was worked out by the Bureau of Mines engineers in cooperation with Mr. Noon, the Operator, in August. Mr. Noon was in accord with the terms of the contract in which the estimated costs were put on a unit cost basis, but he felt that he would have to discuss the matter with his Board of Directors.

(3) On September 22, Mr. Reed of the Bureau of Mines wrote to Mr. Noon pointing out that we required a letter from the Queen Mining Syndicate indicating agreement with the proposed exploration before any further progress could be made in processing the application. I am informed that our field engineers have been advised verbally by Mr. Noon that he will indicate this agreement, but to date we have had no official word from him; and consequently,

Docket
10/21/52

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED

So. 1[illegible]7 Howard Street
Spokane 4, Washington

October 1[illegible], 19[illegible]2

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Re: Docket No. DMEA-393 Tungsten
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

I have recently had an inquiry from our Washington office asking us why we have not submitted a report on the application of the Queen Mining Syndicate for the exploration of the Sunrise Mine, Granite County, Montana, as a copper prospect. On referring to our files, I find that a proposal had been worked out by you and Bureau of Mines engineers together with a specimen contract, and that we were to hear further from you whether the proposal was agreeable to you. I also note that on September 22, Mr. Reed wrote you stating that it would be necessary for us to hear from you on this matter before we could process your application further.

If you are not in agreement with any of the terms or provisions of the proposed contract, we would be glad to discuss these differences with you at any time; and you are at liberty to submit any alternative proposal that you may see fit. If we do not hear from you within a short time, we will necessarily have to assume that you are no longer interested in the project, and will put your application in the dead file.

Please let us know your wishes.

Sincerely yours,

Copy retained 400

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

cc: USBM (2)
DMEA (2)
Quinlan
A. E. Weissenborn:dd

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

1201 North Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work proposed by Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Docket No. DMA 393X (copper)

As I have not visited the subject property, the following estimate is based on information obtained from the files of the Bureau of Mines and the USGS. The application was also reviewed to obtain all pertinent information as regards to cost.

The proposed work consists of:

1. Rehabilitation and straightening 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel.

COST ESTIMATE

Labor:

One shift 4 feet/shift (5' x 7') drift
104 feet/26 day month

| | Cost/foot |
|---|---|
| 2 miners at $15.00/day | $ 7.50 |
| Plus 10% workmen's compensation, O.A.B., and Unemployment Insurance | .75 |
| Plus 8-1/3% overtime | .63 |
| 1 Supervisor <Engineer, bookeeper> at $500.00/month | 4.80 |
| | $13.68 |

Supplies:

| | Cost/foot |
|---|---|
| Steel and bits assume | $ 1.00 |
| Rail 20# at $7.80/100 pounds | 1.03 |
| Ties at $0.40 each | 0.20 |
| Spikes, Bolts and Fish Plates | 0.14 |
| Air 2" pipe at $48.63/100 feet > Water 1" pipe at $16.00/100 feet> | 0.65 |
| Air hose 50 feet at $98/100 feet> Water hose 50 feet at $90/100' > | 0.17 |
| 1 air mover at $50.00 | 0.09 |
| Powder 15#/foot at $21.75/100# | 3.26 |
| Caps 20/5 foot round at $21.60/1000 | 0.11 |
| Fuse 200'/5' round at $13.10/1000' | 0.65 |
| Small Tools and Misc. $165.00 | 0.30 |
| Power at $300.00/month | 2.88 |
| | $10.48 |

Equipment Rental:

| | |
|---|---|
| 1 320 cfm Compressor at $280.00/month | $ 2.69 |
| 1 Eimco mucking machine at $250.00/month | 2.40 |
| 1 Air trammer at $150.00/month | 1.44 |
| 4 Mine cars at $100.00/month | 0.96 |
| 1 Automatic feed drifter at $60.00/month | 0.58 |
| | $ 8.07 |

Rehabilitation of 900 feet of main tunnel:

| | |
|---|---|
| At $1375.00 | $ 2.50 |

Recapitulation:

| | |
|---|---|
| Labor and Supervision (Includes O.A.B., unemployment insurance, workmen's comp. and overtime) | $13.68 |
| Supplies | 10.48 |
| Equipment Rental | 8.07 |
| Rehabilitation of main tunnel | 2.50 |
| | $34.73 |
| 10% contingencies | 3.47 |
| Estimated cost/foot | $38.20 |

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

1201 North Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work proposed by Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Docket No. DMA 393X (copper)

As I have not visited the subject property, the following estimate is based on information obtained from the files of the Bureau of Mines and the USGS. The application was also reviewed to obtain all pertinent information as regards to cost.

The proposed work consists of:

1. Rehabilitation and straightening 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel.

COST ESTIMATE

Labor:

One shift 4 feet/shift (5' x 7') drift
104 feet/26 day month

| | Cost/foot |
|---|---|
| 2 miners at $15.00/day | $ 7.50 |
| Plus 10% workmen's compensation, O.A.B., and Unemployment Insurance | .75 |
| Plus 8-1/3% overtime | .63 |
| 1 Supervisor <Engineer, bookeeper> at $500.00/month | 4.80 |
| | $13.68 |

Supplies:

| | Cost/foot |
|---|---|
| Steel and bits assume | $ 1.00 |
| Rail 20# at $7.80/100 pounds | 1.03 |
| Ties at $0.40 each | 0.20 |
| Spikes, Bolts and Fish Plates | 0.14 |
| Air 2" pipe at $48.63/100 feet > Water 1" pipe at $16.00/100 feet> | 0.65 |
| Air hose 50 feet at $98/100 feet> Water hose 50 feet at $90/100' > | 0.17 |
| 1 air mover at $50.00 | 0.09 |
| Powder 15#/foot at $21.75/100# | 3.26 |
| Caps 20/5 foot round at $21.60/1000 | 0.11 |
| Fuse 200'/5' round at $13.10/1000' | 0.65 |
| Small Tools and Misc. $165.00 | 0.30 |
| Power at $300.00/month | 2.88 |
| | $10.48 |

Equipment Rental:

| | |
|---|---|
| 1 320 cfm Compressor at $280.00/month | $ 2.69 |
| 1 Eimco mucking machine at $250.00/month | 2.40 |
| 1 Air trammer at $150.00/month | 1.44 |
| 4 Mine cars at $100.00/month | 0.96 |
| 1 Automatic feed drifter at $60.00/month | 0.58 |
| | $ 8.07 |

Rehabilitation of 900 feet of main tunnel:

| | |
|---|---|
| At $1375.00 | $ 2.50 |

Recapitulation:

| | |
|---|---|
| Labor and Supervision (Includes O.A.B., unemployment insurance, workmen's comp. and overtime) | $13.68 |
| Supplies | 10.48 |
| Equipment Rental | 8.07 |
| Rehabilitation of main tunnel | 2.50 |
| | $34.73 |
| 10% contingencies | 3.47 |
| Estimated cost/foot | $38.20 |

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

1201 North Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work proposed by Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Docket No. DMA 393X (copper)

As I have not visited the subject property, the following estimate is based on information obtained from the files of the Bureau of Mines and the USGS. The application was also reviewed to obtain all pertinent information as regards to cost.

The proposed work consists of:

1. Rehabilitation and straightening 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel. and Sample

COST ESTIMATE

Labor:

One shift 4 feet/shift (5' x 7') drift
104 feet/26 day month

| | Cost/foot |
|---|---|
| 2 miners at $15.00/day | $ 7.50 |
| Plus 10% workmen's compensation, O.A.B., and Unemployment Insurance | .75 |
| Plus 8-1/3% overtime | .63 |
| 1 Supervisor <Engineer, bookeeper> at $500.00/month | 4.80 |
| | $13.68 |

Supplies:

| | Cost/foot |
|---|---|
| Steel and bits assume | $ 1.00 |
| Rail 20# at $7.80/100 pounds | 1.03 |
| Ties at $0.40 each | 0.20 |
| Spikes, Bolts and Fish Plates | 0.14 |
| Air 2" pipe at $48.63/100 feet > Water 1" pipe at $16.00/100 feet> | 0.65 |
| Air hose 50 feet at $98/100 feet> Water hose 50 feet at $90/100' > | 0.17 |
| 1 air mover at $50.00 | 0.09 |
| Powder 15#/foot at $21.75/100# | 3.26 |
| Caps 20/5 foot round at $21.60/1000 | 0.11 |
| Fuse 200'/5' round at $13.10/1000' | 0.65 |
| Small Tools and Misc. $165.00 | 0.30 |
| Power at $300.00/month | 2.88 |
| | $10.48 |

Equipment Rental:

| | |
|---|---|
| 1 320 cfm Compressor at $280.00/month | $ 2.69 |
| 1 Eimco mucking machine at $250.00/month | 2.40 |
| 1 Air trammer at $150.00/month | 1.44 |
| 4 Mine cars at $100.00/month | 0.96 |
| 1 Automatic feed drifter at $60.00/month | 0.58 |
| | $ 8.07 |

Rehabilitation of 900 feet of main tunnel:

| | |
|---|---|
| At $1375.00 | $ 2.50 |

Recapitulation:

| | |
|---|---|
| Labor and Supervision (Includes O.A.B., unemployment insurance, workmen's comp. and overtime) | $13.68 |
| Supplies | 10.48 |
| Equipment Rental | 8.07 |
| Rehabilitation of main tunnel | 2.50 |
| | $34.73 |
| 10% contingencies | 3.47 |
| Estimated cost/foot | $38.20 |

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

1201 North Division St.
Spokane 2, Washington

October 14, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Cost estimate for exploration work proposed by Queen Mining Syndicate, Sunrise Mine, Granite County, Montana, Docket No. DMA 393X (copper)

As I have not visited the subject property, the following estimate is based on information obtained from the files of the Bureau of Mines and the USGS. The application was also reviewed to obtain all pertinent information as regards to cost.

The proposed work consists of:

1. Rehabilitation and straightening 900 feet of main tunnel.

2. Drift northward on vein for 550 feet from the north end of main tunnel.

COST ESTIMATE

Labor:

One shift 4 feet/shift (5' x 7') drift
104 feet/26 day month

| | Cost/foot |
|---|---|
| 2 miners at $15.00/day | $ 7.50 |
| Plus 10% workmen's compensation, O.A.B., and Unemployment Insurance | .75 |
| Plus 8-1/3% overtime | .63 |
| 1 Supervisor <Engineer, bookkeeper> at $500.00/month | 4.80 |
| | $13.68 |

Supplies:

| | Cost/foot |
|---|---|
| Steel and bits assume | $ 1.00 |
| Rail 20# at $7.80/100 pounds | 1.03 |
| Ties at $0.40 each | 0.20 |
| Spikes, Bolts and Fish Plates | 0.14 |
| Air 2" pipe at $48.63/100 feet > Water 1" pipe at $16.00/100 feet> | 0.65 |
| Air hose 50 feet at $98/100 feet> Water hose 50 feet at $90/100' > | 0.17 |
| 1 air mover at $50.00 | 0.09 |
| Powder 15#/foot at $21.75/100# | 3.26 |
| Caps 20/5 foot round at $21.60/1000 | 0.11 |
| Fuse 200'/5' round at $13.10/1000' | 0.65 |
| Small Tools and Misc. $165.00 | 0.30 |
| Power at $300.00/month | 2.88 |
| | $10.48 |

Equipment Rental:

| | |
|---|---|
| 1 320 cfm Compressor at $280.00/month | $ 2.69 |
| 1 Eimco mucking machine at $250.00/month | 2.40 |
| 1 Air tramner at $150.00/month | 1.44 |
| 4 Mine cars at $100.00/month | 0.96 |
| 1 Automatic feed drifter at $60.00/month | 0.58 |
| | $ 8.07 |

Rehabilitation of 900 feet of main tunnel:

| | |
|---|---|
| At $1375.00 | $ 2.50 |

Recapitulation:

| | |
|---|---|
| Labor and Supervision (Includes O.A.B., unemployment insurance, workmen's comp. and overtime) | $13.68 |
| Supplies | 10.48 |
| Equipment Rental | 8.07 |
| Rehabilitation of main tunnel | 2.50 |
| | $34.73 |
| 10% contingencies | 3.47 |
| Estimated cost/foot | $38.20 |

FILE COPY
SURNAME:

Selfridge

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

OCT 3 1952

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

Re: Docket No. DMA 393X
Copper and Tungsten
Sunrise Mine
Granite County, Montana

Dear Mr. Weissenborn:

This is to remind you of your recent conversation with our Mr. Selfridge regarding the subject docket. As you probably remember, you personally informed us several months ago that the Field Team was going to recommend the application for copper only. We would appreciate having the field report in order that we can proceed with processing the application as a copper project.

Sincerely yours,

C. O. Mittendorf

Administrator

10.3.52

GCSelfridge:ls
10/2/52

CC: Docket
Admn. Read. File
Field Team, Region 2
G. C. Selfridge
E. W. Ellis
R. W. Geehan, USBM
D. M. Lemmon, USGS

10/29/52

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

1201 N. Division St.
Spokane 2, Wash.
September 22, 1952

Mr. W. A. Noon
Drummond, Montana

Subject: Docket No. DMEA 393X (copper)
Sunrise Mine, Queen Mining Syndicate
Granite County, Montana

Dear Mr. Noon:

Reference is made to your letter of September 16, 1952. A letter from the Queen Mining Syndicate indicating agreement with the proposed exploration on the main adit level of the Sunrise mine is all that is necessary to complete processing of the application by this office.

It should be noted that the estimated cost of $35 per lineal foot includes an allowance of $1375 for straightening and rehabilitating 900 feet of the present adit.

Although my immediate schedule does not include travel in the Drummond area I will make it a point to see you at the earliest opportunity.

Sincerely yours,

Glenn C. Reed
Mining Engineer

HTR/GCR/he

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

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

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

July 29, 1952

Memorandum

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

From: J. J. Quinlan and E. H. Roseboom, Geologists, U.S.G.S.

Subject: Docket No. DMA-393X (Tungsten-Copper), Sunrise Mine, Granite County, Montana

This memorandum concerns a field examination of the Sunrise mine in sec. 35, T. 9 N., R. 14 W., M.P.M., Granite County, Montana. This examination was made July 5, 1952, with the express purpose of evaluating the tungsten possibilities of the property with particular reference to the geologic questions raised in the DMEA's "Review of Application for Exploration Assistance" on the subject property dated February 14, 1952.

Because of the low tungsten content of the crude ore and the difficult metallurgy involved in recovering scheelite from the Sunrise ores, it is recommended that if any exploration aid is granted the Sunrise mine, it should be based upon exploration for copper, with the Government participation at 50 percent of the estimated cost.

Except for a small amount of stoping, no further exploration or development work has been done since Preston and Reynolds mapped the mine in 1947. The Main tunnel has not been extended since that date. The maps of Preston and Reynolds were found to be accurate, and aside from a few minor modifications, seem to be quite adequate. Any further remapping of the mine at this time would be needless repetition.

The distribution of scheelite in the Main tunnel and Russell working was studied with the aid of an ultra-violet lamp. Thirteen samples of the vein were cut in the north portion of the Main tunnel and one sample cut in the Russell workings.

In light of Mr. Noon's claim that "the Sunrise mine (north portion of Main tunnel) has just come into the tungsten ore shoot," the distribution of scheelite in the Main tunnel and connected stopes was carefully studied. Traces of scheelite were observed throughout the workings in "oxidized", "leached copper", and "sulphide" zones. The scheelite is very spotty and irregular in its distribution. Small pockets of relatively high-grade material (high grade when compared with the average vein material) are scattered at intervals of 10 to 30 feet throughout the vein. One of these pockets was sampled and assayed 0.62 percent $WO_3$. However, none of these pockets would contain more than a few pounds of ore. There did not appear to be any increase in size, scheelite content, or relative abundance of these small pockets in any particular portion of the workings examined. The accompanying assay map shows the results of the sampling along the north portion of the Main tunnel and confirm the conclusion arrived at from visual inspection.

The Russell workings were also examined with the ultraviolet lamp. These workings did not lamp as well as the Main tunnel workings; however, the same random distribution of scheelite was observed. One sample cut across the vein in the Russell winze assayed 0.03 percent $WO_3$.

A copy of the shipping records for 1951 accompanies this memorandum. There have been no further shipments. The tungsten content of these shipments bear out the sporadic distribution of the scheelite through the ore body.

The samples taken during this examination were assayed for copper and gold in addition to $WO_3$. The sampling indicates that the copper and gold content of the ores also fluctuates to a considerable degree. The copper content of the vein was found to range from 0.10 percent to 2.32 percent, and the gold values range from a trace to 0.22 ounces per ton. However, all recent car shipments assayed above 2 percent copper and 0.13 ounces of gold. Apparently only certain portions of the vein are of minable grade. This is borne out by the irregular shapes and distributions of the stopes. It is also interesting to note that the variations in the $WO_3$ content do not appear to be related to the variations in copper content. Thus, ore of high copper content may or may not show tungsten values.

In the U. S. Bureau of Mines report on the beneficiation of the Sunrise mine, copper-tungsten ore, Mr. P. H. Floyd states: "The tungsten metallurgy is questionable from the standpoint that sufficient value may not be present in the ore to pay for the additional expense of recovering it * * *". The ore sample used in the metallurgical test assayed 0.105 percent $WO_3$. The 1951 ore shipments averaged 0.049 percent $WO_3$. The weighted average of the

samples taken from the north portion of the Main tunnel (omitting the one which was purposely high graded) shows the grade of the tungsten to be 0.051 percent $WO_3$. As the average grade of the ore shows no indication of improving and the shipping records and sample data indicated that the grade of the ore is only half that used in the metallurgical test, Mr. Floyd's statement might be said to be "doubly true."

On several occasions the DMEA has expressed an interest in granting a copper exploration loan to explore the Sunrise mine. This property is considered to be a worthy copper exploration project if the DMEA is interested in a small 2 percent copper, 0.2 ounce gold ore body.

Shipping records of all sulfide ore produced from 1913 to 1947 (7,396 tons) show the average grade of ore to be 2.38 percent copper, 0.212 ounce gold, and 1.35 ounces silver. Recent shipments are approximately of the same grade. Inspection of the stopes in the sulfide zone above the Main tunnel level shows that this ore has been mined from the richer portions of the vein. It is estimated that these richer shoots constitute 30 to 50 percent of the vein. The appearance of the ore indicates that it would be difficult to improve the grade by hand sorting. In fact, there is no evidence that this was done. Therefore, it may be assumed that the grade of the ore shipped is the same as the grade mined. If this be the case, it is quite likely that the proposed exploration will find other similar small ore shoots of equal grade along the vein and would also provide information as to the percentage of the vein in the sulfide zone which might be of minable grade. Such small ore shoots would be of definite interest to a small mine operator.

The applicant believes that the property may be able to support a 150 to 200 tons a day operation. This might be true if the whole vein would average better than 2 percent copper and 0.2 ounce of gold. However, limited exploration in the sulfide zone has shown that only 30 to 50 percent of the vein is of this grade. If sufficient ore to justify a mill can be found by exploration, we believe the nature of the deposit is such that a 50 to 75 tons a day operation is a more realistic estimate of the potential possibilities of the property.

The "Review of Application for Exploration Assistance" indicates that there is not enough information furnished in the application to write a contract. It also requests information as to manpower, equipment and supplies, accessibility, water, power, and competency of applicant. These points were covered in the Field Team's memorandum of June 15, 1951, and specimen contract of June 18, 1951. However, as it has been over a year since this information was compiled, the U. S. Bureau of Mines is preparing a memorandum and new specimen contract for a proposed copper exploration program.

The Bureau of Mines has suggested that the proposed exploration be confined to the main level. This is a reasonable suggestion and one in which we concur. The extention of the Main level drift 550 feet north on the Sunrise vein will provide valuable information concerning the copper possibilities in the sulfide zone.

The review also asks if it is necessary to straighten out the Main tunnel at a cost of $2,500 for exploration work. Before any type of efficient mining operation can be carried on through the Main tunnel, it will be necessary to straighten it out. The U. S. Bureau of Mines is preparing a cost estimate for straightening the tunnel.

J. J. Quinlan
Geologist

E. H. Roseboom
Geologist

Enclosure 1
cc: DMEA (4)
USBM (1)
USGS (SRO)

CAR SHIPMENTS FROM SUNRISE MINE FOR QUEEN MINING SYNDICATE, 1951

Net value.

| Date | N.P. Car Number | Pounds Gross | Percent Water | Pounds Dry | $WO_3$ | Per-cent Copper | Ounces Silver | Ounces Gold | Treatment Charge | Price Per Ton | Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-51 | 53495 | 91,060 | 1.8 | 89,421 | .00 | 2.26 | 0.75 | 0.145 | 5.14 | 6.92 | $309.40 |
| 1-9-51 | 53455 | 98,500 | 2.0 | 96,530 | .00 | 2.56 | 0.8 | 0.135 | 5.17 | 7.88 | 380.33 |
| 1-22-51 | 50047 | 102,020 | 1.9 | 100,082 | .06 | 2.31 | 0.6 | 0.180 | 5.11 | 8.32 | 416.34 |
| 2-5-51 | 50623 | 93,080 | 1.8 | 91,405 | .00 | 2.89 | 1.2 | 0.205 | 5.50 | 11.57 | 528.78 |
| 2-16-51 | 50295 | 77,040 | 1.8 | 75,653 | .065 | 3.07 | 2.1 | 0.200 | 5.50 | 12.86 | 486.45 |
| 2-28-51 | 50228 | 107,180 | 2.4 | 104.608 | .00 | 2.70 | 1.05 | 0.170 | 5.14 | 9.70 | 507.35 |
| 3-7-51 | 50485 | 123,140 | 3.4 | 118,953 | .039 | 2.49 | 1.40 | 0.195 | 5.45 | 9.61 | 571.57 |
| 3-30-51 | 53134 | 92,200 | 2.4 | 90,079 | .00 | 2.69 | 1.60 | 0.275 | 5.50 | 13.28 | 598.12 |
| 4-12-51 | 50241 | 99,620 | 2.3 | 97,329 | .154 | 2.46 | 0.80 | 0.190 | 5.09 | 9.33 | 454.04 |
| 4-20-51 | 50169 | 88,900 | 2.0 | 87,122 | .00 | 2.33 | 0.60 | 0.195 | 5.01 | 9.00 | 392.05 |
| 5-2-51 | 50050 | 79,000 | 2.2 | 77,262 | .085 | 2.05 | 1.3 | 0.210 | 5.24 | 8.43 | 325.66 |
| 5-14-51 | 50123 | 95,240 | 3.1 | 92,288 | .00 | 2.26 | 0.8 | 0.200 | 5.10 | 8.77 | 322.76 |
| 5-22-51 | 50395 | 86,620 | 2.6 | 84,368 | .26 | 2.17 | 0.6 | 0.180 | 5.48 | 8.64 | 289.97 |

CE OF THE ADMINISTRATOR

# UNITED STATES
# DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

March 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 4 1952

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

Dear Mr. Mittendorf:

This is in reply to your letter of March 21 re the Sunrise mine, docket DMA 393X, Granite County, Montana. I do not believe that the exposures which we have not seen are likely to affect our conclusions regarding the tungsten possibilities of the property; however, we wish to keep an open mind in the matter. Inasmuch as our engineers and geologists will be passing not far from the property, I think the best solution will be to have someone drop in when the exposures can be seen and review the whole thing with Mr. Noon. I believe that an inspection will indicate whether further careful sampling should be done to properly test the tungsten possibilities.

I suppose that some of the tungsten outcrops that Mr. Noon mentions, and which we have not seen, can, in a sense, be considered as "new work" as Mr. Noon himself apparently did not know of them at the time of the Field Team's visit.

Sincerely yours,

A. E. Weissenborn

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

cc: USBM, Spokane

copy returned in 400's office.

400 FILE COPY
SURNAME:

Selfridge.

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

MAR 21 1952

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

Re: Docket No. DMA 393X -
Copper and Tungsten
Sunrise Mine
Granite County, Montana

Dear Mr. Weissenborn:

This is in reply to your letter of March 6, 1952, to Mr. Frank E. Johnson, in which you inform us that no additional work has been done on the Sunrise property since early last summer.

We are enclosing a copy of a letter of February 5, 1952, from Mr. Noon to Mr. W. C. Broadgate of Senator Murray's office. We interpreted the information contained in Mr. Noon's letter as pertaining to new work and, therefore, requested the field examination. Since it refers to former work already examined by the Field Team, we do not feel that the reexamination is warranted.

Both the copper and tungsten divisions agree that any aid, if granted, should be based upon exploration for copper, with Government participation at 50 percent of the estimated cost, as was written to Mr. Noon in a letter dated January 31, 1952, a copy of which you have.

Will you please give us your thoughts and suggestions on this matter?

GCSelfridge:ls 3/20/52

cc: Admn. Reading File
Docket
Field Team, Region 2
G. C. Selfridge
D. M. Lemmon, USGS
R. W. Geehan, USBM
E. W. Ellis

Enclosure

Sincerely yours,

C. O. Mittendorf (for) 3/21

Acting Administrator
Defense Minerals Exploration
Administration

IN REPLY REFER TO:

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

March 6, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 11 1952

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

Dear Mr. Johnson:

We have received a copy of the "Review of Application for Exploration Assistance" with reference to the Queen Mine Syndicate, c/o W. A. Noon, Drummond, Montana, concerning the Sunrise mine in Granite County, Montana. Mr. Glenn Reed of the Bureau of Mines is now in the field and has contacted Mr. Noon with regard to an additional examination by the Field Team. Mr. Reed informs us that no additional work has been done on the Sunrise property since the Field Team's examination of early last summer, but Mr. Noon states that there are some exposures of tungsten ore which the Field Team did not see at that time.

As you will note from the enclosed letter to Mr. Noon, we have agreed to make another examination as soon as Mr. Noon indicates that the weather and snow conditions will permit such an examination to be made.

Sincerely yours,

A. E. Weissenborn

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

Enclosure

cc: USBM-Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

March 6, 1952

Mr. W. A. Noon
Drummond,
Montana

Dear Mr. Noon:

We have just finished talking to Mr. Glenn Reed on the phone and have learned from him that he has contacted you with reference to your letter of March 4 and the recent correspondence we have had from Washington requesting additional review of the tungsten content of the ore at the Sunrise mine. Mr. Reed states that you have informed him that some of the exposures which the Field Team has not seen are in shallow pits which are now filled with snow and that you have stated it would perhaps be better to defer our examination until snow conditions are improved. We will therefore rely upon you to advise us when you consider the field examination can best be made.

Sincerely yours,

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

cc: USBM, Spokane
DMEA, Wash.

400

FILE COPY
SURNAME:

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

FEB 28 1952

Mr. W. C. Broadgate, Consultant to
Hon. James E. Murray
Senate Office Building
Washington 25, D. C.

Re: Docket No. DMA 393X - Tungsten
and Copper
Sunrise Mine
Granite County, Montana

Dear Mr. Broadgate:

We have reviewed Mr. Noon's letter of February 5, 1952. Since there is the possibility that the scheelite content of the sulphide ore of the Sunrise Mine has increased appreciably, we are requesting the field team to make an examination of the mine, paying especial attention to the new exposure described by Mr. Noon.

If the examination indicates that there has been a definite increase in the average tungsten content of the ore, some equitable compromise could be made regarding the participation basis to be used in the proposed contract.

Returned herewith is Mr. Noon's letter with accompanying snapshots.

Sincerely yours,

C. O. Mittendorf (fw) 2/28

Acting Administrator
Defense Minerals Exploration
Administration

Enclosures

GCSelfridge:ls
2/18/52

cc: Admn. Reading File
Docket
Field Team, Region 2
R. W. Geehan, USBM
D. M. Lemmon, USGS
E. W. Ellis
G. C. Selfridge

FILE COPY
SURNAME:

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

FEB 28 1952

Mr. W. A. Noon
Queen Mining Syndicate
P.O. Box 333
Drummond, Montana

Re: Docket No. DMA 393 - Tungsten and Copper
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

Your application for assistance in exploring the Sunrise Mine in Granite County, Montana, Docket No. DMA 393, has been referred to Mr. A. M. Weissenborn, Executive Officer, DMA Field Team, Region II, South 157 Howard Street, Spokane 8, Washington, for a field examination.

The Regional Office will contact you at an early date in regard to your project. Any assistance that you can offer the field team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf (fw) 2/28

Acting Administrator
Defense Minerals Exploration Administration

GGGentry:lm
2/14/52

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

JOSEPH C. O'MAHONEY, WYO., CHAIRMAN
JAMES E. MURRAY, MONT. HUGH BUTLER, NEBR.
ERNEST W. MC FARLAND, ARIZ. EUGENE D. MILLIKIN, COLO.
CLINTON P. ANDERSON, N. MEX. GUY CORDON, OREG.
HERBERT H. LEHMAN, N. Y. ZALES N. ECTON, MONT.
RUSSELL B. LONG, LA. GEORGE W. MALONE, NEV.
GEORGE A. SMATHERS, FLA. ARTHUR V. WATKINS, UTAH

MILLS ASTIN, CHIEF CLERK

OFFICIAL FILE COPY

# United States Senate

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS

| Rm. 3538 | Init. | Date |
|---|---|---|
| 400 | | 2-13 |
| | | |
| 200 | | |

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 13 1952

February 12,1952.

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

DMA-393 X

Dear Mitt:

Herewith please find a letter from W. A. Noon regarding the above numbered docket, together with photographs showing the recent scheelite showings. It is possible that on the strength of these you may want to have another look.

Sincerely,

Bill Boradgate

W. C. Boradgate
Consultant to Senator Murray

Enclosure: 1

# United States Senate

*Washington, D. C.,* February 12, *1952*

*Respectfully referred to*

C. O. Mittendorf

Letter dated February 5 regarding the Sunrise tungsten application DMA-393 X which please return to our files when you are finished with it.

W. C. Broadgate

*U. S. S.*

U. S. GOVERNMENT PRINTING OFFICE 16—45102-1

COPY

W. A. NOON
Drummond, Montana

February 5, 1952

Mr. W. C. Broadgate
Consultant to Senator Murray
Senate Office Bldg.
Washington, D. C.

DMA 393X

Dear Bill:

Enclosed please find copy of letter received from Mr. Ernest Wm. Ellis, Acting Chief, Rare and Misc. Metals Division, Defense Minerals Exploration Administration under date of January 31st, regarding Copper-Tungsten, Sunrise Mine, which is self explanatory.

Replying to your kind favor of February 1, wherein you state you will try to see if a balance can be struck between the copper-tungsten ratio, I believe there is a fact we have probably overlooked in the application which I cannot seem to get over to the DMA or DMEA.

The SUNRISE Mine has just come into the tungsten ore chute. There was no showing in the oxide, outer section, of the Sunrise ore body and it did not appear until the tunnel had been driven between 800 and 850 ft. into the sulphide ore. The last assays covering the last 100 feet have trebbled in value as the face of the drift was advanced. Enclosed pictures of the present face taken with ultra violet lamp and flash bulb. The scheelite started on the bottom foot wall section of vein in a 6" streak and after advancing the drift practically 100 ft. it now covers 6' of the vein from foot wall to hanging wall. It, so far, is low grade we admit but for every pound of sulfide ore taken out (with commercial values of copper-gold-silver) the tungsten values appear to be increasing and should be explored.

What is an Exploration loan for?

I believe if the values of the tungsten in the other properties which are being explored in Montana and on which "Exploration loans" have been granted, were compared with the SUNRISE (which is a good grade of scheelite) the comparison would be favorable to the Sunrise Mine.

The great EMERALD Mine of Canada (with whose engineers I am well acquainted), one of the biggest producers of Tungsten in Canada, has ore almost identical with the heavy, pyritic scheelite carrying massive sulfide and successful flow sheets for milling were worked out on this ore. We have samples of the EMERALD ore on hand here for comparison.

It is my personal opinion that the tungsten in the SUNRISE ore body should be explored. We appreciate your point of view as expressed in your letter of February 1st and I am giving my suggestions on the above to be of any help to you that is possible.

The 50/50 basis on DMA loan 393X would require that the operators put up over $32,500.00 which is a big sum for a small mining company. The tungsten exploration ratio would only require $16,250.00 which can be raised. You can readily see the advantage of any form of compromise.

Will not answer letter from Ernest Wm. Ellis until I hear from you again. With best regards,

Yours very truly

Signed: Bill

W. A. Noon

WAN:m
enc

400
FILE COPY
SURNAME:

Selfridge

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

FEB 11 1952

Hon. James E. Murray
United States Senate
Washington 25, D. C.

Re: Docket No. DMA 393X - Copper-Tungsten
The Sunrise Mine (W. A. Noon)
Granite County, Montana

Dear Senator Murray:

This is to acknowledge receipt of your letter of February 4, 1952, regarding an adjustment of the proportion of Government aid to somewhere between the 50 and 75 percent allotted to approved copper and tungsten exploration projects respectively.

Because of the low tungsten content of the crude ore and the difficult and complex metallurgy involved to extract the tungsten, Mr. Noon was recently informed by letter dated January 31, 1952, that in our opinion his application, if approved, should be based on exploration for copper, with Government participation at 50 percent of the estimated cost.

We are awaiting his reply before proceeding further with his application.

Sincerely yours,

C. O. Mittendorf (for) J.H. 2-11-52

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls
2/8/52

Copy to: Admn. Reading File
Docket
C. H. Johnson, Rm. 3621
Ned Nelson, Rm. 4216, USGS
Field Team, Region 2
G. C. Selfridge
E. E. Ellis, Rm. 4640

JAMES E. MURRAY, MONT., CHAIRMAN
LISTER HILL, ALA.
MATTHEW M. NEELY, W. VA.
PAUL H. DOUGLAS, ILL.
HUBERT H. HUMPHREY, MINN.
HERBERT H. LEHMAN, N. Y.
JOHN O. PASTORE, R. I.
ROBERT A. TAFT, OHIO
GEORGE D. AIKEN, VT.
H. ALEXANDER SMITH, N. J.
WAYNE MORSE, OREG.
IRVING M. IVES, N. Y.
RICHARD M. NIXON, CALIF.
WILLIAM H. COBURN, CHIEF CLERK

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 6 1952

# United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

February 4, 1952

Mr. C. O. Mittendorf
Tungsten Branch
Room 4640
New Interior Building
Washington 25, D. C.

DMA-393X

Dear Mr. Mittendorf:

I understand that the above docket, the application of W. A. Noon for a tungsten exploration contract, is encountering difficulties largely because of the metallurgy involved and that it may be recommended for a copper project instead.

Such a change makes a lot of difference in the amount of the matching funds required. There seems to be no difference of opinion as to the presence of tungsten ? or that some of it will be recoverable.

Is it possible, then, that you may be able to adjust the proportion of private and government funds somewhere between the 50-50 and 75-25 points?

Sincerely yours,

James E. Murray

392

700

FILE COPY
SURNAME:

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

Air Mail

JAN 31 1952

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Re: DMA 393X (Copper-Tungsten)
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

Your subject application for Government assistance in the exploration of the Sunrise Mine for tungsten and copper has been carefully studied by both the Iron and Ferro-Alloy Division and the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration.

Because of the relatively low tungsten content in the crude ore and the difficult and complex metallurgy involved in the extraction of the tungsten, this department is of the general opinion that the application, if granted, should be based on exploration for copper, with government participation at 50% of the estimated cost.

If you concur with this opinion, we shall be pleased if you will advise us to that effect as soon as is convenient so that we may continue consideration of your application.

Sincerely yours,

SIGNED

Ernest M. Ellis, Acting Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

HFKeller/gla 1-30-52
cc to: Adm. Reading File
Docket
Messrs. Johnson, C. H. Rm. 3621
Nelson, Ned. Rm. 4216 G.S.
Ellis
Keller
Field Team, Region II (2)

1/31/52

DMA 393-X - W. A. Noon

Mr.Broadgate of Senator Murray's office inquired by phone concerning another case, and related that a letter had been received from W. A. Noon, part of which was marked "confidential" regarding differences in assays. Broadgate said he would write Noon asking permission to turn material over to DMEA, though from Noon's letter, it appeared we might already have part of it.

Mr. Selfridge advised Broadgate an exploration loan was pretty definitely "out" so far as tungsten was concerned, but the Copper Div'n might go along on a 50-50 basis for exploration work.

L. Scott
1/31/52

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

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Re: Docket No. DMA 393X (Tungsten)
(Copper)
Granite County, Nevada

Dear Mr. Noon:

Your application for Government assistance in the production of tungsten from your Sunrise Mine has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration.

The tungsten phase of the program has been denied by this Division due to the low tungsten content in the crude ore and the difficult and complex metallurgy involved in the extraction of the tungsten.

However, yourapplication has been referred to the Rare and Miscellaneous Metals Division for their further consideration of the copper content.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

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

GGGentry:lm
1/22/52

400

(400)

January 22, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Docket No. DMA 393X - Tungsten and Copper
Sunrise Mine
Granite County, Nevada

The Iron and Ferro-Alloy Division recommends denial of the tungsten phase of the subject exploration application for the following reasons:

1. The low grade of the tungsten content in the crude ore as represented by 5 samples averaging 0.134 percent $WO_3$ and samples from 5 earlier shipments averaging 0.166 percent $WO_3$.

2. It appears evident from metallurgical tests conducted by the U. S. Bureau of Mines during the summer of 1951 and received in this Division on January 8, 1952, that the recovery of the tungsten will be a complex metallurgical problem involving grinding to minus 200 mesh and high cost plant installation. Laboratory tests indicate a recovery of 60.1 percent of the tungsten in a concentrate having a grade of 16.9 percent $WO_3$.

3. The absence of a definite financial program for the construction of an adequate milling plant, without which the tungsten content of the crude ore would not be recovered.

Therefore, repayment of the loan in its present status will depend upon the monies received from the mills or smelters on the basis of the copper-gold and silver content of the crude ore shipped from a discovery made under the exploration program.

Conclusion:

It is suggested that the docket be turned over to the Rare and Miscellaneous Metals Division for their further consideration of the copper content.

G. C. Selfridge, Acting Chief

FILE COPY
SURNAME:

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

Mr. W. A. Noon
Queen Mining Syndicate
P.O. Box 333
Drummond, Montana

Re: Docket No. DMA 393X - Tungsten and Copper
Granite County, Nevada

Dear Mr. Noon:

Your application for Government assistance in the production of tungsten from your Sunrise Mine has been reviewed by the Iron and Ferro-Alloy Division of the Defense Minerals Exploration Administration.

The tungsten phase of the program has been denied by this Division due to the low tungsten content in the crude ore and the difficult and complex metallurgy involved in the extraction of the tungsten.

However, your application has been referred to the Rare and Miscellaneous Metals Division for their further consideration of the copper content.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry'lm
1/21/52

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

FILE COPY
SURNAME:

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

Brewer
Selfridge
Mitt

JAN 4 1952

Mr. W. A. Noon
Queen Mining Syndicate
P.O. Box 333
Drummond, Montana

Re: Docket No. DMA 393 - Tungsten
and Copper
Granite County, Montana

Dear Mr. Noon:

Our files show that your application is awaiting receipt from you of six signed copies of form MF-202, Landlord's Subordination Agreement. This will accompany your "Extension of Lease and Option" of July 2, 1951, wherein Charles A. Murray, et al, appear as lessors and "Queen Syndicate, assignee of William R. McLure" appears as lessee.

Please favor us in this instance so that we may continue with your application.

Sincerely yours,

cc 1-3-52

George C. Selfridge

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

Enclosures - 7 copies MF-202

QLBrewer'lm
1/2/52

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

BL

M. E. Volin, Chief, Mining Division,
Region II

December 11, 1951

J. D. Bardill

Discussion of tin and tungsten possibilities, DMA Docket 393X, Tungsten-Copper, Sunrise Mine, Montana.

Attached is a copy of a memorandum directed to H. Gordon Poole, Chief, Nonferrous Metals Branch, from P. H. Floyd, Acting Head, Mineral Dressing Section, Northwest Electrodevelopment Laboratory, Albany, Oregon, dated November 7, 1951. This memorandum outlines the metallurgical test procedures and results on a copper-tungsten-gold ore sample from the Sunrise Mine, Granite County, Montana. This mine is being considered for an exploratory contract as a source of tungsten. I believe the original loan application was on the basis of the mine being a copper producer.

An analysis of the sample indicated the tin content to be 0.11 percent. The sample was insufficient in size for beneficiation tests to recover the tin.

My memorandum dated December 3, 1951, to you was to correct the tungsten analyses shown on page 2 of a memorandum dated June 15, 1951, to Mr. Tom Lyon, Chairman, Coordinating Committee, DMA, from Field Team, Region II. The June memorandum showed the analyses for samples 1 through 5 inclusive, to be 0.45, 0.28, 0.33, 0.29 and 0.28 percent tungsten trioxide. The correct results, based on a reassay, should be 0.23, 0.09, 0.14, 0.09 and 0.12 percent tungsten trioxide respectively. The average of these assays corresponds reasonably well with the average tungsten analyses of the 5 carload shipments.

The attached memorandum indicates that a 60.1 percent tungsten recovery was made in a scheelite concentrate containing about 16.9 percent tungsten trioxide from the head sample, which analyzed 0.105 percent tungsten trioxide. Using the 0.143 percent tungsten trioxide average analyses of the 5 carloads of ore shipped, 1.72 pounds of tungsten trioxide would be saved in a 16.9 percent concentrate at a 60 percent recovery. The value of the tungsten recovered per ton of ore mined, according to the purchase schedule of the U. S. Vanadium Corporation at Bishop, California, at $41.00 per short ton unit, would be $3.52 before deducting milling and shipping charges to Bishop. This can hardly be considered a tungsten ore.

The pyrite concentrate shown in the test data as Albany Assay No. 23141, contained 30.6 percent sulphur and 33.7 percent iron.

M. E. Volin, Chief, Mining Division,
Region II

December 11, 1951

J. D. Bardill

Discussion of tin and tungsten possibilities, DMA Docket 393X, Tungsten-Copper, Sunrise Mine, Montana.

Attached is a copy of a memorandum directed to H. Gordon Poole, Chief, Nonferrous Metals Branch, from P. H. Floyd, Acting Head, Mineral Dressing Section, Northwest Electrodevelopment Laboratory, Albany, Oregon, dated November 7, 1951. This memorandum outlines the metallurgical test procedures and results on a copper-tungsten-gold ore sample from the Sunrise Mine, Granite County, Montana. This mine is being considered for an exploratory contract as a source of tungsten. I believe the original loan application was on the basis of the mine being a copper producer.

An analysis of the sample indicated the tin content to be 0.11 percent. The sample was insufficient in size for beneficiation tests to recover the tin.

My memorandum dated December 3, 1951, to you was to correct the tungsten analyses shown on page 2 of a memorandum dated June 15, 1951, to Mr. Tom Lyon, Chairman, Coordinating Committee, DMA, from Field Team, Region II. The June memorandum showed the analyses for samples 1 through 5 inclusive, to be 0.45, 0.28, 0.33, 0.29 and 0.28 percent tungsten trioxide. The correct results, based on a reassay, should be 0.23, 0.09, 0.14, 0.09 and 0.12 percent tungsten trioxide respectively. The average of these assays corresponds reasonably well with the average tungsten analyses of the 5 carload shipments.

The attached memorandum indicates that a 60.1 percent tungsten recovery was made in a scheelite concentrate containing about 16.9 percent tungsten trioxide from the head sample, which analyzed 0.105 percent tungsten trioxide. Using the 0.143 percent tungsten trioxide average analyses of the 5 carloads of ore shipped, 1.72 pounds of tungsten trioxide would be saved in a 16.9 percent concentrate at a 60 percent recovery. The value of the tungsten recovered per ton of ore mined, according to the purchase schedule of the U. S. Vanadium Corporation at Bishop, California, at $41.00 per short ton unit, would be $3.52 before deducting milling and shipping charges to Bishop. This can hardly be considered a tungsten ore.

The pyrite concentrate shown in the test data as Albany Assay No. 23141, contained 30.6 percent sulphur and 33.7 percent iron.

J. D. Bardill

FILE COPY
SURNAME:

Guthrie

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

September 4, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Docket No. DMA 393X-Tungsten Copper Sunrise Mine, Queen Mining Syndicate

W. A. Moon

We have examined the Extension of Lease and Option attached to your recent memo on this subject and consider it adequate for the purposes of the exploration contract application.

The document in question and the other papers forwarded with it are returned herewith in order that they may be kept with the rest of the file on the case.

In addition to the extension and the information as to the yield of the ore which the letter of August 22, 1951 from Mr. Moon indicates is being obtained, the case requires a subordination agreement on the landlord form signed by the owners of the property.

J. L. Hofflund

not stripped in R. + R.

J. L. Hofflund
General Counsel

Attachment

RRGuthrie/ema

Copy to: R. R. Guthrie
J. L. Hofflund
Reports & Records
Chron.

A. G. C.

FILE COPY
SURNAME:

Blakemore
Mittendorf

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

Memorandum

TO: General Counsel, DMA

FROM: Director, PED of DMA

W. A. Noon

SUBJECT: Docket No. DMA 393X-Tungsten Copper
Sunrise Mine, Queen Mining Syndicate

Attached hereto is a copy of a letter to subject syndicate which was prepared by you. There is also attached a letter from W. A. Noon, Manager of Syndicate, of August 22, 1951 in reply thereto, together with a copy of "Extension of Lease and Option" - and a copy of Lease and Option.

Your opinion as to the adequacy of these documents may be required in the consideration of the Syndicate's Exploration Contract application.

In addition you will note that the question as to whether the tungsten content (a very small percentage) of the rock can be economically recovered is to be resolved before further consideration can be given to the application.

C. O. Mittendorf (J. H.)

Attachment

PBBlakemore/jem
8-29-51

cc to: Adm. Reading File
Reports & Records
Messrs: Mittendorf-Olund
Mr. Blakemore
Docket

not stripped in R. + R.

a. E. C.

Queen Mining Syndicate
W. A. Noon, Manager
P.O. Box 333
Drummond, Montana

Re: Docket DMA 3931, Tungsten-Copper
Sunrise Mine, Montana

Gentlemen:

Your letter of July 30, 1951 transmitting six copies of the Mortgator's Subordination Agreement in connection with the subject project has been received. There are, however, several defects in connection with it, as it now stands, which prevent further processing of an exploration contract.

The lease under which you assert the right to conduct the proposed exploration work does not run to you, but to William R. McLure, which lease expired on July 1, 1951. It will therefore be necessary for you to submit a copy of an assignment of the lease from Mr. McLure to the Queen Mining Syndicate. If the lease has been extended, you should send us a copy of the extension. If it has not been extended, you should obtain an extension in the name of the Queen Mining Syndicate and send it to us. If the extension runs to Mr. McLure, you should obtain an assignment of that extension to the Queen Mining Syndicate and send it to us.

It would appear from the lease that the Messrs. Murray and Maury are the owners and lessors of the mining claims on which the proposed exploration work is to be conducted. The subordination agreements which you furnished are, however, Mortgator Subordination Agreements. If, as it appears, you hold this property under an assignment of a lease from the Messrs. Murray and Maury and Mr. McLure, you should submit seven copi of a lessor's subordination agreement signed by the Messrs. Murray and Maury and seven additional copies of the lessor's subordination agreement signed by Mr. McLure. Please do not insert a date on the third line of these forms.

Of course, if there is a mortgage on the property, or if there are any other claims against it, seven copies of the appropriate subordination agreement, that is, the Mortgator's or Landlord's Subordination

Agreement should be obtained from each holder of such claim for attachment to each copy of the Exploration Contract.

The information you have furnished in regard to the tungsten content of the copper ore is not sufficient to justify the granting of an Exploration Contract for tungsten. In order to qualify for the allowances granted for the Exploration of tungsten ores, it will be necessary for you to furnish authentic reports of tests which would indicate that a reasonable recovery of tungsten in the form of a merchantable concentrate can be produced from the rock. The results of mill tests made on placer material to recover tungsten, which you have submitted do not show that similar tests have been made on the copper ore from the Sunrise Mine.

If you should require further information or assistance in preparing the papers and data referred to above, please contact the Executive Officer of the DMA Field Team in Spokane, Washington.

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

PBBlakemore/jem
8-13-51

cc to; Adm. Reading File
Mr. Mittendorf-Olund
Reports & Records
Docket
Field (2)
Mr. Blakemore

Agreement should be obtained from each holder of such claim for attachment to each copy of the Exploration Contract.

The information you have furnished in regard to the tungsten content of the copper ore is not sufficient to justify the granting of an Exploration Contract for tungsten. In order to qualify for the allowances granted for the Exploration of tungsten ores, it will be necessary for you to furnish authentic reports of tests which would indicate that a reasonable recovery of tungsten in the form of a merchantable concentrate can be produced from the rock. The results of mill tests made on placer material to recover tungsten, which you have submitted do not show that similar tests have been made on the copper ore from the Sunrise Mine.

If you should require further information or assistance in preparing the papers and data referred to above, please contact the Executive Officer of the DMA Field Team in Spokane, Washington.

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

PBBlakemore/jem
8-13-51

cc to; Adm. Reading File
Mr. Mittendorf-Olund
Reports & Records
Docket
Field (2)
Mr. Blakemore

FILE COPY
SURNAME:

Blakemore
Mittendorf (J.H.)

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

August 8, 1951

a. E. C.

MEMORANDUM

TO: Mr. Hofflund, General Counsel, DMA

FROM: C. O. Mittendorf, Director PED pf DMA

Goon, W.A.

SUBJECT: Review of draft of proposed letter to Queen Mining Syndicate, Docket DMA-393X Tungsten-Copper, Sunrise Mine Montana

Your opinion of the attached draft of proposed letter is requested.

C. O. Mittendorf (J.H.)

C. O. Mittendorf

PBBlakemore/jem
cc to: Mr. Hofflund-Courtesy
Mr. Mittendorf-Olund
Mr. Blakemore
Reports & Records
Docket

340

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

July 31, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951
LANDON F. STROBEL
Executive Secretary

Mr. George B. Holderer
Chief, Tungsten Branch
Defense Minerals Administration
Washington 25, D. C.

Dear Mr. Holderer:

In reply to your letter of July 25 with reference to the Sunrise mine, DMA 393X, we have been in contact with Mr. W. A. Noon, the applicant. Mr. Noon informed us that the subordination agreements had been sent to Senator Murray in Washington for signature by him and by his son, Charles A. Murray. The subordination agreements were then to be sent directly to your office. However, Mr. Noon informed us this morning by phone that Senator Murray had returned the signed subordination agreements to him. Mr. Noon is sending these directly to you. I hope that this will clear up the matter.

Sincerely yours,

A. E. Weissenborn

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

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

340

July 25, 1951

W. A. Moon

A. E. R

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

In reply please refer to:
DMA-393-I — Tungsten

Dear Mr. Weissenborn:

Mr. Moon's application on his Sunrise Mine was approved jointly with the Copper Branch and forwarded to the Production Expansion Division.

Mr. Blakesore in Production Expansion Division reports that he is stymied in processing the application further until you obtain the various subordination agreements about which he informed you.

Very truly yours,

George B. Holderer
jass

George B. Holderer
Chief, Tungsten Branch

TJBallard:awj

cc:File
Adm. Reading File
Reports & Records Unit
DMA Field Team II
Mr. Holderer

FILE COPY
SURNAME:

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

JUL 18 1951

W. A. Noon
A. E. C.
Blakemore
Mittendorf

A. E. Weissenborn
Executive Officer
DMA Field Team, Region IV
South 157 Howard Street
Spokane 8, Washington

Re: Docket DMA 393-X
Tungsten and Copper
Sunrise Mine, Montana
Queen Mining Syndicate

Dear Mr. Weissenborn:

We find the following items are lacking in the original and five copies of the Exploration Contract covering the subject property which were mailed by you on June 20, 1951 to the Executive Secretary.

1. The Operator's (W. A. Noon) mailing address.
2. A copy of the Operator's lease or a statement from you that you have examined it and found that is has sufficient time to run to cover a future productive period.

We note that you expect to forward the subordination agreement in the near future.

In addition, it is particularly desirable, in this instance from the Governmental viewpoint, to have the Operator rent all or as much as possible of the equipment which he has listed in Exhibit C -- "to be purchased". It is requested that you discuss this feature with the Operator and endeavor to reduce the amount to be purchased as much as possible.

Sincerely yours,

C. O. Mittendorf

APPROVED:

C. O. Mittendorf, Director
Production Expansion Division

Chairman, Coordinating Committee

Member, Bureau of Mines

Member, Geological Survey

PBBlakemore/meh
cc to: Mr. Mittendorf, Olund
Mr. Moon
Mr. Thayer
Mr. Holderer
Mr. Lyon
Mr. McKnight
Mr. Blakemore
Field II (2)
FILES

FILE COPY
SURNAME:

340 Ballard
Holderer

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

July 25, 1951

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

In reply please refer to:
DMA-393-X — Tungsten

Dear Mr. Weissenborn:

Mr. Noon's application on his Sunrise Mine was approved jointly with the Copper Branch and forwarded to the Production Expansion Division.

Mr. Blakemore in Production Expansion Division reports that he is stymied in processing the application further until you obtain the various subordination agreements about which he informed you.

Very truly yours,

George B. Holderer
Jan
George B. Holderer
Chief, Tungsten Branch

TJBallard:awj

cc:File
Adm. Reading File
Reports & Records Unit
DMA Field Team II
Mr. Holderer

DMA 393

856

A. E. Weissenborn
Executive Officer
DMA Field Team, Region IV
South 157 Howard Street
Spokane 8, Washington

Re: Docket DMA 393-K
Tungsten and Copper
Sunrise Mine, Montana
Queen Mining Syndicate

Dear Mr. Weissenborn:

We find the following items are lacking in the original and five copies of the Exploration Contract covering the subject property which were mailed by you on June 20, 1951 to the Executive Secretary.

1. The Operator's (W. A. Moon) mailing address.
2. A copy of the Operator's lease or a statement from you that you have examined it and found that is has sufficient time to run to cover a future productive period.

We note that you expect to forward the subordination agreement in the near future.

In addition, it is particularly desirable, in this instance from the Governmental viewpoint, to have the Operator rent all or as much as possible of the equipment which he has listed in Exhibit C — "to be purchased". It is requested that you discuss this feature with the Operator and endeavor to reduce the amount to be purchased as much as possible.

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

APPROVED:

Chairman, Coordinating Committee

Member, Bureau of Mines

Member, Geological Survey

PBBlakemore/meh
cc to: Mr. Mittendorf, Olund
Mr. Moon
Mr. Thayer
Mr. Holderer
Mr. Lyon
Mr. McKnight
Mr. Blakemore
Field II (2)
FILES

FILE COPY
SURNAME:

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

July 13, 1951

Holderer
Selfridge

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

In reply please refer to:
DMA-393-X — Tungsten

Dear Mr. Weissenborn:

Recently we have had several inquiries concerning the application of the Sunrise mine, Granite County, Montana. In your letter of May 31 mention was made that the field report would be submitted when certain assays were received. Will you please inform us of the status of the report.

Very truly yours,

George B. Holderer

George B. Holderer
Chief, Tungsten Branch

GCSelfridge:awj

cc:File
Adm. Reading File
Reports & Records Unit
Mr. Holderer

June 29, 1951

Form MF-100, 12-c
Re- Placer. Tungsten
W. A. Koon - DMA 393X

Department of the Interior
Defense Minerals Administration
Requirements Division MO-7
New Interior Bldg. Washington, D.C.

Dear Sirs:

In answering question No. 12, your form MF-100, it seems advisable to explain that the writer is also interested in a tungsten placer project which takes in the upper Henderson Creek Canyon and concerning which there was correspondence with the Tungsten Department of the DMA (given No. 1060 in their files) which would be available to you. However, for your convenience in acting on serial number application, will repeat said information;-

This placer workings lies at the base of Sunrise Mountain at the head of Henderson Creek (above the Henderson Gulch Dredge area already worked) in Granite County, Montana. It is a drag-line, washing-plant operation and consists of 218,592 tested ground, minimum yardage @ $1.15 per yd. (plug gold content around $.2279 per yd.) There is, in addition, an indicated probable yardage of 1,500,000 yds. hillside deposit of decomposed granite at better values which will be worked with same equipment. A table of results of 1951 testing by drilling and shafting is attached. (Further testing was unnecessary as the writer is well acquainted with the canyon and its commercial values having done all the testing and drilling on the lower five miles of Henderson Creek in connection with the dredge operation of which he was manager.)

Gravel is medium, some larger rocks from hillside talus, is loose, no stumps or bolders to contend with etc. surface will be cleaned with bulldozer. Bedrock is decomposed granite, some hard ribs balance soft and smooth. Overburden approximately 10' average, loose, sidehill wash.

Located on County road, 4 miles distant from N.P. station of Stone, Montana, and 18 miles from Drummond,. Water adequate, available from Henderson Creek and pond storage. Electric power on property 3/4¢ per Kw.Hr. estimated 100 H.P. Labor available this district crew probably 14 for two shifts. List of Equipment to be used ;- 1½ Yd. N.W. Drag-line, washing Plant on cat-treads, one HD 7 cat, Jig plant;- 4 Pan American Rougher Jigs, 1 2-cell P.A.Cleaner jig, amalgamating bbl., bins, storage, etc. The equipment is now being purchased for operation and being moved to the property. The plan calls for acq uiring the Shore Plant already constructed and in good operating condition to raise the tungsten concentrates to a grade of 60% or better (as has been done for past 10 years in connection with the dredge operation on the lower creek.)

W. A. Koon

TABLE OF RESULTS of drill-hole checking, May, 1951, and bank pits located on north rim of canyon.

| Crosscut | Drill Hole | Depth | Value of gold | Value of $WO_3$ | |
|---|---|---|---|---|---|
| 400 | #2 | 26 ft | $.1607 | $ .94 per yd | |
| 1900 | #2 | 20 ft | .2295 | 2.14 " " | |
| 2200 | #2 | 20 ft | .2935 | .37 " " | |
| | Average | 22 ft | .2279 | 1.15 | $1.38 |

Bank Pits Average depth 4', average width 24"

| | | | |
|---|---|---|---|
| A | Aprox 100 ft E of CC 400 | 1.78 | |
| B | " 100 ft E " 1900 | 2.50 | |
| C | " half between 400 & 1900 | 1.16 | |
| D | " " " " & E. end of ground | 1.32 | |
| E | " " " Pit D " " " " " | .56 | |
| G | " 50 ft S. of Pit D (check sample) | 1.10 | |
| | Average | | 1.413 |

Addendum To MF-100
WA Noon – Drummond-Mont.
Page-3 – "12-c"

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

June 23, 1951

Mr. Landon F. Strobel
Executive Secretary, DMA
Department of Interior
Washington 25, D. C.

Dear Mr. Strobel:

W. A. Noon

Enclosed are six copies of a map showing the proposed exploration at the Sunrise mine, Granite County, Montana (DMA-393X) These are part of "Exhibit A" of the proposed contract sent to you by this office on June 20, 1951, and should be substituted for the larger maps now attached.

Also enclosed are six copies of a sketch map of the Columbia Tungsten property (DMA-520), Stevens County, Washington, which should accompany the memorandum on this property sent to you on the same date.

These maps were misplaced when the above material was sent in and have just been found.

Sincerely yours,

Allan B. Griggs

Allan B. Griggs
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

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

June 20, 1951

Mr. Tom Lyon
Chief, Supply Division
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Dear Mr. Lyon:

Enclosed are four sets of maps to accompany a memo from the Field Team, Region II, on the Sunrise mine, DMA-393. The memo was sent via airmail.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

A. E. Weissenborn
Executive Officer
DMA Field Team, Region IV
South 157 Howard Street
Spokane 8, Washington

Re: Docket DMA 393-X
Tungsten and Copper
Sunrise Mine, Montana
Lucky Mining Syndicate

Dear Mr. Weissenborn:

We find the following items are lacking in the original and five copies of the Exploration Contract covering the subject property which were mailed by you on June 20, 1951 to the Executive Secretary.

1. The Operator's (W. A. Moon) mailing address.
2. A copy of the Operator's lease or a statement from you that you have examined it and found that it has sufficient time to run to cover a future productive period.

We note that you expect to forward the subordination agreement in the near future.

In addition, it is particularly desirable, in this instance from the Governmental viewpoint, to have the Operator rent all or as much as possible of the equipment which he has listed in Exhibit 3 — 'to be purchased'. It is requested that you discuss this feature with the Operator and endeavor to reduce the amount to be purchased as much as possible.

Sincerely yours,

C. A. Fittendorf, Director
Production Expansion Division

Approved:

Chairman, Coordinating Committee

Member, Bureau of Mines

Member, Geological Survey

FBBlakemore/mch
cc to: Mr. Fittendorf, Glund
Mr. Moon
Mr. Thayer
Mr. Holderer
Mr. Lyon
Mr. McKnight
Mr. Blakemore
Field II (7)
FILES

June 19, 1951

Mr. W. A. Noon
Drummond
Montana

Subject: DMA-393X
Re: Exploration Loan -
Sunrise Mine

My dear Mr. Noon:

Receipt is acknowledged of your application and attachments of May 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-393X and referred to Mr. George Holderer, Chief, Tungsten Branch on June 6, 1951.

In any future correspondence relating to your application, kindly refer to DMA-393X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
Holderer
Lyon

FILE COPY
SURNAME:

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

June 19, 1951

Mr. W. A. Noon
Drummond
Montana

Subject: DMA-393X
Re: Exploration Loan -
Sunrise Mine

My dear Mr. Noon:

Receipt is acknowledged of your application and attachments of May 28, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-393X and referred to Mr. George Holderer, Chief, Tungsten Branch on June 6, 1951.

In any future correspondence relating to your application, kindly refer to DMA-393X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel jc
Executive Secretary

L. F. Strobel:jc
cc: Strobel
✓File
Holderer
Lyon

a.E.C

June 15, 1951

Mr. W. A. Noon
Drummond, Montana

In reply please refer to
DMA-1065

Dear Mr. Noon:

No individual purchase contracts are being negotiated as the five-year tungsten program is deemed a sufficient committment. However, you should register your intention to participate in the program before June 30, as suggested on page two of the tungsten regulation enclosed.

In respect to a loan, you might ask your bank to request the Federal Reserve to initiate an application for V-loan guarantee, as we believe the purchase program can be sufficient to qualify your project under Section 301 of the Defense Production Act.

Very truly yours

P. R. Bradley

P. R. Bradley, Jr.
Chief, Tungsten Branch

Enclosure

TJBallard:AWJ

cc:Adm. Reading File
Mr. Strobel
Mr. Holderer
Files

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

So. 157 Howard Street
Spokane 17, Washington

June 15, 1951

Memorandum

To: Tom Lyon, Chairman
Coordinating Committee
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

From: Field Team, Region II

Subject: Contract, Loan Application, DMA Docket No. 393
W. A. Noon, Sunrise mine, Box 333, Drummond, Montana

It is recommended that the application for an exploration loan of W. A. Noon and Associates, Queen Mining Syndicate, for the Sunrise mine be granted and a contract made in the amount asked. Competent reports by John W. Cole, Bureau of Mines RI-4689, 1950, and J. R. Reynolds, private report, 1948, estimate the reserves as follows:

Indicated ore -- 33,000 short tons
Inferred ore -- 578,100 short tons

Cole is more conservative in estimating 50 percent as minable ore or 305,500 tons. The average grade, based on past production from the sulfide zone (7,396 tons), is given as: gold 0.212 ounces per ton, silver 1.35 ounces per ton, and copper 2.38 percent.

Recently it was found that the Sunrise ore bears tungsten in the form of scheelite. Assays of carload lots, 40 to 50 tons, are as follows:

| Date of shipment | Dry weight pounds | Percent WO3 | Percent Cu |
|---|---|---|---|
| 2-16-51 | 75,653 | 0.065 | 3.07 |
| 4-12-51 | 97,329 | 0.154 | 2.46 |
| 5-2--51 | 77,252 | 0.085 | 2.05 |
| 5-17-51 | 1/ | 0.260 | 2.27 |

1/ Weight not available.

The estimated average of these assays is .143 $WO_3$. It should be noted that the tungsten content has generally increased as the amount of oxidized material in the ore shipped decreased. This can be observed from the above shipments, which have had decreasing amounts of oxidized ore in them.

The Bureau of Mines collected 200 pounds in five samples from the ore bin in May 1951, which assayed as follows:

| Sample No. | $WO_3$ Recovery % | Percent $WO_3$ | Percent Cu |
|---|---|---|---|
| 1 | .23 | .45 | 2.5 |
| 2 | .09 | .28 | 2.6 |
| 3 | .14 | .33 | 2.7 |
| 4 | .09 | .29 | 2.7 |
| 5 | .12 | .28 | 3.45 |

All of these samples of ore mined from two small stopes at the north end of the main drift indicate a tungsten content of ±0.2 percent $WO_3$. Scheelite also is known to occur in the No. 3 West drift. If the tungsten content of the ore continues as high as indicated by the assays, this commodity will have a net value commensurate with that of the copper. This is shown by the gross values per ton of the economic metals: $WO_3$ 0.2 percent-$13.00, Cu 2.38-$9.65, Au 0.212 ounces-$7.42, and Ag 1.38 ounces-$1.21. Tungsten test work now in progress, although not altogether completed, indicates that no unusual difficulty should be experienced in the recovery of the scheelite by the usual concentration methods. The copper content of the ore is fairly well established, and an exploration loan of 50-50 participatition based on copper is well justified. The amount of evidence on the tungsten content is sketchy in comparison, but may be sufficient to justify 75 percent Government participation. There is no geologic evidence that the tungsten content will not remain as good as indicated.

The applicant was unwilling to ask for an exploration loan based on the copper content of the ore.

The general setup of the mine in reference to power, water supply, and accessibility is favorable. P. A. Moon is competent to supervise the exploration, and it is believed that the work can be completed within the time allotted.

The project as outlined is exploratory in nature and is set forth to reasonably delineate an undeveloped portion of the deposit to find if there are sufficient reserves of tungsten-copper ore to warrant the erection of a 150-ton concentration plant.

By Field Team, Region II

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

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

March 16, 1951

Re: Docket No. DMA-393

Mr. W. A. Noon
Drummond
Montana

Dear Mr. Noon:

We wish to acknowledge and to thank you for your letter of March 6, 1951 and it will be added to our file on Docket No. DMA-393.

A copy of your letter will be forwarded to the Executive Officer of Defense Minerals Administration Field Team, Region II, South 157 Howard Street, Spokane, Washington.

Very truly yours,

Tom Lyon, Chief
Copper Branch

JWAlt:pf

Copy to: Executive Officer, DMA Field Team, Region II,
South 157 Howard Street, Spokane, Washington w.c.i.
Executive Secretary w.c.i.
Copper Commodity Committee w.c.i.
Files

W. A. NOON
Phone 2551 or 2741
DRUMMOND, MONTANA

Mar. 6, 1951

Mr. Tom Lyon, Chief
Copper Branch
Defense Minerals Administration

Docket DMA393

Dear Mr. Lyon:

In reference to our letters of March 1st and earlier, subject tungsten content in SUNRISE MINE ores, as you know we are stoping ore at the face of what is known as the Main Tunnel which has just entered the sulphide ore-body (see Reynold's maps) and this stope is a large stope being a seeming swell in the bedding plane vein, in some places 7 ft. thick. About three weeks ago a streak of scheelite came in on the foot-wall side of this vein, being about 16 inches wide, and we ran a few car assays on this which, of course, would include the whole vein matter. These assays were on total car shipments of ore going to the smelter at Anaconda and cut by the Washoe Sampler at Butte. These assays ran .06 percent (plus) in $WO_3$.

In the last few days the streak on the foot wall has increased to 36 inches wide and is a very fair showing of scheelite in the sulphide ore. And the scheelite is now showing somewhat at the top of the vein. The writer cut a small sample trying not to get highgrade, and we herewith enclose a copy of the result, (our assay No. 2009) Since taking this sample the looks of the showing has improved under the blue light.

The SUNRISE MINE is situated in a tungsten district. Practically all former testing has been done in oxide zones. We cannot tell what may happen until we drive fartherinto the sulphide ore and there is a possibility that within the sulphide zone a sizable amount tungsten, of commercial grade, may be encountered.

We sill keep you advised as to further developments.

Yours very truly

/s/ W. A. Noon

W. A. Noon

WAN:M
1 enc

COPY

MONTANA LABORATORY COMPANY
CHEMISTS AND ASSAYERS

Philipsburg, Montana, Feb. 23, 1951

The Folloring Analyses Were Made For W. A. Noon

| | per cent $H_2O$ | Ozs Silver Per Ton | Ozs Gold Per Ton | $ Gold Per Ton | Per Cent | Per Cent Mn. Dioxide |
|---|---|---|---|---|---|---|
| | | | | | $WO_3$ | |
| #2009 | | | | | 0.72 | |

Montana Laboratory Company

By /s/ M. L. Degendant

COPY

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

January 19, 1951

Memorandum

Re: DMA - 393
Sunrise Mine,
Montana

To: Operating Committee

From: Copper Committee

Apparently the applicant has in mind a $25,000 loan to finance a 539-foot adit to intersect a vein 367 feet below the surface.

This appears to be an exploration project and hence is deferred pending the announcement of procedures in negotiating exploration contracts.

Attached is a proposed letter to the applicant.

J. K. RICHARDSON

J. K. Richardson
Chairman, Copper Committee

JKR:apd

Cc - Mr. Strobel - 4623
Operating Committee (2)
Copper Commodity Committee - 3425
Files

APPROVED:

C. O. MITTENDORF

C. O. Mittendorf

J. H. Hedges

J. H. Hedges

Olaf N. Reve

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

January 19, 1951

Mr. W. A. Noon
Drummond, Montana

Re: DMA - 393
Sunrise Mines,
Montana

Dear Mr. Noon:

Your application for assistance under the Defense Production Act of 1950 was given the above docket number for future reference.

The application has been considered by the Copper Branch with the conclusion that this is primarily an exploration project. As yet the details have not been worked out to handle exploration projects.

Until those procedures are announced, we can only suggest that you estimate what terms can be offered regarding the eventual hoped-for production. For instance we would need to know:

a) Size of loan or purchase contract and terms of repayment
b) Production schedule
c) Details of proposed expenditure
d) Costs per pound of copper produced

In addition we would like more sample and reserve data to support.

Sincerely yours,
J. K. RICHARDSON

J. K. Richardson
Chief, Copper Branch

JKR:apd

Cc - Mr. Strobel - 4623
Copper Commodity Committee - 3425
Files

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

June 20, 1951

DMA 393X

Air Mail

Mr. L. F. Strobel
Executive Secretary
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Dear Mr. Strobel:

Enclosed are four copies of a field team memo re the Sunrise mine, Docket DMA 393. Also enclosed are six copies of a contract, complete with all exhibits. The costs have been determined by the Bureau of Mines and the proposal has been discussed with Mr. Noon; a few minor changes have been made since, but these are not significant and do not affect the overall costs. The subordination agreement is in the hands of the applicant and will be forwarded as soon as received.

Pending receipt of

Please forward this material to the Copper Branch.

Sincerely,

Enclosures

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

P.S. Four sets of maps to accompany the field team memo are being sent to Tom Lyon via regular mail.

A. E. W.

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

So. 157 Howard Street
Spokane 17, Washington

June 15, 1951

Memorandum

To: Tom Lyon, Chairman
Coordinating Committee
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

From: Field Team, Region II

Subject: Contract, Loan Application, DMA Docket No. 393
W. A. Noon, Sunrise mine, Box 333, Drummond, Montana

It is recommended that the application for an exploration loan of W. A. Noon and Associates, Queen Mining Syndicate, for the Sunrise mine be granted and a contract made in the amount asked. Competent reports by John W. Cole, Bureau of Mines RI-4689, 1950, and J. R. Reynolds, private report, 1948, estimate the reserves as follows:

Indicated ore -- 33,000 short tons
Inferred ore -- 578,100 short tons

Cole is more conservative in estimating 50 percent as minable ore or 305,500 tons. The average grade, based on past production from the sulfide zone (7,396 tons), is given as: gold 0.212 ounces per ton, silver 1.35 ounces per ton, and copper 2.38 percent.

Recently it was found that the Sunrise ore bears tungsten in the form of scheelite. Assays of carload lots, 40 to 50 tons, are as follows:

| Date of shipment | Dry Weight pounds | Percent WO3 | Percent Cu |
|---|---|---|---|
| 2-16-51 | 75,653 | 0.065 | 3.07 |
| 4-12-51 | 97,329 | 0.154 | 2.46 |
| 5-2--51 | 77,262 | 0.085 | 2.05 |
| 5-17-51 | 1/ | 0.260 | 2.27 |

1/ Weight not available.

The estimated average of these assays is .143 $WO_3$. It should be noted that the tungsten content has generally increased as the amount of oxidized material in the ore shipped decreased. This can be observed from the above shipments, which have had decreasing amounts of oxidized ore in them.

The Bureau of Mines collected 200 pounds in five samples from the ore bin in May 1951, which assayed as follows:

| Sample No. | Percent $WO_3$ | Percent Cu |
|---|---|---|
| 1 | .45 | 2.6 |
| 2 | .28 | 2.6 |
| 3 | .33 | 2.7 |
| 4 | .29 | 2.7 |
| 5 | .28 | 3.45 |

All of these samples of ore mined from two small stopes at the north end of the main drift indicate a tungsten content of ±0.2 percent $WO_3$. Scheelite also is known to occur in the No. 3 West drift. If the tungsten content of the ore continues as high as indicated by the assays, this commodity will have a net value commensurate with that of the copper. This is shown by the gross values per ton of the economic metals: $WO_3$ 0.2 percent-$13.00, Cu 2.38-$9.66, Au 0.212 ounces-$7.42, and Ag 1.35 ounces-$1.21. Tungsten test work now in progress, although not altogether completed, indicates that no unusual difficulty should be experienced in the recovery of the scheelite by the usual concentration methods. The copper content of the ore is fairly well established, and an exploration loan of 50-50 participatition based on copper is well justified. The amount of evidence on the tungsten content is sketchy in comparison, but may be sufficient to justify 75 percent Government participation. There is no geologic evidence that the tungsten content will not remain as good as indicated.

The applicant was unwilling to ask for an exploration loan based on the copper content of the ore.

The general setup of the mine in reference to power, water supply, and accessibility is favorable. W. A. Noon is competent to supervise the exploration, and it is believed that the work can be completed within the time allotted.

The project as outlined is exploratory in nature and is set forth to reasonably delineate an undeveloped portion of the deposit to find if there are sufficient reserves of tungsten-copper ore to warrant the erection of a 150-ton concentration plant.

By Field Team, Region II

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

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

MF-200
(June 1951)

Docket No. DMA _____
Commodity _____

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

## EXPLORATION PROJECT CONTRACT [1]

No date

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Queen Mining Syndicate, a partnership, W A Noon, Manager

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Granite described as follows: [3] the Sunrise Mine, consisting of 21 patented lode claims and 5 unpatented lode claims and a tract of homestead land containing 7.3 acres lying principally in Section 35, T. 9 N., R. 14 W.

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

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: _____

(*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 60 days from the date of this contract shall commence work on a project of exploration for [5] Copper.; 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] 18 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 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,000.00, which is 50 percent of the agreed estimated total cost of this project, $60,000.00.

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

---
(Operator)

By ----------

By ----------

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

Notes by H.F. Keller

DMA-393. Copper, Tungsten
W.A. Noon, Manager
Sunrise Mining Syndicate

I Project:

| | |
|---|---|
| Rehabilitation of main adit and Reopen No 1 West Drift | $ 4,800.00 |
| 880 ft. of Drifting at $25.00 - | $ 22000.00 |
| 210 ft of Raising @ 30.00 | 6300.00 |
| Equipment to purchase | 20,900.00 |
| Supervision, eng. account. | 6000.00 |
| Total. | |

II Basis.

Applicant applied for Explor. for Tungsten with Gov. participation of 75%.

Assays for Tungsten show average of about 0.15% of which 50-60% can be recovered by grinding tailings of flotation to minus 200 mesh and then tabling, thus obtaining a 16% $WO_3$ Concentrate which will be difficult to reconcentrate to higher grade.

As average assays of other metals are the following. Au .212 Og, Ag 1.35 Og, and Cu 2.38%., and there recoverable values are much greater than for $WO_3$ it appears that Copper explor. should be the basis of the project.

Recommendation:

That if the contract is granted, it be granted for Explor. for Copper with participation of the gov. at 50%.

Exploration Project.

1 Straighten out main tunnel (Development) (to improve haulage)
2 Drift North on Main Level 550 ft. (Exploration)
3 Open and rehabilitate No 1 West Tunnel. (Development)
4 Drift North 330 ft. on No 1 West " face (Exploration)
5 Raise from Main Tunnel to No. 1 West " (Explor. Dev. Vent.)

Drifts will follow vein as will the raise.

Comments:

While all this work could be considered as Development, it also can be classed as Explor. with the exception of No 1 and No 3

Costs

Drifting @ $25.00/ft.
Raising @ $30.00/ft.

These costs include all costs of materials used in the project with the exception of equipment.

Equipment:

| | |
|---|---|
| 320 ft Compressor and motor. | $5000.00 |
| 1 Mucking Machine. | 3000.00 |
| 1 Air Hammer | 2500.00 |
| 4 Mine Cars | 1600.00 |
| 2 Air Slushers? @ $2000.00 | 4000.00 |
| 2 Stopers | $800.00 |
| 1 I.R. automatic Drifter | 600.00 |
| Miscellaneous | 1500.00 |
| Contingencies | 1900.00 |
| Total | 20,900.00 |

# Appex I

The following patented lode Mining claims held under lease and option to buy.

| Claim | | | | | Survey No. |
|---|---|---|---|---|---|
| Sunday Quartz | Lode | Mining | Claim | | 4692 |
| Free Trade | " | " | " | " | 4582 |
| Nugget | " | " | " | " | 4689 |
| Russell | " | " | " | " | 4688 |
| Pine | " | " | " | " | 4475 |
| Protection | " | " | " | " | 4476 |
| Queen | " | " | " | " | 4392 |
| Toe Calk | " | " | " | " | 4395 |
| Float | " | " | " | " | 4540 |
| Inbetween | " | " | " | " | 4539 |
| Treble | " | " | " | " | 4541 |
| Armadilla | " | " | " | " | 4555 |
| Sunol | " | " | " | " | 4394 |
| Sunrise | " | " | " | " | 2697 |
| Oakland | " | " | " | " | 4690 |
| Irree | " | " | " | " | 4562 |
| Maria | " | " | " | " | 7241 |
| Maud S | " | " | " | " | 4393 |
| Gaylord | " | " | " | " | |

Lease includes only that portion of the Maud S. and Gaylord claims which is North of the south line of the County Road.

Also the following unpatented claims
Robinson, Frog, Heel Calk, Jennie Y., May, Eagle's Nest,

and the following tract of land.
7.3 Acres of Homestead land in Section 35, T.9N., R.14 W., M.P.M.

Also the following mining claims.

| | | | | | Survey No |
|---|---|---|---|---|---|
| The Addie | Quartz | Lode | Mining | Claim | 6342 |
| Nellie | " | " | " | " | 6343 |
| Sunflower | " | " | " | " | 5394 |
| Bellflower | " | " | " | " | 5393 |

Exploration Project Contract
Queen Mining Syndicate.
W.A. Noon, Manager
Docket No DMA-393 X.

Same as proposed in original contract.

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

Docket Copy

Originals summoned by Bentry Dessinger Keller Ellis

2/14/52

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

Dear Sir:

I attach "Review of Application for Exploration / Development" [illegible]

Applicant: Queen Mining Syndicate, c/o W. A. Noon

Docket No. 393

Commodity: Tungsten

Amount: $ 60,000.00

I have expedited consideration of the application with particular reference to the points raised in the attached "Review".

Sincerely yours,

(signed) FRANK E. JOHNSON
(HB)
Chairman, Operating Committee
Defense Mineral Exploration
Administration

APPROVED:

J. H. Hedges (HB)
Director, Bureau of Mines

L. P. Thayer (HB)
Director, U. S. Geological Survey

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 393

Commodity Tungsten

Total Amount $60,000.00

Govt. Participation 75%

1. Name and Address of Applicant Queen Mining Syndicate, c/o U. A. Noon
P.O. Box 333
Drummond, Montana

2. Location of Property Sunrise Mine

Granite County, Montana

Section 35, T. 9 N., R. 14 W.

3. Mineral or metal Tungsten and Copper Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery--based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know--needs field examination Needs field examination

e) Is there an alternative and favorable project? Unknown
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future

productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202? _____

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? Field team should discuss these items with applicant.

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

_____

Is a field check needed on this point? Discuss with applicant

10. Exhibit A. (question 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Will require geological maps of tunnel headings.

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is? _____

_____

_____

_____

Is this part a worthwhile exploration project? Yes

d) Are the cost estimates detailed? Not sufficient detail.

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Unknown

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? No If so, attach a draft.

c) Is a field check needed? Yes

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Unknown

d) Is a field check needed? Yes

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? Unknown

c) Is the schedule excessive for the work proposed? Unknown

d) Are the proposed wages and salaries reasonable? Unknown

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? Unknown

d) Field check needed? Yes

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Investigate, map and sample ore occurrence in north face of main tunnel and stopes. Prepare any cross sections you consider useful. Consider both the copper and tungsten content of the ore. Consider carefully the Metallurgical difficulty as outlined in the attached metallurgical report. Is it necessary to straighten the main drift at cost of $2,500 for exploration work? Secure records of any recent shipments made by applicant. Let us have your opinion on the applicant's plan of operations. Which work should be done first and how much drifting and raising is justified?

Reviewed by: Glenn G. Gentry

Enclosures:
MF-100
MF-103
Copy of letter to Mr. Lyon, Mar. 6, 1951
Copy of letter to Mr. Noon, Mar. 16, 1951
Copy of memo to Mr. Lyon, 6/15/51
Copy of detailed cost data as of 6/18/51
Copy of memo from Mr. Volin (1/3/52) enclosing copy of a discussion of Sn and WO3 by Bardill dated 12/11/51 and a metallurgical report by Floyd dtd 11/7/51
Copy of letter to Mr. Noon, Jan. 31, 1952
Copy of R. I. 4513
Copy of R. I. 4689
Copy of maps

Date Feb. 14, 1952

Note: Please return the above listed documents with the field team report.



Refer to: Following Page

The applicant believes that a loan should be granted on a 25-75 basis. However, the Washington Office is of the opinion that a basis of 50-50 would be more applicable due to the low tungsten content in the crude ore and the difficult metallurgy involved in the separation of the tungsten and copper. Refer to Mr. Ellis letter of January 30, 1952, to Mr. Noon, copy of which is attached.

Mr. Noon has reported new or additional showings of tungsten ore and if these showings are sufficient in grade and tonnage, perhaps a compromise agreement may be indicated.

DMR 393X

2/1/52 jem 700

Air Mail

JAN 31 1952

Mr. W. A. Noon
Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Re: DMA 393X (Copper-Tungsten)
Sunrise Mine
Granite County, Montana

Dear Mr. Noon:

Your subject application for Government assistance in the exploration of the Sunrise Mine for tungsten and copper has been carefully studied by both the Iron and Ferro-Alloy Division and the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration.

Because of the relatively low tungsten content in the crude ore and the difficult and complex metallurgy involved in the extraction of the tungsten, this department is of the general opinion that the application, if granted, should be based on exploration for copper, with government participation at 50% of the estimated cost.

If you concur with this opinion, we shall be pleased if you will advise us to that effect as soon as is convenient so that we may continue consideration of your application.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Acting Chief
Rare and Misc. Metals Division
Defense Minerals Exploration
Administration

HFKeller/gla 1-30-52
cc to: Adm. Reading File
Docket
Messrs. Johnson, C. H. Rm. 3621
Nelson, Ned. Rm. 4216 G.S.
Ellis
Keller
Field Team, Region II (2)

Notes by Gentry - 1-18-52

1-18-52
By Gentry

Notes

USBM Report - Dec. 11-51

Average $WO_3$ analysis of 5 Samples:
0.23
0.09
0.14
0.09
0.12
.67 = 0.134% $WO_3$

5 Carload Shipments avg 0.166% $WO_3$

Jan. 4-52
Files not Complete.
Waiting for Landlords Subordination Agreement.

Recovery 60.1%

Value per ton of Ore mined: $3.52

This Could hardly be Considered a Tungsten Ore.

Apr. 25-51

Copper Branch Reports: 33,000 Tons Probable Ore
83,000 " Possible "
495,000 " geologic "

of which USBM Reports 305,500 tons Can be extracted having an average Grade of:
0.212 Au
1.35 Ag.
2.38 Cu.

{Present production at Rate of 500 tons per month}

operating Costs $7.125 per ton
Net profit $5.356 "

Note: difficult & Complex metallurgy - Low Recovery will probably Reduce this apparent net profit. Capital investment in plant will be high.

75% —
50% →

{Lease for 5 years dated July 6, 46 has expired.
8% Royalty on Shipping Ores - 5% Royalty on ~~Ore sorted~~ Concentrates.

July 1-1951 - Lease has been extended for 4½ years to Dec. 31, 1955 -

{Question of Economic Recovery of the tungsten noted by letter from Mittendorf to General Counsel, dy. 8-29-51

6-27-51 - Reviewed by Gowan & Holderer on 6-27-51: DMA Field Team Recommends that the Application be approved and a Contract made in the amount asked. Copper is principal metal but Tungsten is present in Sufficient quantity to Justify 75% Govt. Participation. The Copper Branch Concurs. Since Copper Branch believes total amount can be paid back by Copper alone, Tungsten Branch will O.K. this Application. (Approved by Tom Lyon.)

Notes by Geoffrey: 1-18-52

Work to be performed for $60000 Loan:

main drift 500 ft. on Vein

drift #1 West - 150 ft.

Plan to block out enough ore to warrant 150 ton mill

Raise 210 ft. from #1 West drift to main tunnel

| | | |
|---|---|---|
| G.G. | Costs: 650' drifts @ $30.00 ---- | $19500.00 |
| | 210' Raise @ 40.00 | 8400.00 |
| | Straighten main drift | 4250.00 |
| | opening #1 West drift | 2500.00 |
| | | $34650.00 |

(Applicant Costs estimated at $29300.00

" " for equipment $12000.00

$41300.00

Balance of funds Requested to be used for further developing sulphide ore Body and extending drifts to Longer Length if justified.

By Applicant June 16-51: Rehabilitation of main adit and

| | |
|---|---|
| Re Opening No.1 West drift | $4800.00 |
| 880 ft. of drifting @ $25.00 | $22000.00 |
| 210 ft. of Raising @ 30.00 | $6300.00 |
| Equipment to be purchased | $20900.00 |
| Supervision-engineering-accounting-etc. | $6000.00 |
| | $60,000.00 |

2%

Rate of progress: 1 month to Rehabilitate

100 ft./month for drifting

100 ft./ " " Raising

Total Time about 12 months

Notes by Gentr
1-16-52

DMA 393 - Sunrise Mine, Montana

Metallurgical Notes: From Spencer Report on Test Work —

The Tungsten Recovered as a Low Grade Concentrate;

Head Sample : 0.105% $WO_3$

Concentrate : 16.9% $WO_3$ - Recovery 60.1%

Value of tungsten Recovered, Per ton of ore Mined :- $3.52, before deducting milling and Shipping Charges.

Fine Grinding (minus 200 mesh) is necessary for the maximum Liberation. Spencer metallurgical Report States:

Complex treatment Required; Flotation of the Gold and Copper followed by Cyanidation of the pyrite middling product for a Recovery of 50.6% of the Gold.

The ore is of a Complex nature and the excessive Fine Grinding Jeopardizes the Recovery of Tungsten

The high Ratio of Sulfide minerals to $WO_3$ (about 400 to 1) tends to impair Recovery by either Flotation or Gravity Concentration. The Gold metallurgy is Complex because one half of the Recoverable Gold was associated with the pyrite, therefore Gold Recovery would depend on the process of cyanidation of the pyrite product.

Conclusions by the Metallurgist:

1) The Copper metallurgy is satisfactory if a Complex Flotation Circuit is Warranted.
2) The Gold metallurgy is satisfactory if steps are taken to Recover the high Gold Loss that normally Goes to the pyrite Flotation Concentrate
3) The tungsten metallurgy is questionable from the standpoint that sufficient Value may not be present in the ore to pay for the additional expense of Recovering it and this is especially true if only a Low Grade Concentrate Can be produced as indicated by test Work.

---

Notes by Gentry:

Scheelite mineral Would probably slime badly due to excessive Fine Grinding and therefore $WO_3$ Recovery Would be Low.

Due to a Complex Flow Sheet followed by Cyanidation, the plant Cost Would probably be high.

Tests on Mill Scale Tonnage of Freshly broken ore Would be advisable before designing Flow Sheet.

Sufficient tonnage to pay for mill, should be blocked out prior to Mill Construction.

# United States Senate

DMA- 393x

January 28 52

*Washington, D. C.,* ....., *19*.....

*Respectfully referred to*

Mr. George C. Selfridge
Defense Minerals Exploration
Administration

Room 3538
South Interior Bldg.
Washington, D. C.

Attached hereto please find
copies of the Noon letter
and assay certificate.

DMA-393 — Denied $WO_3$
on 1/22/52 & sent to
copper branch — Mr. Ellis
for further work

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 30 1952

(Signed) W. C. Broadgate
Consultant to Senator Murr

U. S. S.

U. S. GOVERNMENT PRINTING OFFICE 16—45102-1

Dnt A 393

MONTANA LABORATORY COMPANY
Chemists and Assayers

Philipsburg, Montana,
December 19, 1931

The Following Analyses Were Made For W. A. Noon

| Per Cent $H_2O$ | Ozs Silver Per Ton | Ozs Gold Per Ton | $ Gold Per Ton | Per Cent Copper | Per Cent Iron | Per Cent Lead | Per Cent Manganese | Per Cent Silica |
|---|---|---|---|---|---|---|---|---|
| | | | | $Wo_s$ | | | | |
| | | | | 0.208 | | | | |
| #2061 | | | | | | | | |
| Sample Wt. 32.696 Avdp. Lbs. | | | | | | | | |

MONTANA LABORATORY COMPANY
BY W. L. Degenhant
(Signed)

c
o
p
y

W. A. Noon
Phone 2551 or 2741
Drummond, Montana

Jan. 23, 1952

Dma
393

Mr. W. C. Broadgate
Consultant to Senator Murray
Senate Office Building
Washington, D. C.

Dear Mr. Broadgate:

As I told you on the phone this morning, we believe the tungsten assays on the SUNRISE ore, made by the Bureau of Mines, are low.

The writer recently took a sample weighing 32.696 pounds from the face of the SUNRISE drift and sent it to the Montana Laboratory (Sample 2061) to be assayed. We attach a copy of the assay report, which shows 0.208 $WO_3$

You understand the tungsten had just come into the sulfide zone on the stope of the main tunnel and same is improving in assay value as the work is advancing on the ore.

In other words, it is a new discovery so far unexplored. What the loan was requested for was to explore the tungsten possibilities. If at the same time a copper reserve is blocked out for milling it would be that much to the good.

Yours very truly

W. A. Noon

WAN : m

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

January 22, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Docket No. DMA 393X - Tungsten and Copper
Sunrise Mine
Granite County, Nevada

The Iron and Ferro-Alloy Division recommends denial of the tungsten phase of the subject exploration application for the following reasons:

1. The low grade of the tungsten content in the crude ore as represented by 5 samples averaging 0.134 percent $WO_3$ and samples from 5 carload shipments averaging 0.166 percent $WO_3$.

2. It appears evident from metallurgical tests conducted by the U. S. Bureau of Mines during the summer of 1951 and received in this Division on January 8, 1952, that the recovery of the tungsten will be a complex metallurgical problem involving grinding to minus 200 mesh and high cost plant installation. Laboratory tests indicate a recovery of 60.1 percent of the tungsten in a concentrate having a grade of 16.9 percent $WO_3$.

3. The absence of a definite financial program for the construction of an adequate milling plant, without which the tungsten content of the crude ore would not be recovered.

Therefore, repayment of the loan in its present status will depend upon the monies received from the mills or smelters on the basis of the copper-gold and silver content of the crude ore shipped from a discovery made under the exploration program.

Conclusion:

It is suggested that the docket be turned over to the Rare and Miscellaneous Metals Division for their further consideration of the copper content.

G. C. Selfridge

G. C. Selfridge, Acting Chief

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

GGGentry'lm
1/[illegible]52

400

FILE COPY
SURNAME:

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

January 22, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Docket No. DMA 393X - Tungsten and Copper
Sunrise Mine
Granite County, Nevada

The Iron and Ferro-Alloy Division recommends denial of the tungsten phase of the subject exploration application for the following reasons:

1. The low grade of the tungsten content in the crude ore as represented by 5 samples averaging 0.134 percent $WO_3$ and samples from 5 carload shipments averaging 0.166 percent $WO_3$.

2. It appears evident from metallurgical tests conducted by the U. S. Bureau of Mines during the summer of 1951 and received in this Division on January 8, 1952, that the recovery of the tungsten will be a complex metallurgical problem involving grinding to minus 200 mesh and high cost plant installation. Laboratory tests indicate a recovery of 60.1 percent of the tungsten in a concentrate having a grade of 16.9 percent $WO_3$.

3. The absence of a definite financial program for the construction of an adequate milling plant, without which the tungsten content of the crude ore would not be recovered.

Therefore, repayment of the loan in its present status will depend upon the monies received from the mills or smelters on the basis of the copper-gold and silver content of the crude ore shipped from a discovery made under the exploration program.

Conclusion:

It is suggested that the docket be turned over to the Rare and Miscellaneous Metals Division for their further consideration of the copper content.

G. C. Selfridge, Acting Chief

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES
1201 North Division Street
Spokane 2, Washington
January 3, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 8 1952

MEMORANDUM

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

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

Subject: DMA Docket 393X, Sunrise Mine, Montana

Sent herewith are the following memoranda in connection with an application for an exploratory project under the subject docket:

Discussion of tin and tungsten possibilities, DMA Docket 393X, Tungsten-Copper, Sunrise Mine, Montana, by J. D. Bardill.

Comment on tin values in the Sunrise Mine by P. H. Floyd.

Beneficiation report on Sunrise Mine, tungsten-copper, Granite County, Montana, by P. H. Floyd.

These memoranda will add to the information on the subject docket. Four copies of each are sent herewith for attachment to the application.

M. E. Volin, Member
DMEA Field Team, Region II

Albany, Oregon
November 7, 1951

MEMORANDUM

To: K. Gordon Poole, Chief, Nonferrous Metals Branch

From: F. H. Floyd, Acting Head, Mineral Dressing Section

Subject: Comment on tin values in the Sunrise Mine Copper-Tungsten-Gold Ore Metallurgical Report of November 7, 1951.

The head assay for this ore sample reported 0.11 percent tin. Data was not possible on the metallurgy of this metal because the concentrates produced that could be expected to contain the tin were not of large enough bulk to permit tin assaying after the assay of the other major metals. Since the copper, tungsten, and gold were the metals named by the D. M. A. as the metals of major interest, these metals were considered first in the beneficiation and data collection.

It is realized that this tin may be of interest; however, the ore sample is exhausted. Further work is not anticipated unless a new sample with requests to continue are submitted.

F. H. Floyd

FHF:jc

cc:
KT
PR
DF
MIN. DIV. (2)
MACHILL (2)
FHF

Albany, Oregon
November 7, 1951

MINERALOGICAL REPORT

Memorandum

To: E. Gordon Poole, Chief, Nonferrous Metals Branch

From: P. H. Floyd, Acting Head, Mineral Dressing Section

Subject: Beneficiation report on Sunrise Mine - Copper-Tungsten Ore, Granite County, Montana.

This ore sample was submitted for beneficiation tests by the D. P. A. The request accompanying the sample specified the investigation of the recovery of the tungsten values as well as the recovery of the copper-gold values. It was necessary to recover both a copper concentrate and a pyrite concentrate in order to obtain optimum gold recovery. Up to 60 percent of the tungsten was recovered in a product assaying 16.9% $WO_3$.

60%
16.9%

Chemical Analysis

| Ounces Per Ton | | Assay Percent | | | | Albany |
|---|---|---|---|---|---|---|
| Au | Ag | Cu | $WO_3$ | Sn | Bi | Assay No. |
| 0.08 | 19.5 | 2.50 | 0.105 | 0.11 | 0.045 | 20200 |

Spectrographic Analysis

Over 10 percent - Fe, Si
5 to 10 percent - None
1 to 5 percent - Al, Cu
0.1 to 1 percent - Ca, Mg
0.01 to 0.1 percent - As, Bi, Mn, Ti, V
0.001 to 0.01 percent - Ag, Ni, Mo, Zr, B, Au, Sn

Petrographic Examination

The results of the petrographic examination were as follows:

"The ore minerals include chalcopyrite, scheelite, malachite, and bornite associated with quartz, hydromica, sericite, pyrite, calcite, limonite, talc, and magnetite. Some of the chalcopyrite is stained iridescent. About 95 percent of the sulfides are unlocked in the minus 100 plus 200-mesh fraction (the smallest size submitted). The scheelite is also partially locked at this size. Grinding to pass 200 mesh will be necessary for maximum liberation."

Mineral Dressing Laboratory Observations

A brief summary of test work done by Mr. H. E. Hollis was presented with the request. Mr. Hollis reported the successful production of a copper-gold concentrate with a relatively simple flotation procedure. Mr. R. N. Spencer*, formerly associated with this mineral dressing laboratory, performed a series of beneficiation tests on the Sunrise ore. Mr. Spencer reported that the ore required complex treatment for acceptable gold-copper metallurgy. Mr. Spencer's work involved the flotation of a copper-gold concentrate, and the cyanidation of a pyrite middling byproduct for the recovery of 54.6 percent of the gold. The recent test work done by this laboratory bore out Mr. Spencer's observations. It should be pointed out that a difference in test head samples may explain the discrepancy of this laboratory's work with that of Mr. Hollis.

The observations and the work performed in this laboratory indicated the ore to be of a complex nature. The nature of the problems that arose from this complexity are outlined as follows:

1 - The ore was of a massive sulfide nature, and liberation was obtained only by fine grinding. The required fine grinding jeopardized the scheelite recovery because of the danger of overgrinding this tungsten mineral.

2 - The extreme low grade tungsten head limited the possible methods of recovery from an economic point of view.

3 - The extreme high ratio of sulfide minerals to scheelite (approximately 400 to 1) tended to impair the selectivity in either flotation or gravity concentration.

4 - The lack of flotation selectivity between the copper sulfides (predominantly chalcopyrite) and the pyrite caused difficulty in producing acceptable copper-gold grade concentrates with adequate recovery. This was caused by the massive sulfide nature of the ore and thus the inherent fineness of mineral grains; and the possibility that a very slight degree of oxidation may have taken place in the ore. This oxidation is evident from the malachite observed, and this oxidation would tend to form soluble copper salts in the ore that would cause sulfide mineral activation before the flotation process was reached and counter measures could be taken.

5 - The gold metallurgy was complex because it was found that half of the recoverable gold was associated with the pyrite, and therefore good gold recovery would depend on such a process of cyanidation of a pyrite product.

---

* R. N. Spencer, Mineral Dressing Report to J. B. Darrell, Dec. 1, 1947, "Queen Mine Syndicate (Sunrise Mine) Head 68".

Beneficiation Tests

Scheme 1:

A table concentrate test was conducted on the laboratory Deister-Overstrom diagonal deck table. The table feed was roll crushed to minus 28-mesh and then hydraulically classified. The classifier products were passed over the table separately. The scheme was to produce a tungsten concentrate for further upgrading, and then to recover the copper and gold values from the table tailings and middlings (assuming that the gold was associated with the sulfide minerals and not in a free state). This scheme proved unsuccessful because the effective table specific gravities of the sulfide minerals proved to approach that of scheelite, and the tremendous preponderance of the sulfides over the scheelite (approximately 400 to 1) prevented any practical scheelite concentration. The result was a very low scheelite but high sulfide concentrate with copper and gold values spread throughout the scheelite product and the table tailing. This type of procedure would cause undue complexity in a mill circuit. This scheme of beneficiation was abandoned.

Scheme 2:

A group of flotation tests were conducted to determine the merits of flotation beneficiation. It was found that the flotation properties of the copper sulfide minerals were very close to those of pyrite. This condition added difficulty to any selective separation of the sulfide minerals which was paramount for the production of a copper concentrate of adequate grade. The following reagents were tested in turn as modifiers to achieve the copper sulfide minerals and pyrite flotation selectivity: lime, sodium cyanide, potassium dichromate, sulfuric acid, calcium sulfite, sodium carbonate, and copper sulphate. The optimum results indicated lime and potassium dichromate were the best modifiers.

The selective sulfide flotation was followed by fatty acid flotation of the scheelite. To do this it was essential that all the sulfide minerals be removed prior to the fatty acid float to prevent their contamination of the scheelite product. It was thought that a flotation concentrate thus produced could be made more economically than running the selective sulfide flotation tailing direct to a gravity concentration procedure; it was further thought that a low grade scheelite flotation concentrate thus produced would possibly lend itself well to further gravity upgrading. The upgrading of the scheelite flotation concentrate was abandoned because of the exceedingly low recovery of tungsten in this product.

Table I presents the metallurgical results of such a test procedure; Table II presents the test flowsheet. The procedure followed was complex; however, a simplification would be difficult because of the character of the ore and the results desired. The test was successful in producing a copper concentrate of 0.24 oz per ton of gold and 11.2 percent copper with a 45.9 percent gold and a 79.0 percent copper recovery.

The pyrite concentrate ran 0.13 oz per ton gold and 1.15 percent copper with a 44.8 percent gold and a 14.6 percent copper recovery. The scheelite flotation product made ran 0.41 percent $WO_3$ and 0.5 percent recovery. The gold-copper beneficiation was moderately successful while the tungsten beneficiation was not.

Scheme 3:

This group of tests was run with the objective of making a bulk sulfide concentrate and then recovering the scheelite by tabling the flotation tailing. Further, the bulk sulfide concentrate was subjected to selective flotation for the production of a gold-copper concentrate and a gold-pyrite concentrate. All the inherent difficulties, due to the complexity of the ore outlined in Scheme 2 were encountered in this procedure scheme. Table II presents the test flowsheet of this scheme.

Table III presents the metallurgical results from a typical test using Scheme 3. A copper concentrate was produced which ran 0.31 oz per ton gold and 13.96 percent copper with 38.8 percent gold and 71.3 percent copper recovery. A pyrite concentrate was produced that ran 0.11 oz per ton of gold and 1.46 percent copper with 43.5 percent gold and 23.5 percent copper recovery. A scheelite table concentrate was produced that ran 16.9 percent $WO_3$ with 50.1 percent recovery. The copper-gold concentration could be considered moderately successful; however, the tungsten concentration could be questioned from an economic standpoint. It must be pointed out that it would be questionable if the economic value of the recoverable tungsten could cover the expense of tabling the entire sulfide tailing; further, it is doubtful that such a concentrate could be upgraded to the market specification of 60 percent $WO_3$ with a maximum of 0.5 percent sulfur without large losses in recovery. Flotation could remove most of the contaminating sulfide minerals but further tabling would be of little effect. Magnetic separation is impossible because of the small grain size (minus 200 mesh in this concentrate). It was not possible to produce enough concentrate to run further upgrading tests.

Conclusions and Summary

The test work indicated that the best scheme produced a copper concentrate of 0.31 oz per ton gold and 13.96 percent copper with 38.8 percent gold and 71.3 percent copper recovery. A pyrite concentrate was produced that ran 0.11 oz per ton gold and 1.46 percent copper with 43.5 percent gold and 23.5 percent copper recovery. A scheelite concentrate was produced that ran 16.9 percent $WO_3$ with 50.1 percent recovery. These results came from a complex sulfide selective flotation circuit followed by tabling of the flotation tailing for the tungsten values.

From the test work performed by this laboratory on the sample of Sunrise Mine copper-tungsten-gold ore, it can be concluded that:

1 - The copper metallurgy is satisfactory if a complex flotation circuit is warranted.

2 - The gold metallurgy is satisfactory if steps are taken to recover the high gold loss that normally goes to the pyrite flotation concentrate.

3 - The tungsten metallurgy is questionable from the standpoint that sufficient value may not be present in the ore to pay for the additional expense of recovering it and this is especially true if only a low grade concentrate can be produced as indicated by the test work.

The foregoing report is presented from the findings of laboratory test work upon the sample submitted, and therefore this report is representative of the Sunrise ore only to the extent that the sample is representative. Further work is not anticipated.

P. H. Floyd

Test Engineer:
E. L. Chen

P.H.F:ga

cc: JF
RF
DF
Mining Div. (2)
J. D. Cardill (2)
P. H. Floyd

U. S. BUREAU OF MINES
Albany, Oregon
Mineral Dressing Section
Metallurgical Data

TABLE I

November 7, 1951

Test No. O.D. - 2722
Test Engineers W. L. Chen
Head No. 2 Ore - Mt. - 202 - Sunrise Mine Copper-Tungsten-Gold Ore.
Treatment: Locked series test; selective flotation of sulfides; with middling regrind circuit, to produce a copper concentrate and a pyrite concentrate. Fatty acid flotation of scheelite from the sulfide tailing.

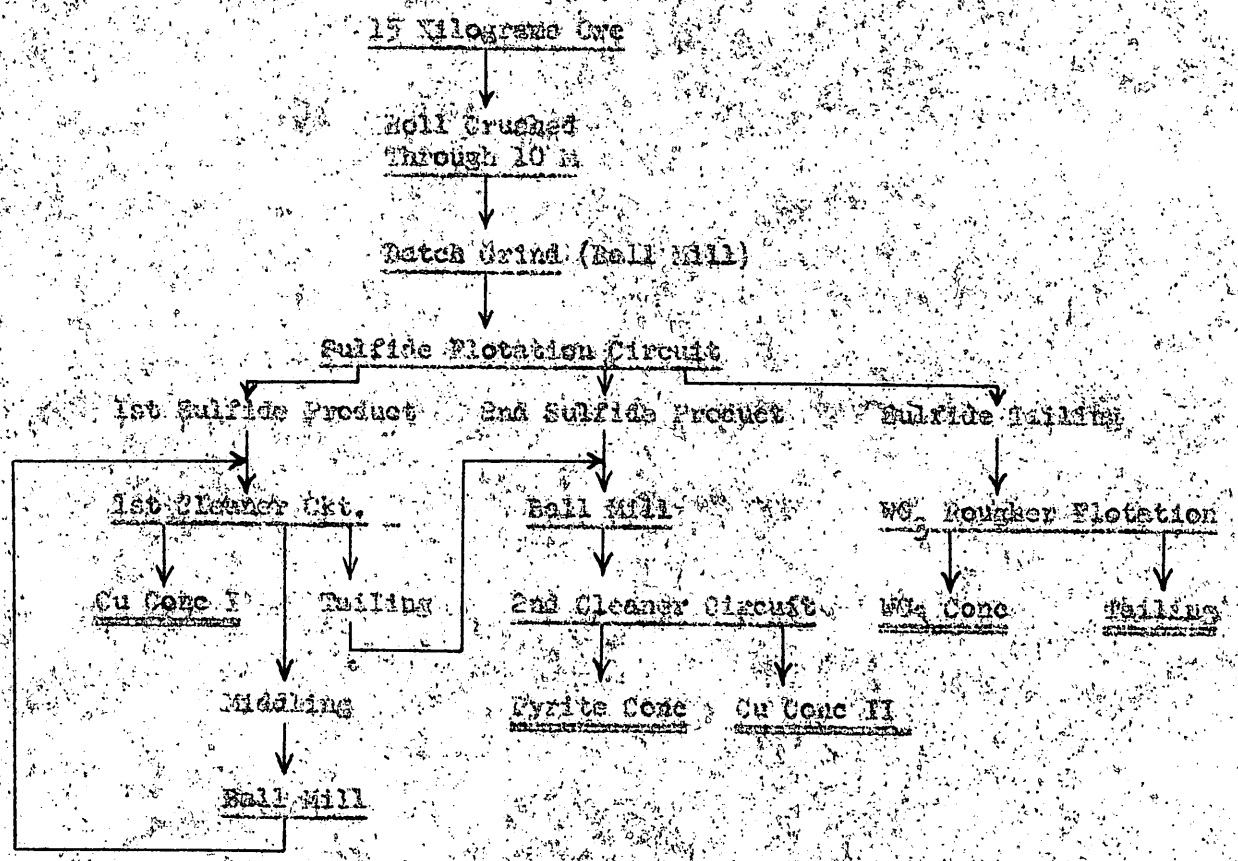
| Product | Weight Percent | Assay Percent Au | Ag | Cu | $WO_3$ | Distribution Percent Au | Ag | Cu | $WO_3$ | Albany Assay No. |
|---|---|---|---|---|---|---|---|---|---|---|
| Copper Conc I | 7.26 | 0.36 | 3.8 | 18.2 | 0.15 | 21.8 | 24.5 | 47.6 | 12.6 | 23735 - 6 |
| Copper Conc II | 12.27 | 0.20 | 1.6 | 7.1 | 0.00 | 24.1 | 17.6 | 31.4 | 0.0 | 23737 |
| Pyrite Conc | 35.14 | 0.13 | 1.3 | 1.15 | 0.06 | 44.8 | 41.0 | 14.6 | 24.1 | 23738 |
| $WO_3$ Conc | 1.84 | 0.04 | 0.8 | 1.20 | 0.41 | 0.8 | 1.3 | 0.8 | 3.5 | 23739-40-41-42 |
| Tailing | 43.49 | 0.02 | 0.4 | 0.36 | 0.11 | 8.5 | 15.6 | 5.6 | 54.7 | 23743 |
| Calculated Head | 100.00 | 0.10 | 1.1 | 2.77 | 0.09 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Combined Cu Conc | 19.53 | 0.24 | 2.4 | 11.0 | 0.06 | 45.9 | 42.1 | 79.0 | 12.6 | |

Reagent Scheme

| Point of Addition | Time Min. | pH | Reagent Consumption in Pounds Per Ton: Oleic Acid | $Cao$ | $K_2Cr_2O_7$ | Z-6 | AOS | $NaCN$ | AO4 | $H_2SO_4$ | $Na_2SiO_3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ball Mill | 18 | | | 10.0 | 1.0 | | | | | | |
| Cu Ro. Ckt. | 20 | 11.5 | | | | 0.25 | 0.05 | 1.0 | 0.10 | | |
| Cu Cl Ckt. I | 16 | 11.4 | | 4.0 | | 0.10 | | | | | |
| Cu Cl Ckt. II | 12 | 12.0 | | 10.0 | 1.0 | 0.03 | | | | | |
| $WO_3$ Ckt. | 10 | 3.3 | 0.20 | | | | | | | 3.6 | 1.0 |

Table II

Test Flowsheet Scheme:



U. S. BUREAU OF MINES
Albany, Oregon
Mineral Dressing Section
Metallurgical Data

TABLE III

November 7, 1951

Test No. O. P. 2700
Test Engineer: W. L. Chee
Head No. 5 Ore - Sd. 202 - Sunrise Mine Copper-Tungsten-Gold Ore
Treatment: Locked series test; selective flotation of sulfides, with middling regrind circuit, to produce a copper concentrate and a pyrite concentrate. Hydraulic classification of tailings and tabling of sands and slimes separately.

| Product | Weight Percent | Assay Percent Au | Ag | Cu | $WO_3$ | Distribution Percent Au | Ag | Cu | $WO_3$ | Albany Assay No. |
|---|---|---|---|---|---|---|---|---|---|---|
| Copper Conc. | 14.3 | 0.31 | 3.0 | 13.96 | 0.03 | 38.0 | 38.4 | 71.3 | 3.8 | 23140 |
| Pyrite Conc. | 45.1 | 0.11 | 1.2 | 1.46 | 0.04 | 43.5 | 48.5 | 23.5 | 16.0 | 23141 |
| $WO_3$ Conc. | 6.4 | 0.57* | 1.4* | 2.71 | 16.9 | 11.0 | 2.8 | 0.4 | 60.1 | 23142 |
| $WO_3$ Middling | 1.8 | | | 1.78 | 0.19 | | | 1.1 | 3.0 | 23143 |
| Tailing | 38.4 | 0.08 | 0.3 | 0.27 | 0.05 | 6.9 | 10.3 | 3.7 | 17.1 | 23144 |
| Calculated Head | 100.0 | 0.41 | 1.1 | 2.8 | 0.11 | 100.0 | 100.0 | 100.0 | 100.0 | |

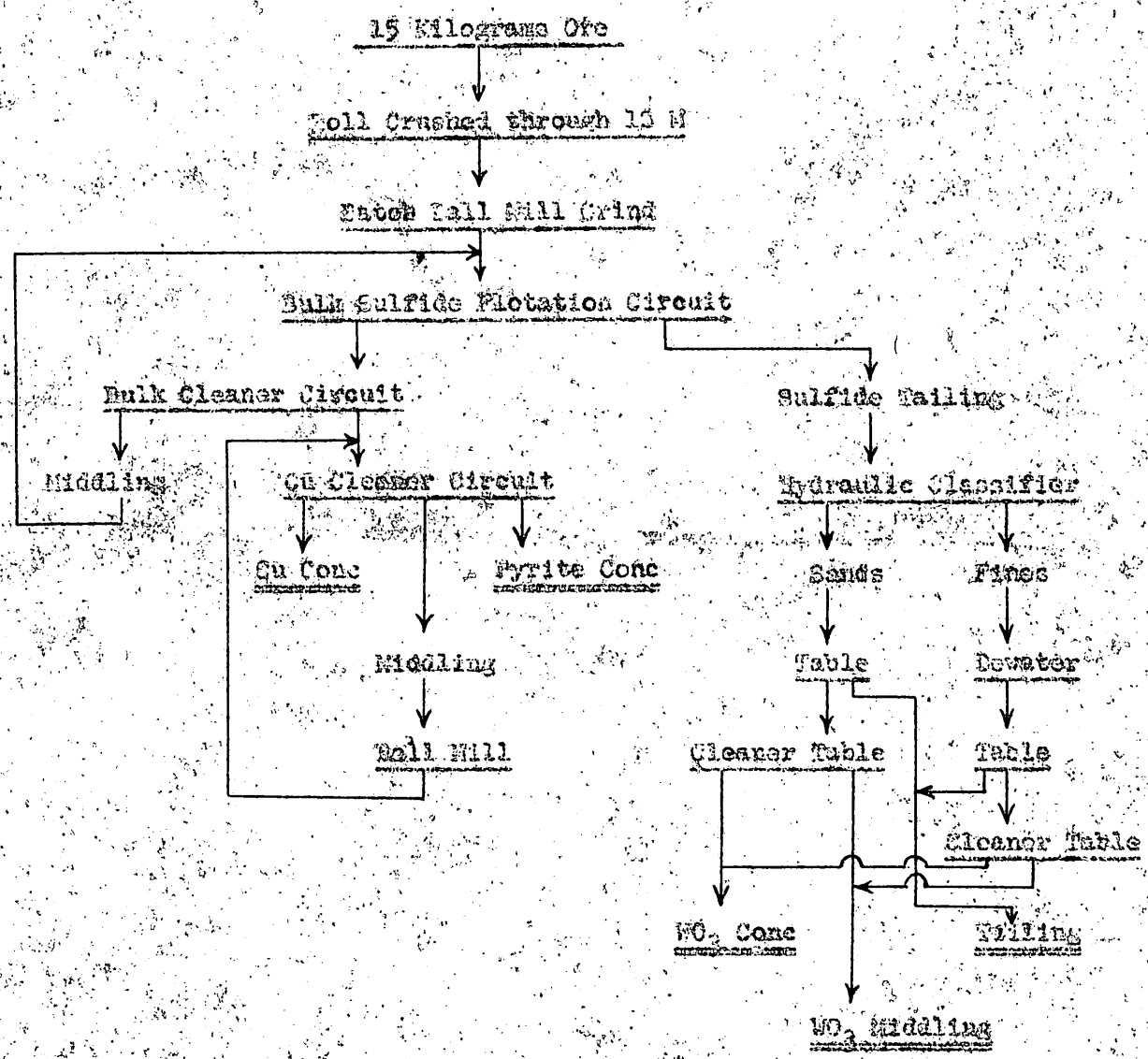
*Insufficient sample for WO3 assays

Reagent Scheme

| Point of Addition | Time Min. | pH | Reagent Consumption in Pounds Per Ton CaO | NaCN | Z-5 | Pine Oil |
|---|---|---|---|---|---|---|
| Ball Mill | 15 | | | | | |
| Bulk Sul. Ckt. | 15 | 6.2 | | | 0.25 | 0.06 |
| Bulk Cl. Ckt. | 10 | | | | | |
| Cu Cl. Ckt. | 5 | 11.9 | 10.0 | 5.0 | | |

Table IV

Test Flowsheet Scheme, G. D. 2700:



Albany, Oregon
November 7, 1951

MEMORANDUM

To: H. Gordon Poole, Chief, Nonferrous Metals Branch

From: F. H. Floyd, Acting Head, Mineral Dressing Section

Subject: Comment on tin values in the Sunrise Mine Copper-Tungsten-Gold Ore Metallurgical Report of November 7, 1951.

The head assay for this ore sample reported 0.11 percent tin. Data was not possible on the metallurgy of this metal because the concentrates produced that could be expected to contain the tin were not of large enough bulk to permit tin assaying after the assay of the other major metals. Since the copper, tungsten, and gold were the metals named by the D. M. A. as the metals of major interest, these metals were considered first in the beneficiation and data collection.

It is realized that this tin may be of interest; however, the ore sample is exhausted. Further work is not anticipated unless a new sample with requests to continue are submitted.

F. H. Floyd

FHF:jc

cc:
HF
RE
DF
MIN. DIV. (2)
MARDILL (2)
FHF

Albany, Oregon
November 7, 1951

METALLURGICAL REPORT

Memorandum

To: N. Gordon Poole, Chief, Nonferrous Metals Branch

From: P. H. Floyd, Acting Head, Mineral Dressing Section

Subject: Beneficiation report on Sunrise Mine - Copper-Tungsten Ore, Granite County, Montana.

This ore sample was submitted for beneficiation tests by the E. M. A. The request accompanying the sample specified the investigation of the recovery of the tungsten values as well as the recovery of the copper-gold values. It was necessary to recover both a copper concentrate and a pyrite concentrate in order to obtain optimum gold recovery. Up to 60 percent of the tungsten was recovered in a product assaying 16.9% $WO_3$.

Chemical Analysis

| Oz Per Ton | | Assay Percent | | | | Albany |
|---|---|---|---|---|---|---|
| Au | Ag | Cu | $WO_3$ | Sn | Si | Assay No. |
| 0.08 | 0.6 | 2.50 | 0.135 | 0.11 | 0.045 | 20500 |

Spectrographic Analysis

Over 10 percent - Fe, Si
5 to 10 percent - None
1 to 5 percent - Al, Cu
0.1 to 1 percent - Ca, Mg
0.01 to 0.1 percent - As, Bi, Mn, Ti, V
0.001 to 0.01 percent - Ag, Ni, Mo, Zn, B, Au, Sn

Petrographic Examination

The results of the petrographic examination were as follows:

"The ore minerals include chalcopyrite, scheelite, malachite, and bornite associated with quartz, hydromica, sericite, pyrite, calcite, limonite, talc, and magnetite. Some of the chalcopyrite is stained iridescent. About 95 percent of the sulfides are unlocked in the minus 100 plus 200-mesh fraction (the smallest size submitted). The scheelite is also partially locked at this size. Grinding to -200 mesh will be necessary for maximum liberation."

Mineral Dressing Laboratory Observations

A brief summary of test work done by Mr. R. B. Hollis was presented with the request. Mr. Hollis reported the successful production of a copper-gold concentrate with a relatively simple flotation procedure. Mr. E. N. Spencer*, formerly associated with this mineral dressing laboratory, performed a series of beneficiation tests on the Sunrise ore. Mr. Spencer reported that the ore required complex treatment for acceptable gold-copper metallurgy. Mr. Spencer's work involved the flotation of a copper-gold concentrate, and the cyanidation of a pyrite middling byproduct for the recovery of 54.8 percent of the gold. The recent test work done by this laboratory bore out Mr. Spencer's observations. It should be pointed out that a difference in test head samples may explain the discrepancy of this laboratory's work with that of Mr. Hollis.

The observations and the work performed in this laboratory indicated the ore to be of a complex nature. The nature of the problems that arose from this complexity are outlined as follows:

1 - The ore was of a massive sulfide nature, and liberation was obtained only by fine grinding. The required fine grinding jeopardized the scheelite recovery because of the danger of overgrinding the tungsten mineral.

2 - The extreme low grade tungsten head limited the possible methods of recovery from an economic point of view.

3 - The extreme high ratio of sulfide minerals to scheelite (approximately 400 to 1) tended to impair the selectivity in either flotation or gravity concentration.

4 - The lack of flotation selectivity between the copper sulfides (predominantly chalcopyrite) and the pyrite caused difficulty in producing acceptable copper-gold grade concentrates with adequate recovery. This was caused by the massive sulfide nature of the ore and thus the inherent fineness of mineral grains; and the possibility that a very slight degree of oxidation may have taken place in the ore. This oxidation is evident from the malachite observed, and this oxidation would tend to form soluble copper salts in the ore that would cause sulfide mineral activation before the flotation process was reached and counter measures could be taken.

5 - The gold metallurgy was complex because it was found that half of the recoverable gold was associated with the pyrite, and therefore good gold recovery would depend on such a process of cyanidation of a pyrite product.

---

* E. N. Spencer, Mineral Dressing Report to J. D. Merrill, Dec. 1, 1947, "Queen Mine Syndicate (Sunrise Mine) Head 66".

Beneficiation Tests

Scheme 1:

A table concentrate test was conducted on the laboratory Deister-Overstrom diagonal deck table. The table feed was roll crushed to minus 28-mesh and then hydraulically classified. The classifier products were passed over the table separately. The scheme was to produce a tungsten concentrate for further upgrading, and then to recover the copper and gold values from the table tailings and middlings (assuming that the gold was associated with the sulfide minerals and not in a free state). This scheme proved unsuccessful because the effective table specific gravities of the sulfide minerals proved to approach that of scheelite, and the tremendous preponderance of the sulfides over the scheelite (approximately 400 to 1) prevented any practical scheelite concentration. The result was a very low scheelite but high sulfide concentrate with copper and gold values spread throughout the scheelite product and the table tailing. This type of procedure would cause undue complexity in a mill circuit. This scheme of beneficiation was abandoned.

Scheme 2:

A group of flotation tests were conducted to determine the merits of flotation beneficiation. It was found that the flotation properties of the copper sulfide minerals were very close to those of pyrite. This condition added difficulty to any selective separation of the sulfide minerals which was paramount for the production of a copper concentrate of adequate grade. The following reagents were tested in turn as modifiers to achieve the copper sulfide minerals and pyrite flotation selectivity: lime, sodium cyanide, potassium dichromate, sulfuric acid, calcium sulfite, sodium carbonate, and copper sulphate. The optimum results indicated lime and potassium dichromate were the best modifiers.

The selective sulfide flotation was followed by fatty acid flotation of the scheelite. To do this it was essential that all the sulfide minerals be removed prior to the fatty acid float to prevent their contamination of the scheelite product. It was thought that a flotation concentrate thus produced could be made more economically than running the selective sulfide flotation tailing direct to a gravity concentration procedure; it was further thought that a low grade scheelite flotation concentrate thus produced would possibly lend itself well to further gravity upgrading. The upgrading of the scheelite flotation concentrate was abandoned because of the exceedingly low recovery of tungsten in this product.

Table I presents the metallurgical results of such a test procedure; Table II presents the test flowsheet. The procedure followed was complex; however, a simplification would be difficult because of the character of the ore and the results desired. The test was successful in producing a copper concentrate of 0.24 oz per ton of gold and 11.2 percent copper with a 45.9 percent gold and a 79.0 percent copper recovery.

The pyrite concentrate ran 0.13 oz per ton gold and 1.45 percent copper with a 44.8 percent gold and a 14.6 percent copper recovery. The scheelite flotation product made ran 0.41 percent $WO_3$ and 0.5 percent recovery. The gold-copper beneficiation was moderately successful while the tungsten beneficiation was not.

Scheme 3:

This group of tests was run with the objective of making a bulk sulfide concentrate and then recovering the scheelite by tabling the flotation tailing. Further, the bulk sulfide concentrate was subjected to selective flotation for the production of a gold-copper concentrate and a gold-pyrite concentrate. All the inherent difficulties, due to the complexity of the ore outlined in Scheme 2 were encountered in this procedure scheme. Table II presents the test flowsheet of this scheme.

Table III presents the metallurgical results from a typical test using Scheme 3. A copper concentrate was produced which ran 0.31 oz per ton gold and 13.96 percent copper with 38.8 percent gold and 71.3 percent copper recovery. A pyrite concentrate was produced that ran 0.11 oz per ton of gold and 1.46 percent copper with 43.5 percent gold and 23.5 percent copper recovery. A scheelite table concentrate was produced that ran 16.9 percent $WO_3$ with 60.1 percent recovery. The copper-gold concentration could be considered moderately successful; however, the tungsten concentration could be questioned from an economic standpoint. It must be pointed out that it would be questionable if the economic value of the recoverable tungsten could cover the expense of tabling the entire sulfide tailing; further, it is doubtful that such a concentrate could be upgraded to the market specification of 60 percent $WO_3$ with a maximum of 0.5 percent sulfur without large losses in recovery. Flotation could remove most of the contaminating sulfide minerals but further tabling would be of little effect. Magnetic separation is impossible because of the small grain size (minus 200 mesh in this concentrate). It was not possible to produce enough concentrate to run further upgrading tests.

Conclusions and Summary

The test work indicated that the best scheme produced a copper concentrate of 0.31 oz per ton gold and 13.96 percent copper with 38.8 percent gold and 71.3 percent copper recovery. A pyrite concentrate was produced that ran 0.11 oz per ton gold and 1.46 percent copper with 43.5 percent gold and 23.5 percent copper recovery. A scheelite concentrate was produced that ran 16.9 percent $WO_3$ with 60.1 percent recovery. These results came from a complex sulfide selective flotation circuit followed by tabling of the flotation tailing for the tungsten values.

From the test work performed by this laboratory on the sample of Sunrise Mine copper-tungsten-gold ore, it can be concluded that:

1 - The copper metallurgy is satisfactory if a complex flotation circuit is warranted.

2 - The gold metallurgy is satisfactory if steps are taken to recover the high gold loss that normally goes to the pyrite flotation concentrate.

3 - The tungsten metallurgy is questionable from the standpoint that sufficient value may not be present in the ore to pay for the additional expense of recovering it and this is especially true if only a low grade concentrate can be produced as indicated by the test work.

The foregoing report is presented from the findings of laboratory test work upon the sample submitted, and therefore this report is representative of the Sunrise ore only to the extent that the sample is representative. Further work is not anticipated.

P. H. Floyd

Test Engineer:
F. L. Chen

PHF:gs

cc: HF
RF
DF
Mining Div. (2)
J. D. Bardill (2)
P. H. Floyd

U. S. BUREAU OF MINES
Albany, Oregon
Mineral Dressing Section
Metallurgical Data

TABLE I

November 7, 1951

Rept. No. O.D. - 2722
Test Engineer: W. L. Chen
Head No. & Ore - Mt. - 202 - Sunrise King Copper-Tungsten-Gold Ore.
Treatment: Locked series test; selective flotation of sulfides; with middling regrind circuit, to produce a copper concentrate and a pyrite concentrate. Fatty acid flotation of scheelite from the sulfide tailing.

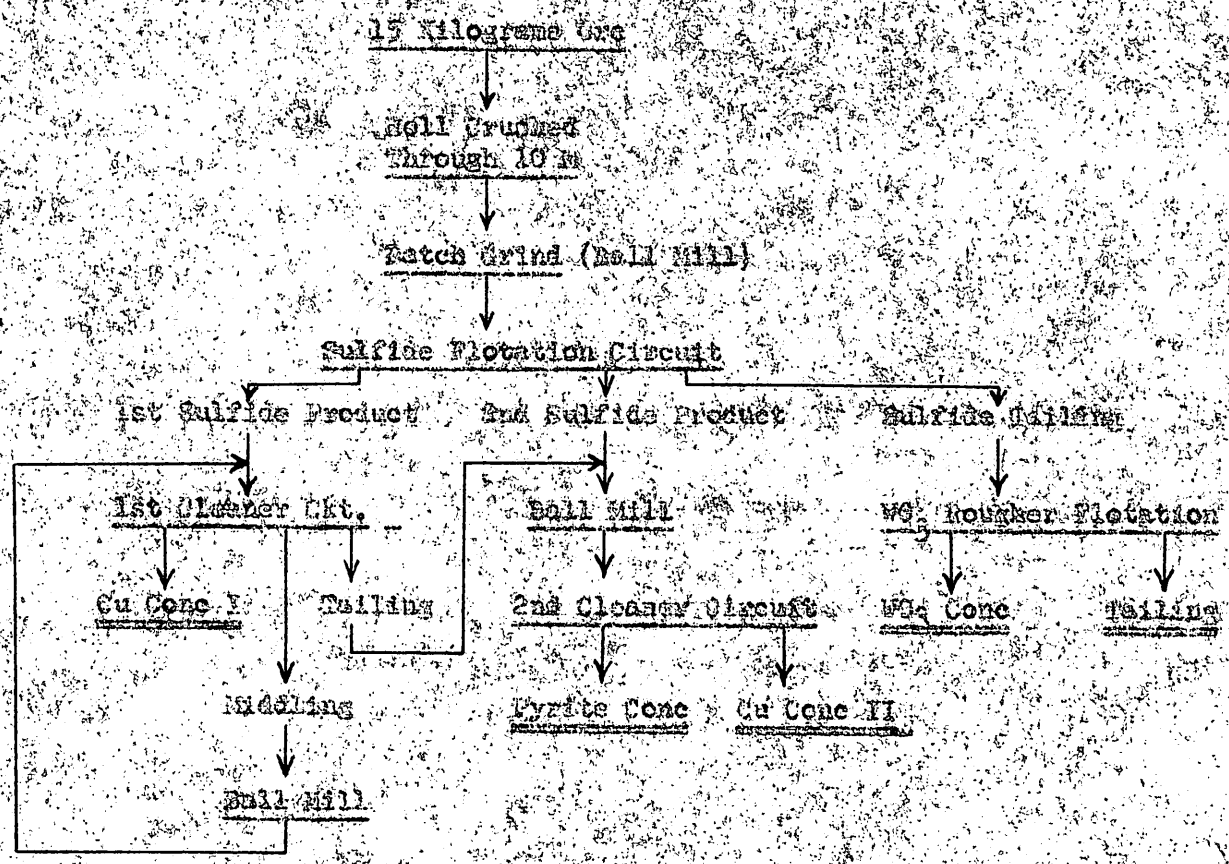
| Product | Weight Percent | Assay Percent Au | Ag | Cu | $WO_3$ | Distribution Percent Au | Ag | Cu | $WO_3$ | Albany Assay No. |
|---|---|---|---|---|---|---|---|---|---|---|
| Copper Conc I | 7.26 | 0.36 | 3.8 | 18.2 | 0.15 | 21.8 | 24.5 | 47.6 | 12.5 | 23735 - 6 |
| Copper Conc II | 12.27 | 0.20 | 1.6 | 7.1 | 0.00 | 24.1 | 17.6 | 31.4 | 0.0 | 23737 |
| Pyrite Conc | 35.14 | 0.13 | 1.3 | 1.15 | 0.06 | 44.8 | 41.0 | 14.5 | 24.1 | 23738 |
| $WO_3$ Conc | 1.84 | 0.04 | 0.8 | 1.20 | 0.41 | 0.8 | 1.3 | 0.8 | 8.5 | 23739-40-41-42 |
| Tailing | 43.49 | 0.02 | 0.4 | 0.36 | 0.11 | 8.5 | 15.6 | 5.6 | 54.7 | 23743 |
| Calculated Head | 100.00 | 0.10 | 1.1 | 2.77 | 0.09 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Combined Cu Conc | 19.53 | 0.24 | 2.4 | 11.2 | 0.06 | 45.9 | 42.1 | 79.0 | 12.6 | |

Reagent Scheme

| Point of Addition | Time Min. | pH | Reagent Consumption in Pounds Per Ton: Oleic Tall Acid | $K_2Cr_2O_7$ | AF-5 | NaCN | $Na_2S$ | $NaO_4$ | $H_2SO_4$ | $Na_2CO_3$ |
|---|---|---|---|---|---|---|---|---|---|---|
| Ball Mill | 18 | | 10.0 | 1.0 | | | | | | |
| Cu Ro. Ckt. | 20 | 11.5 | | | 0.25 | 0.05 | 1.6 | 0.10 | | |
| Cu Cl Ckt. I | 16 | 11.4 | 4.0 | | 0.10 | | | | | |
| Cu Cl Ckt. II | 12 | 12.0 | 10.0 | 1.0 | 0.03 | | | | | |
| $WO_3$ Ckt. | 10 | 8.3 | 0.20 | | | | | | 3.6 | 1.0 |

Table II

Test Flowsheet Scheme:



U. S. BUREAU OF MINES
Albany, Oregon
Mineral Dressing Section
Metallurgical Data

TABLE III

November 7, 1951

Test No. G. D. 2700
Test Engineer: W. L. Chen
Head No. 4 Ore - Sd. 302 - Sunrise Mine Copper-Tungsten-Gold Ore
Treatment: Locked series test; selective flotation of sulfides, with middling regrind circuit, to produce a copper concentrate and a pyrite concentrate. Hydraulic classification of tailings and tabling of sands and slimes separately.

| Product | Weight Percent | Assay Percent Au | Ag | Cu | $WO_3$ | Distribution Percent Au | Ag | Cu | $WO_3$ | Albany Assay No. |
|---|---|---|---|---|---|---|---|---|---|---|
| Copper Conc. | 14.3 | 0.34 | 3.0 | 13.96 | 0.03 | 38.8 | 38.4 | 71.3 | 3.8 | 23140 |
| Pyrite Conc. | 45.1 | 0.11 | 1.2 | 1.46 | 0.08 | 43.5 | 48.5 | 23.5 | 16.6 | 23141 |
| $WO_3$ Conc. | 0.4 | 0.57* | 1.4* | 2.71 | 16.9 | 11.0 | 2.8 | 0.4 | 60.1 | 23142 |
| $WO_3$ Middling | 1.8 | | | 1.78 | 0.19 | | | 1.1 | 3.0 | 23143 |
| Tailing | 38.4 | 0.02 | 0.3 | 0.27 | 0.05 | 6.9 | 10.3 | 3.7 | 17.1 | 23144 |
| Calculated Head | 100.0 | 0.11 | 1.1 | 2.8 | 0.11 | 100.0 | 100.0 | 100.0 | 100.0 | |

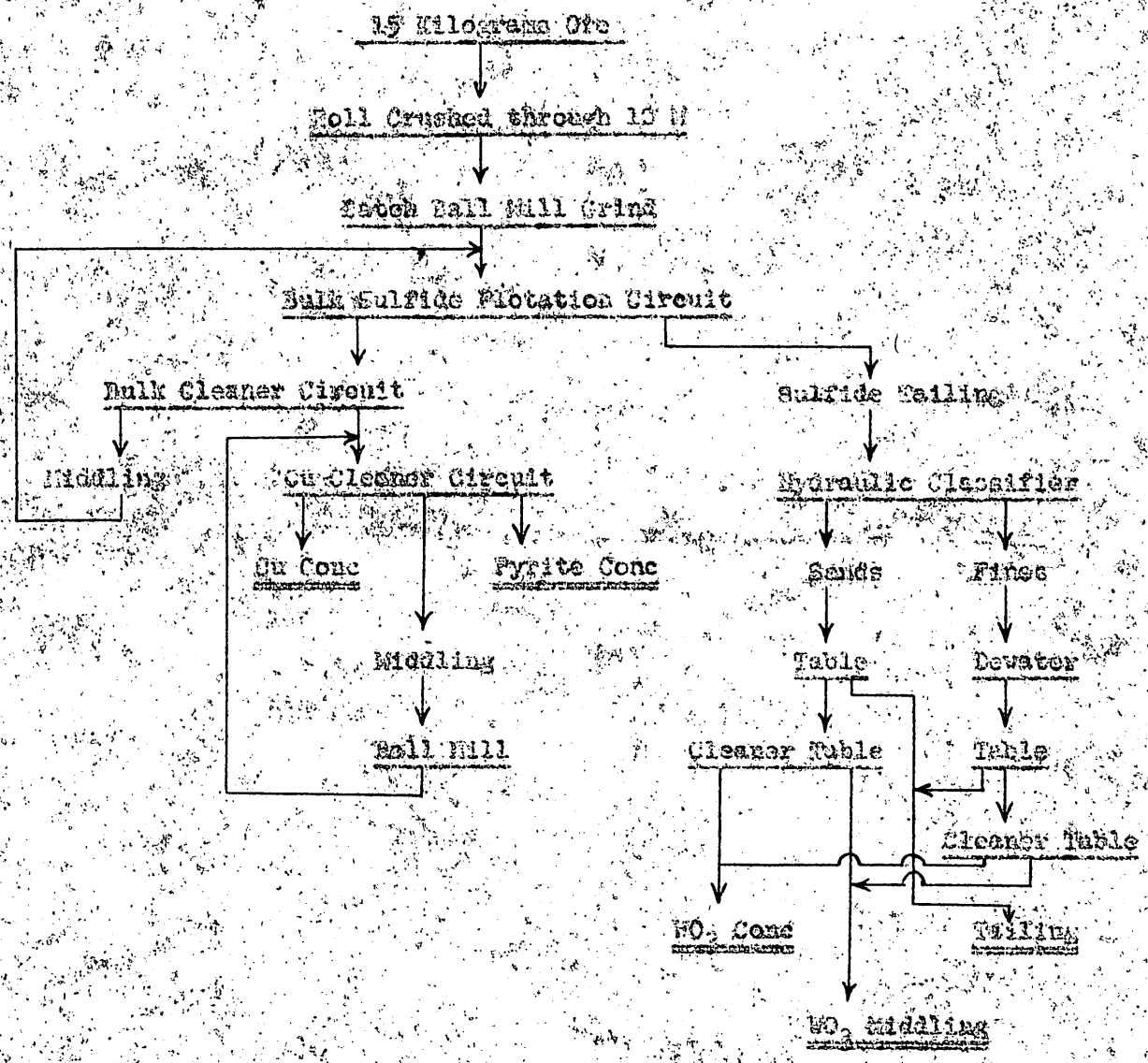
*Insufficient sample for two assays

Reagent Scheme

| Point of Addition | Time Min. | pH | Reagent Consumption in Pounds Per Ton Na2 | NaCN | Z-3 | Pine Oil |
|---|---|---|---|---|---|---|
| Ball Mill | 15 | | | | | |
| Bulk Sul. Ckt. | 15 | 6.8 | | | 0.25 | 0.06 |
| Bulk Cl. Ckt. | 10 | | | | | |
| Cu Cl. Ckt. | 5 | 11.9 | 10.0 | 5.0 | | |

Table IV

Test Flowsheet Scheme, O. L. 2700:



Rec'd at Wash. DMA-393X

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

So. 157 Howard Street
Spokane 8, Washington

June 11, 1951

Mr. Landon F. Strobel
Executive Secretary
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Dear Mr. Strobel:

Enclosed is additional data asked of W. A. Noon for his application for an exploration loan on the Sunrise mine (DMA-393). The additional data enclosed includes a copy of the lease on the Sunrise mine, a list of the claims and property in the Sunrise mine, assays of the tungsten content of ore, a partial list of shipments of ore since beginning operations in January, 1951, and further explanation of the cost requirements.

Three copies of the application for an exploration loan were forwarded to you on May 31, 1951.

Sincerely yours,

Allan B Griggs

Allan B. Griggs
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosures

Dma - 393 X

# MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, June 7, 1951

The Following Analyses Were Made For W. A. Noon

| | Per Cent $H_2O$ | Ozs. Silver Per Ton | Ozs. Gold Per Ton | $ Gold Per Ton | Per Cent ~~XXXXX~~ $WO_3$ | Per Cent Mn. Dioxide | Per Cent Iron | Per Cent Lead | Per Cent Manganese | Per Cent Silica | Per Cent Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #2031 | Dried | Pulp | | | 0.260 | ✓ | M.P. 50395 - 5/07/51 | | | | |
| #2032 | ✓ | ✓ | | | 0.085 | ✓ | M.P. 50050 - 4/30/51 | | | | |
| #2033 | ✓ | ✓ | | | 0.154 | ✓ - | M.P. 50241 - 4/11/51 | | | | |
| | | | | | 0.499 | | | | | | |
| | | | | Avg | = 0.166% | | | | | | |

MONTANA LABORATORY COMPANY

By [signature]

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

June 8, 1951

Re: DMA-393

Mr. Allan B. Griggs, Acting For
A. E. Weissenborn
Executive Officer, D.M.A.
Field Team, Region II
South 157 Howard Street
Spokane 8, Washington

Dear Mr. Griggs:

In line with our last letter of the 6th, we herewith enclose tungsten assays 2031, 2032 and 2033.

Assay 2031 was a pulp sample taken at the Washoe Sampler from N.P. car 50395, shipped from the Sunrise Mine on May 17th, 1951.

Assay 2032, same sort of a sample from car N.P. 50050, shipped on April 30, 1951.

Assay 2033 was from car N.P. 50241, shipped on April 11, 1951.

These are approximately 50-ton cars and, of course, was ore from the entire north stope. It is the writer's personal opinion, as the mine is developed deeper into the sulphide zone, the tungsten values will increase; and if you will check our car assays, they show this fact.

Yours very truly,

W. A. Noon

WAN.da
Encl.-3

Dma-393X

# MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, March 3, 1951

The Following Analyses Were Made For W. A. Noon

| | Per Cent $H_2O$ | Ozs. Silver Per Ton | Ozs. Gold Per Ton | $ Gold Per Ton | Per Cent ~~XXXXX~~ WO3 | Per Cent Mn. Dioxide | Per Cent Iron | Per Cent Lead | Per Cent Manganese | Per Cent Silica | Per Cent Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #2010 | | | | | 0.065 | | | 0.20 | | | |

Cu bad pulp
Cu # MP 50295

MONTANA LABORATORY COMPANY

By [illegible]

M.P. 50295

# MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, June 2, 1951

The Following Analyses Were Made For W. A. Noon

| | Per Cent $H_2O$ | Ozs. Silver Per Ton | Ozs. Gold Per Ton | $ Gold Per Ton | Per Cent ~~XXXXX~~ | Per Cent Mn. Dioxide | Per Cent ~~XXX~~ | Per Cent Lead | Per Cent Manganese | Per Cent Silica | Per Cent Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | $WO_3$ | | S | | | | |
| #2030 | | | | | 0.025 | | 18.29 | | | | |

Dist of Philipsburg

MONTANA LABORATORY COMPANY

By W. A. Rupp

# MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, **February 23, 1951**

The Following Analyses Were Made For **W. A. Noon**

| | Per Cent $H_2O$ | Ozs. Silver Per Ton | Ozs. Gold Per Ton | $ Gold Per Ton | Per Cent ~~Copper~~ | Per Cent Mn. Dioxide | Per Cent Iron | Per Cent Lead | Per Cent Manganese | Per Cent Silica | Per Cent Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | $WO_3$ | | | | | | |
| #2009 | | | | | 0.72 | | | | | | |

Grab from Drift face

MONTANA LABORATORY COMPANY

By [illegible]

# MONTANA LABORATORY COMPANY

CHEMISTS AND ASSAYERS

Philipsburg, Montana, March 28, 1951

The Following Analyses Were Made For W. A. Noon

| | Per Cent $H_2O$ | Ozs. Silver Per Ton | Ozs. Gold Per Ton | $ Gold Per Ton | Per Cent ~~XXXX~~ $WO_3$ | Per Cent Mn. Dioxide | Per Cent Iron | Per Cent Lead | Per Cent Manganese | Per Cent Silica | Per Cent Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|
| #2013 | | | | | 1.52 | | | | | | |

grab in dump pile

MONTANA LABORATORY COMPANY

By

TELEPHONE 3-3302

Hand Sample Serial 17346

Mine H & H Mines, Inc.

ASSAY REPORT

# UNION ASSAY OFFICE, Inc.

J. V. SADLER, President
A. C. SELBY, Vice-Pres. & Treas.
A. C. SELBY, JR., Secretary

RESULTS PER TON OF 2000 POUNDS

May 8, 1951

Salt Lake City 11, Utah

| NO. | GOLD Ozs. per Ton | SILVER Ozs. per ton | LEAD Per Cent Wet | ~~COPPER~~ Per Cent | INSOL. Per Cent | ZINC Per Cent | SULPHUR Per Cent | IRON Per Cent | LIME Per Cent | Per Cent | Per Cent | VALUE GOLD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | WO3 | | | | | | | | |
| #5620 | | | | 64.90 | | | | | | | | |

3.00

Mill run 56 mesh.

A. C. Selby

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

June 6, 1951

Mr. Allen B. Griggs, Acting For
A. E. Weissenborn
Executive Officer, D.M.A.
Field Team, Region II
South 157 Howard Street
Spokane 8, Washington

Dear Mr. Griggs:

Referring again to your letter of June 1st, we enclose herewith a copy of the lease and option on the Sunrise Mine, dated the 22nd day of June 1946, which is drawn to William R. McLure. We hold an assignment from William R. McLure for this lease, and an extension has been granted on this lease for 3½ years with the payment due July 1st.

We herewith enclose the list of claims of the Sunrise Mine which are all located in Section 35, Township 9 North, Range 14 West M.P.M.

We also include a partial list of car shipments from the Sunrise Mine made in 1951.

Also included herewith are copies of Assays #2011, #2030, #2009, #2013 and #5620.

Assay #2011, Dated March 3rd, was a pulp sample from car N.P. 50295 shipped on February 16th from the Sunrise Mine. This shows tungsten content.

Assay #2030, which is the 200 pound sample from the bin, assayed on June 2nd. Please realize an assay from the bin on the Sunrise Mine takes all the ore taken from the mine stopes. Please notice the sulphur content 18.29%. This sulphur content surprised us and if it can be handled from the pyrite ore, it might make a very valuable by-product.

Assay #2009, dated February 23rd, was a 100 pound block of sulphide ore from the face of the north drift which was broken in two and assayed. We tried to get an ordinary grab sample. We still have the other half of the sample.

Assay #2013 was a grab sample from the face of the north drift which, of course, is too high, which shows that part of the ore is high grade.

Assay #5620 is a sample taken from the mill on Henderson Creek. This was our last mill-run from the Henderson Creek gravel, showing that the Henderson Creek ore can be concentrated into a high-grade concentrate. This was a 4,000 pound run.

Now, regarding your question number two in your letter of June 1st, asking for more detailed information on cost and requirements, question No. 23, we would like to get your advice on this as we have already turned in costs of contract work and we aim to contract all the work possible. There is a detailed list of costs of every type and nature in Mr. Reynold's report. The writer wishes to simplify the matter as much as possible by handling the proposed work on a contract basis.

The ore is costing today about $2.00 per ton by hand labor into the bin. The hauling charge to the railroad is $1.50 per ton which can be cut to $1.00. The freight to the smelter in Anaconda is $1.72 per ton and we have asked for a reduction in this rate.

We will be glad to follow any suggestions you have to give us on the cost feature.

Yours very truly,

W. A. Noon

W. A. Noon

WAN.da
Encl.-9

PARTIAL LIST OF CAR SHIPMENTS FROM SUNRISE MINE FOR QUEEN MINING SYNDICATE

| Date | N. P. Car Number | Pounds Gross | Per Cent Water | Pounds Dry | Per Cent Copper | Ounces Silver | Ounces Gold | Treatment Charge | Price Per Ton | Value |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-12-51 | 50241 | 99620 | 2.3 | 97329 | 2.46 | 0.80 | 0.190 | $ 5.09 | $ 9.33 | $ 454.04 |
| 5-2-51 | 50050 | 79000 | 2.2 | 77262 | 2.05 | 1.3 | 0.210 | 5.24 | 8.43 | 325.66 |
| 4-20-51 | 50169 | 88900 | 2.0 | 87122 | 2.33 | 0.6 | 0.195 | 5.01 | 9.00 | 392.05 |
| 3-30-51 | 53134 | 92200 | 2.3 | 90079 | 2.69 | 1.6 | 0.275 | 5.50 | 13.28 | 598.12 |
| 3-7-51 | 50485 | 123140 | 3.4 | 118953 | 2.49 | 1.4 | 0.195 | 5.45 | 9.61 | 571.57 |
| 2-28-51 | 50228 | 107180 | 2.4 | 104608 | 2.70 | 1.05 | 0.170 | 5.14 | 9.70 | 507.35 |
| 2-16-51 | 50295 | 77040 | 1.8 | 75653 | 3.07 | 2.1 | 0.200 | 5.50 | 12.86 | 486.45 |
| 2-5-51 | 50623 | 93080 | 1.8 | 91405 | 2.89 | 1.2 | 0.205 | 5.50 | 11.57 | 528.78 |
| 1-22-51 | 50047 | 102020 | 1.9 | 100082 | 2.31 | 0.60 | 0.180 | 5.11 | 8.32 | 416.34 |
| 1-9-51 | 53455 | 98500 | 2.0 | 96530 | 2.56 | 0.8 | 0.135 | 5.17 | 7.88 | 380.33 |
| 1-4-51 | 53495 | 91060 | 1.8 | 89421 | 2.26 | 0.75 | 0.145 | 5.14 | 6.92 | 309.40 |

M. E. Volin, Chief, Mining Division,
Region II

December 11, 1951

J. D. Bardill

Discussion of tin and tungsten possibilities, DMA Docket 393X, Tungsten-Copper, Sunrise Mine, Montana.

Attached is a copy of a memorandum directed to H. Gordon Poole, Chief, Nonferrous Metals Branch, from F. H. Floyd, Acting Head, Mineral Dressing Section, Northwest Electrodevelopment Laboratory, Albany, Oregon, dated November 7, 1951. This memorandum outlines the metallurgical test procedures and results on a copper-tungsten-gold ore sample from the Sunrise Mine, Granite County, Montana. This mine is being considered for an exploratory contract as a source of tungsten. I believe the original loan application was on the basis of the mine being a copper producer.

An analysis of the sample indicated the tin content to be 0.11 percent. The sample was insufficient in size for beneficiation tests to recover the tin.

My memorandum dated December 3, 1951, to you was to correct the tungsten analyses shown on page 2 of a memorandum dated June 15, 1951, to Mr. Tom Lyon, Chairman, Coordinating Committee, DMA, from Field Team, Region II. The June memorandum showed the analyses for samples 1 through 5 inclusive, to be 0.45, 0.28, 0.33, 0.29 and 0.28 percent tungsten trioxide. The correct results, based on a reassay, should be 0.23, 0.09, 0.14, 0.09 and 0.12 percent tungsten trioxide respectively. The average of these assays corresponds reasonably well with the average tungsten analyses of the 5 carload shipments.

The attached memorandum indicates that a 60.1 percent tungsten recovery was made in a scheelite concentrate containing about 16.9 percent tungsten trioxide from the head sample, which analyzed 0.105 percent tungsten trioxide. Using the 0.143 percent tungsten trioxide average analyses of the 5 carloads of ore shipped, 1.72 pounds of tungsten trioxide would be saved in a 16.9 percent concentrate at a 60 percent recovery. The value of the tungsten recovered per ton of ore mined, according to the purchase schedule of the U. S. Vanadium Corporation at Bishop, California, at $41.00 per short ton unit, would be $3.52 before deducting milling and shipping charges to Bishop. This can hardly be considered a tungsten ore.

The pyrite concentrate shown in the test data as Albany Assay No. 23141, contained 30.6 percent sulphur and 33.7 percent iron.

J. D. Bardill

Holderer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

S. 157 Howard Street
Spokane 4, Washington

July 19, 1951

Air Mail

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 3 1951
LANDON F. STROBEL
Executive Secretary

Mr. George V. Holderer
Chief, Tungsten Branch
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Holderer:

Referring to your letter of July 13 regarding Sunrise mine, Granite County, Montana, docket DMA 393X, perhaps our letter of July 17 may not be wholly clear to you. A field team report dated July 15 which was forwarded to you on June 21 with a proposed contract for the Sunrise mine contains on page 2 the tungsten assays which were mentioned in our letter of May 31. I hope that this will clear up the matter.

Can you advise me on the status of the Sunrise mine? We had, as I recall, received informal word that the contract was being approved, but that was some time ago and we have had no further word since.

Sincerely yours,

A E Weissenborn

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

July 17, 1951

Mr. George B. Holderer
Chief, Tungsten Branch
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

Re: DMA Docket 393 X Tungsten

Dear Mr. Holderer:

Our records show that a field team report and contracts for the Sunrise Mine, Granite County, Montana, were forwarded to Washington on June 21, and that the Sunrise mine docket was forwarded on July 9.

Very truly yours,

Elton A. Youngberg

Elton A. Youngberg
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 23 1951
LANDON F. STROBEL
Executive Secretary

MF-200
(April 1951)

Docket No. DMA 393 X
Commodity tungsten and copper.

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

# EXPLORATION PROJECT CONTRACT[1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and[2] Queen Mining Syndicate, a partnership, W. A. Noon, Manager

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Granite described as follows:[3] the Sunrise Mine, consisting of 21 patented lode claims, 5 unpatented lode claims, and a tract of homestead land containing 7.3 acres lying principally in Sec. 35, T. 9 N., R. 14 W.

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

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

Queen Mining Syndicate is the lessee of the property.

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

3. *Exploration project.* The Operator, within 30 days from the date of this contract shall commence work on a project of exploration for[5] tungsten and copper; 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] 18 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. Attached hereto, marked "Exhibit 'B'," is a detailed list of 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 its agreed pro-rata share of the cost. 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.* Attached hereto, marked "Exhibit 'C'," is a detailed list of operating equipment divided into categories of items to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or rental value, as the case may be, annexed to each. 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.* Attached hereto, marked "Exhibit 'D'," is 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.

9. *Rehabilitation and repairs.* Attached hereto, marked "Exhibit 'E'," is a detailed schedule 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, which cost shall be allowed as a cost of the project.

10. *Allowable costs of the project.* The allowable 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, 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 the 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, or any other indirect costs not expressly allowed by these regulations, 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. *Participation by the Government.* At the end of the first full calendar month after the Operator has commenced work under the project, and at the end of each succeeding calendar month, the Operator shall submit to the Government a voucher for payment with a detailed statement of work done and allowable costs (as defined in Article 10 of this agreement) incurred, in a form and with supporting data acceptable to the Government. After approving the voucher, the Government shall pay to the Operator 75 percent of the sum of such costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $45,000, which is 75 percent of the agreed estimated total cost of this project, $60,000.

12. *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.

13. *Progress reports.* The Operator shall provide the Government with monthly reports of progress in form and content satisfactory to the Government, and upon the completion of the project or termination of the contract 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.

14. *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 additional for each 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 property 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.

15. *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.

16. *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 triplicate the day and year first above written.

THE UNITED STATES OF AMERICA

---
(Operator)

By ---

By ---

U. S. GOVERNMENT PRINTING OFFICE 16—64066-1

June 18, 1951

DMA Docket No. 393X
Commodity-Tungsten-Copper

Queen Mining Syndicate
Sunrise Mine, Granite County, Montana
Exploration Project Contract

EXHIBIT A

Proposed exploration (Plan No. 1): Straighten out main tunnel by blasting off corners and make it generally suitable for haulage. Drift northward on vein for 550 feet from the north end of main tunnel. Open the No. 1 west drift and drift northward on the vein for 330 feet from the north end of this drift. Then drive a raise along the vein to connect the extended faces of main tunnel and No. 1 west drift, an estimated distance of 210 feet.

Alternate (Plan No. 1 A): Open up the No. 1 west drift, now caved at portal. If upon opening No. 1 west drift it is found that it is not a good workable tunnel, it is proposed that No. 3 west be extended instead by drifting along the vein north from the face for 398 feet and that the main tunnel be extended only 188 feet; then a raise estimated at 455 feet in length be driven to connect the ends of the extended main tunnel and No. 3 West.

The attached map outlines the proposed work, Plan 1 and alternate Plan 1 A.

Total Cost--Plan 1

| | |
|---|---|
| Rehabilitation of main adit and reopening of No. 1 west drift. | $ 4,800.00 |
| 880 feet of drifting @ $25.00/ft. | 22,000.00 |
| 210 feet of raising @ $30.00/ft. | 6,300.00 |
| Equipment to be purchased | 20,900.00 |
| Supervision (including engineering, accounting, etc.) | 6,000.00 |
| | $60,000.00 |

Total Cost--Plan 1a

| | |
|---|---|
| Rehabilitation of main adit and reopening of No. 1 west drift. | $ 4,800.00 |
| 586 feet of drifting @ $25.00 | 14,650.00 |
| 455 feet of raising @ $30.00 | 13,650.00 |
| Equipment to be purchased | 20,900.00 |
| Supervision (including engineering, accounting, etc.) | 6,000.00 |
| | $60,000.00 |

## Estimated progress schedule

It is estimated the rate of progress for drifting will be 100 feet per month, for raising will be 100 feet per month, and that it will take one month to rehabilitate main adit and open up No. 1 west drift.

DMA Docket No. 393X
Commodity-Tungsten-Copper

Queen Mining Syndicate
Sunrise Mine, Granite County, Montana
Exploration Project Contract

EXHIBIT B

Fixtures and Improvements

Any additional facilities, building, and fixtures to be purchased, installed, or erected by the Operator shall not be charged as a cost of the project.

Queen Mining Syndicate
Sunrise Mine, Granite County, Montana
Exploration Project Contract

EXHIBIT C

Operating Equipment

To be rented--none.
To be purchased:

| Item | Delivery Cost |
|---|---|
| 320 Cu. Ft. Electric compressor | $5,000.00 |
| 1 mucking machine | 3,000.00 |
| 1 air trammer | 2,500.00 |
| 4 mine cars @ $400.00/car | 1,600.00 |
| 2 air slushers (complete) @ $2,000 ea. | 4,000.00 |
| 2 stopers @ $400.00 ea. | 800.00 |
| 1-I.R. automatic feed drifter | 600.00 |
| Miscellaneous parts and supplies | 1,500.00 |
| Contingencies @ 10 percent | 1,900.00 |
| | $20,900.00 |

To be furnished by operator--none.
To be required but estimated in contract as part of cost of drifting or raising:

| | |
|---|---|
| 12 ton rail (20#) 3,600 ft. @ $200.00/ton | 2,400.00 |
| 2,000 ft. 2" airline @ $0.60/ft. | 1,200.00 |
| 2,000 ft. 1" waterline @ $0.25/ft. | 500.00 |
| 1,000 ties @ $0.60 each | 600.00 |
| Powder (est.) | 600.00 |
| Steel and bits (est.) | 1,500.00 |
| Power for drilling, trammer, etc. $300.00/month for 12 months | 3,600.00 |
| | $10,300.00 |

DMA Docket No. 393X
Commodity-Tungsten-Copper

Queen Mining Syndicate
Sunrise Mine, Granite County, Montana
Exploration Project Contract

EXHIBIT D

Labor and Supervision

| No. Required | Classification | Butte Scale Rates per hour |
|---|---|---|
| 2 | miners | $1.54 |
| 2 | muckers | 1.48 |
| 2 | trammers | 1.48 |
| 1 | Superintendent | Maximum Salary |
| (engineering | accounting, etc.) | $500.00/mo. |
| 1 | Foreman shift boss | 400.00/mo. |

Any additional labor that may be required will be hired at Union wage rates in effect at Butte, Montana.

It is planned to contract the driving of drifts and raises, in which case the above wage scale will not hold. Up to $9.00 per foot will be allowed for labor.

DMA Docket No. 393X
Commodity-Tungsten-Copper

Queen Mining Syndicate
Sunrise Mine, Granite County, Montana
Exploration Project Contract

EXHIBIT E

Rehabilitation and repairs

The cost of any rehabilitation and repairs required to put existing facilities, building, installations, and fixtures into useful and operable condition shall not be charged as a cost of the project, with the exception of the reopening No. 1 west drift and the rehabilitation of the main drift to an operable haulage adit by slabbing the sides and making sufficient head room.

1. Reopening No. 1 west drift and rehabilitation of main drift --$4,800.00.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 8, Washington

May 31, 1951

Mr. Landon F. Strobel
Executive Secretary
Defense Minerals Administration
Department of Interior
Washington 25, D. C.

DMA-393-X

Dear Mr. Strobel:

Enclosed herewith are three copies of an application for an exploration loan on the Sunrise mine, Granite County, Montana. The applicant is the Queen Mining Syndicate and the application has been submitted by W. A. Noon, Manager.

Originally an application, Docket DMA-393, was made for a production loan based on the copper content of the ore. Mr. Noon was advised that the project suggested was of an exploratory nature, and he then submitted the enclosed application, which is based on tungsten, recently found in the deposit in the form of scheelite.

Several of the questions do not appear to have been answered adequately and Mr. Noon has been asked to furnish the following additional information:

1. A legal description of the property upon which the exploration will be conducted.

2. A more detailed statement on requirements and costs of the project.

3. Production and net smelter returns since starting operations in January, 1951.

These plus a copy of the lease will be forwarded as soon as received.

A field examination has been made of this property and a report will be submitted when further information on the tungsten content is received. The fourth copy of the exploration application is being held for reviewal and will be sent with the report on the examination.

Sincerely yours,

Allan B. Griggs

Allan B. Griggs
For: A. E. Weissenborn
Executive Officer, DMA
Field Team, Region II

Enclosure
cc: Volin U.S.B.M.
Shelton U.S.B.M.

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

May 28, 1951

Mr. A. C. Weissenborn
c/o Defense Minerals Administration
South 157 Howard Street
Spokane, Washington

Dear Sir:

At the suggestion of Mr. Allan B. Griggs, we are hereby filing with you Form MF-103, asking for a $60,000 exploration loan on a tungsten basis. We are to furnish 25% of the necessary funds.

Time is short and we haven't the necessary time to send you our late tungsten assays or a recapitulation of our last ore shipments. They will be forwarded tomorrow.

It is possible that we have over-looked some information in this form, and we would be very glad to give you any additional data you desire at any time.

Yours very truly,

W. A. Noon

W. A. Noon

WAN.da
Encl.-4

Form MF-103
(April 1951)

U[redacted] DEPARTMENT OF THE INTER[redacted]R
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA - 393X

Date received 6/4/51

Participation

W. A. Noon
c/o Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Name and address of applicant

Date 5-28-51

FILL IN THIS BLOCK

Date of application 2-26-51

Estimated cost $60,000

Mineral or metal Copper and tungsten

Percentage of Government participation 75%

Location of mine Sunrise Mine, Granite County, Montana

Date of filing MF-100

DMA Docket Number, if available DMA-393 X

## INSTRUCTIONS

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

See attached sheet for answers to questions 1 through 24.

THE APPLICANT

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

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

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

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

16—64067-1

## THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

## THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

## THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

## CERTIFICATION

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

Queen Mining Syndicate
(Name of company)

By [signature]
(Signature of authorized official)

May 28, 1951
(Date)

Manager
(Title)

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

*Same as footnote on page 1.

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

To be attached to Form MF-103 -- filed by W. A. Noon

1. See Form NSRB-146
2. See Form NSRB-146
3. See Form NSRB-146
4. See Form NSRB-146
5. See Form NSRB-146
6. See Form NSRB-146
7. Copy of lease will be mailed. Lease is in good standing.
8. See NSRB-146
9. Applicant is prepared to invest 25% of loan asked for.
10. (a) See Form NSRB-146
    (b) See Form NSRB-146
11. See NSRB-146
12. See NSRB-146
13. See NSRB-146. Power furnished by Montana Power Company at 7/8¢ per kilowatt. Mine will use to start with around 100 horse power.
14. See NSRB-146. The mine at this time only has: rails, cars, 800 feet of 2-inch air lines, and light facilities for mining.
15. See NSRB-146. See John Reynolds' report on handling the crude ore, showing differentials between shipping crude ore to the smelter and milling same on the property.
16. See NSRB-146.
17. Property now shipping at the rate of 300to 500 tons per month. Attached is the record of last smelter returns on shipments.
18. See NSRB-146.
19. Changes in the value of the ore have occurred. Since a fair grade of tungsten is now showing in the north face of the main tunnel and seems to be increasing as the ore is stoped, assays will be mailed on tungsten values on the last cars shipped. Development of the copper ore will also develop the tungsten reserves.
20. See NSRB-146
21. Main drift to be driven ahead 500 feet holding drift on the vein. Drift one west to be driven ahead 150 feet. If when opened, one west is not a good workable tunnel, we suggest driving ahead three west. The plan being to block out enough commercial ore to warrant installation of 150 ton mill. General plans are to raise 210 feet from one west to main tunnel. Drifting 500 feet on main tunnel and 150 feet on one west and raising 210 feet from one west to main tunnel, estimated cost . . . . . $ 22,550.00

    Drift is estimated at $25 per foot and raising at $30 per foot.

    Cost of straightening main drift, estimated. . . . . 4,250.00

    Opening one west, estimated. . . . . 2,500.00

    $ 29,300.00

    Estimated time to complete this work is 12 months operating time.

    Equipment needed to carry on this work would be extra rails, 320 cubic foot electric compressor, 4 extra mine cars, and air tools. This equipment purchased today in good second-hand condition would cost around $12,000. Plans are balance of funds asked for would be used for further development in developing sulphide ore body in the Sunrise Mine and extending drifts to longer length if, as development work progresses, this expense is justified.

(See Reverse side of sheet)

22. See NSRB-146
23. (a) and (b) Present plans call for two shifts of work which include 2 miners, 2 muckers, 2 tammers, 1 shift boss and superintendent. Present wage scale here is Butte scale and is approximately $12.85 per day.
(c) None
(d) None
(e) Possible use of compressor on hand, rental $125 per month.
(f) None
(g) None
(h) None
(i) None
24. We believe with good weather conditions, this work can be done over a period of 12 months.

Form MF-103
(April 1951)

U[redacted] DEPARTMENT OF THE INTER[redacted]R
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-393X

Date received 6/4/51

Participation

W. A. Noon
c/o Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Name and address of applicant

Date 5-28-51

FILL IN THIS BLOCK

Date of application 2-26-51

Estimated cost $60,000

Mineral or metal Copper and tungsten

Percentage of Government participation 75%

Location of mine Sunrise Mine, Granite County, Montana

Date of filing MF-100

DMA Docket Number, if available DMA-393 X

## INSTRUCTIONS

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

See attached sheet for answers to questions 1 through 24.

THE APPLICANT

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

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

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

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

16—64067-1

## THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

## THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

## THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

## CERTIFICATION

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

Queen Mining Syndicate
(Name of company)

By [signature]
(Signature of authorized official)

May 28, 1951
(Date)

[signature]
(Title)

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

*Same as footnote on page 1.

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

To be attached to Form MF-103 -- filed by W. A. Noon

1. See Form NSRB-146
2. See Form NSRB-146
3. See Form NSRB-146
4. See Form NSRB-146
5. See Form NSRB-146
6. See Form NSRB-146
7. Copy of lease will be mailed. Lease is in good standing.
8. See NSRB-146
9. Applicant is prepared to invest 25% of loan asked for.
10. (a) See Form NSRB-146
    (b) See Form NSRB-146
11. See NSRB-146
12. See NSRB-146
13. See NSRB-146. Power furnished by Montana Power Company at 7/8¢ per kilowatt. Mine will use to start with around 100 horse power.
14. See NSRB-146. The mine at this time only has: rails, cars, 800 feet of 2-inch air lines, and light facilities for mining.
15. See NSRB-146. See John Reynolds' report on handling the crude ore, showing differentials between shipping crude ore to the smelter and milling same on the property.
16. See NSRB-146.
17. Property now shipping at the rate of 300to 500 tons per month. Attached is the record of last smelter returns on shipments.
18. See NSRB-146.
19. Changes in the value of the ore have occurred. Since a fair grade of tungsten is now showing in the north face of the main tunnel and seems to be increasing as the ore is stoped, assays will be mailed on tungsten values on the last cars shipped. Development of the copper ore will also develop the tungsten reserves.
20. See NSRB-146
21. Main drift to be driven ahead 500 feet holding drift on the vein. Drift one west to be driven ahead 150 feet. If when opened, one west is not a good workable tunnel, we suggest driving ahead three west. The plan being to block out enough commercial ore to warrant installation of 150 ton mill. General plans are to raise 210 feet from one west to main tunnel. Drifting 500 feet on main tunnel and 150 feet on one west and raising 210 feet from one west to main tunnel, estimated cost . . . . . $ 22,550.00
    Drift is estimated at $25 per foot and raising at $30 per foot.
    Cost of straightening main drift, estimated. . . . . 4,250.00
    Opening one west, estimated. . . . . 2,500.00
    $ 29,300.00

    Estimated time to complete this work is 12 months operating time.
    Equipment needed to carry on this work would be extra rails, 320 cubic foot electric compressor, 4 extra mine cars, and air tools. This equipment purchased today in good second-hand condition would cost around $12,000. Plans are balance of funds asked for would be used for further development in developing sulphide ore body in the Sunrise Mine and extending drifts to longer length if, as development work progresses, this expense is justified.

(See Reverse side of sheet)

22. See NSRB-146
23. (a) and (b) Present plans call for two shifts of work which include 2 miners, 2 muckers, 2 tammers, 1 shift boss and superintendent. Present wage scale here is Butte scale and is approximately $12.85 per day.
(c) None
(d) None
(e) Possible use of compressor on hand, rental $125 per month.
(f) None
(g) None
(h) None
(i) None
24. We believe with good weather conditions, this work can be done over a period of 12 months.

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. 393X

Commodity Tungsten Copper

Total Amount $60 000

Govt. Participation $45000

1. Name and Address of Applicant Queen Mining Syndicate
Sunrise Mine, Granite County Montana

2. Location of Property
Granite County, Montana

3. Mineral or metal Copper Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good Yes

b) Poor

c) None

d) Don't know—needs field examination Has been done

e) Is there an alternative and favorable project? Yes
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? No

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? Yes

a) MF-201? No

b) MF-202 Yes

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Yes

b) Equipment and supplies Yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

Is a field check needed on this point? Has been done

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? Yes If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Yes

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is?

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? No

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed?_____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft.

c) Are rents and charges reasonable? No rentals

d) Is a field check needed?_____ No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? Yes

c) Reasonable? Yes

d) Field check needed? Has been done

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? DMA Field Team Region II recommends that the application be approved and a contract made in the amount asked. Copper is principal metal but tungsten is present in sufficient quantity to justify 75% Government participation. The Copper Branch concurs. Since Copper Branch feel [illegible] that amount can be paid back by copper alone Tungsten Branch would O.K. this application

Reviewed by: J.B. Gowen

Date 6/27/51



97692

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

Hower

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 393X

Date received

[illegible]

Name and address of applicant

Date [illegible]

## 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? [illegible] concentrates
   (b) What are the byproducts, if any? copper ore
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: [illegible] so far produced
   (a) Linear feet of shafts.
   (b) Linear feet of drifts and crosscuts. } 7000' - DMA 393X - Sunrise Mine
   (c) Linear feet of tunnels or adits.
   (d) Linear feet of other mine openings (explain briefly). 150T. Mill — after exploration?

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following: see Bu Mines Reports
   (a) Distance and direction from nearest town and shipping point. [illegible]
   (b) Mining district. [illegible]
   (c) Township, Section, Range. [illegible] } See Bu of Mines Maps & Reports
   (d) County, State. [illegible]
4. (a) State whether or not property is now in operation, and if in operation, by whom operated. DMA-393X - WANOON - Mgr.
   (b) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee.
   - ☐ Contractor.
5. Number of years in production [illegible] on Henderson Creek
   If not in production or operation, estimated date when production will begin [illegible]
6. Experience of operators: [illegible] on Henderson Creek
   Describe the mining and general business experience of (a) the applicant, and (b) the person or persons who manage the project. [illegible]
7. History: [illegible] with application DMA [illegible]
   (a) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation. DMA 393X - Tungsten Exploration
   (b) State briefly the known history and production of adjoining and neighboring properties. [illegible]
   (c) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

Bu. of Mines Report - 1949 - (RI-4513) - Hunahansen
" " " " 1950 (4669 Investigation) John W Cole

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 | | Life Insurance Carried for Benefit of Applicant | |
|---|---|---|---|---|---|---|---|
| | | | | Common (e) | Preferred (f) | Amount (g) | Net Cash Surrender Value After Loans (h) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Total | | x x x x x | | | x x x x x | x x x x x |

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

**For Corporate Applicants**

| Item | Authorized (a) | Outstanding (b) | Par Value (c) | Number of Shares Outstanding (d) | Dividend Rate Last Paid* (e) |
|---|---|---|---|---|---|
| Common stock | $ | $ | $ | | |
| Preferred stock | $ | $ | $ | | |

*Indicate period covered.

10. Production:

| Item | Kind of Product (a) | 1948 Total (b) | 1949 Total (c) | 1950 Total (d) | Present Average Monthly (e) |
|---|---|---|---|---|---|
| 1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.) | | | | | |
| 2. Quantity of product processed (specify unit of measure and type of process) | | | | | |
| 3. Quantity and grade of product sold or shipped (specify units of measure) | | | | | |

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

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.

(*b*) If deposit is other than placer: See DMA 393X for exploration project

(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) Exploration project designed to do this. DMA 393X | | | | | |
| Indicated (probable) | | | | | |

(*c*) If placer: In combination with DMA 393X for tungsten exploration, see letter attached, W.A. Hopp interest in placer ($WO_3$)

(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. tabulation attached-"12-c"

See Bu of Mines Reports

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads. good roads to property, 5 miles from Stone, on K.P.R. shipping point- (DMA 393X)

14. Water Supply: Good (DMA 393X) Henderson Creek

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

15. Power: on property - see DMA 393X

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

16. Labor: DMA 393X

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

17. Equipment and Facilities: will be needed for exploration project DMA 393X + Tungsten placer operation

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.

($WO_3$ Concentrate Mill in connection with Placer Operation) none on DMA 393X - Sunrise Mine

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

**CERTIFICATION**

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

(Name of company)

By [signature] (Signature of authorized official)

June-29-1951 (Date)

Mgr. Jo. Green Mining Syndicate (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
(April 1951)

U. DEPARTMENT OF THE INTERI
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-393X

Date received 6/4/51

Participation

W. A. Noon
c/o Queen Mining Syndicate
P. O. Box 333
Drummond, Montana

Name and address of applicant

Date 5-28-51

FILL IN THIS BLOCK

Date of application 2-26-51

Estimated cost $60,000

Mineral or metal Copper and tungsten

Percentage of Government participation 75%

Location of mine Sunrise Mine, Granite County, Montana

Date of filing MF-100

DMA Docket Number, if available DMA-393 X

## INSTRUCTIONS

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

THE APPLICANT

See attached sheet for answers to questions 1 through 24.

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

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

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

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

16—64067-1

## THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

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

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

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

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

## THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

## THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

## CERTIFICATION

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

Queen Mining Syndicate
(Name of company)

By [signature]
(Signature of authorized official)

May 28, 1951
(Date)

Manager
(Title)

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

*Same as footnote on page 1.

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

To be attached to form MF-103 -- filed by W. A. [illegible]oon

1. See Form NSRB-146
2. See Form NSRB-146
3. See Form NSRB-146
4. See Form NSRB-146
5. See Form NSRB-146
6. See Form NSRB-146
7. Copy of lease will be mailed. Lease is in good standing.
8. See NSRB-146
9. Applicant is prepared to invest 25% of loan asked for.
10. (a) See Form NSRB-146
    (b) See Form NSRB-146
11. See NSRB-146
12. See NSRB-146
13. See NSRB-146. Power furnished by Montana Power Company at 7/8¢ per kilowatt. Mine will use to start with around 100 horse power.
14. See NSRB-146. The mine at this time only has: rails, cars, 800 feet of 2-inch air lines, and light facilities for mining.
15. See NSRB-146. See John Reynolds' report on handling the crude ore, showing differentials between shipping crude ore to the smelter and milling same on the property.
16. See NSRB-146.
17. Property now shipping at the rate of 300to 500 tons per month. Attached is the record of last smelter returns on shipments.
18. See NSRB-146.
19. Changes in the value of the ore have occurred. Since a fair grade of tungsten is now showing in the north face of the main tunnel and seems to be increasing as the ore is stoped, assays will be mailed on tungsten values on the last cars shipped. Development of the copper ore will also develop the tungsten reserves.
20. See NSRB-146
21. Main drift to be driven ahead 500 feet holding drift on the vein. Drift one west to be driven ahead 150 feet. If when opened, one west is not a good workable tunnel, we suggest driving ahead three west. The plan being to block out enough commercial ore to warrant installation of 150 ton mill. General plans are to raise 210 feet from one west to main tunnel. Drifting 500 feet on main tunnel and 150 feet on one west and raising 210 feet from one west to main tunnel, estimated cost . . . . . $ 22,550.00
    Drift is estimated at $25 per foot and raising at $30 per foot.
    Cost of straightening main drift, estimated. . . . . 4,250.00
    Opening one west, estimated. . . . . 2,500.00
    $ 29,300.00

    Estimated time to complete this work is 12 months operating time.
    Equipment needed to carry on this work would be extra rails, 320 cubic foot electric compressor, 4 extra mine cars, and air tools. This equipment purchased today in good second-hand condition would cost around $12,000. Plans are balance of funds asked for would be used for further development in developing sulphide ore body in the Sunrise Mine and extending drifts to longer length if, as development work progresses, this expense is justified.

(See Reverse side of sheet)

22. See MSMB-146

23. (a) and (b) Present plans call for two shifts of work which include 2 miners, 2 muckers, 2 tammers, 1 shift boss and superintendent. Present wage scale here is Butte scale and is approximately $12.65 per day.

(c) None

(d) None

(e) Possible use of compressor on hand, rental $125 per month.

(f) None

(g) None

(h) None

(i) None

24. We believe with good weather conditions, this work can be done over a period of 12 months.

# SUNRISE MINE

Sec. 35, T. 9 N., R. 14 W., Granite County, Montana

## PROPOSED DEVELOPMENT
## PLAN VIEW

DMA-393

Exhibit "A"

Plan of proposed exploration

Existing workings to be used in exploration

Plan I

Alternate Plan I-a

JAMES E. MURRAY, MONT., CHAIRMAN
LISTER HILL, ALA.
MATTHEW M. NEELY, W. VA.
PAUL H. DOUGLAS, ILL.
HUBERT H. HUMPHREY, MINN.
HERBERT H. LEHMAN, N. Y.
JOHN O. PASTORE, R. I.
ROBERT A. TAFT, OHIO
GEORGE D. AIKEN, VT.
H. ALEXANDER SMITH, N. J.
WAYNE MORSE, OREG.
IRVING M. IVES, N. Y.
RICHARD M. NIXON, CALIF.
WILLIAM H. COBURN, CHIEF CLERK

LANDON F. STROBEL

Mr. Lyon

# United States Senate

COMMITTEE ON
LABOR AND PUBLIC WELFARE

BUREAU OF MINES
WASHINGTON, D.C.
MAR 20 9 46 AM '51

March 16, 1951

393

Mr. Tom Lyon, Director
Supply Division
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Lyon:

Thank you very much for your letter of March 8th re D.M.A.-393, the Sunrise Mine case. It seems to me this is a worthy application, and I am pleased it is getting your personal attention.

Sincerely yours,

W. C. Broadgate

W. C. Broadgate,
Consultant to Senator Murray

March 8, 1951

Re: Docket No. DMA-393

Mr. William C. Broadgate
Consultant to Senator Murray
Senate Office Building
Washington, D. C.

Dear Mr. Broadgate:

Mr. Douglas has asked me to make further reply to your inquiry of February 26, 1951 concerning the copper project of Mr. W. A. Noon of Drummond, Montana, at the Sunrise Mine.

This is a project in which we are very much interested and we have corresponded with Mr. Noon in an effort to separate the copper production phase of it from the exploratory program that he also has in mind. He is now about to submit to us a loan application, as he informed you in his letter of February 22, for the increased production of ore from the Sunrise vein. When the Defense Minerals Administration exploratory program goes into effect, which is expected shortly, he can determine whether or not that will be of assistance to him in the exploratory project.

Mr. Noon is correct in his understanding, as stated in the second paragraph of his letter, that the Defense Minerals Administration certifies loans to the Reconstruction Finance Corporation and that a loan is made by that agency. The loan may perhaps not require security other than the productive possibilities of the project, and the terms of repayment will be designed to permit repayment from proceeds in a reasonable length of time.

Mr. Noon asks if there is anything that can be done to hasten action on his application. I do not know of anything unless it is to suggest that he furnish us with the best and most complete analysis he can of his expected operating costs, overall costs, net returns and profits.

Copper Com. Conv. — 3423

As soon as Mr. Noon's application is received it will be given consideration here and if it appears to be technically and economically a feasible project our field team will be requested to make such field examination as is necessary to confirm Mr. Noon's estimates. With report of the field team in hand, the application then can be acted upon.

I am returning herewith, Mr. Noon's letter to you of the 22nd.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

CHJohnson:pf

Copy to: Executive Officer, DMA Field Team, Region II
South 157 Howard Street, Spokane, Washington w.c.i.
Copper Commodity Committee w.c.i.
Executive Secretary w.c.i.
Files

W. A. NOON
Phone 2551 or 2741
Drummond, Montana

Feb. 22, 1951

Mr. William C. Broadgate
Consultant to Senator Murray
Senate Office Building
Washington, D. C.

Dear Mr. Broadgate:

We wish to thank you for your letter of February 10th, and we herewith enclose copy of letter from Tom Lyon, Chief of Copper Branch (DMA) which was sent us airmail February 19th and a copy of our answer to Mr. Lyon as of today.

It is my understanding that a development loan approved by the DMA finally goes to the RFC or some related agency and the loan is made by them. We are under the impression that such a loan is based on the merits of the mine without any other additional security required, and that the terms of repayment are made according to the production possibilities of the mine itself. Is this correct.

We are planning to apply for a loan of $40,000 or $50,000, a development loan based on the recommendations of our engineer Mr. J. R. Reynolds, which recommendation and report the DMA already have in their files (Docket No. DMA-393) and which estimates the development possibility of around 500,000 Tons of commercial, milling, copper ore.

We are now shipping crude ore from this ore body. We are working one shift but can start development work at once by increasing the crew and continue crude ore shipments while the development work is in progress as we are already mining in the sulphide ore body. The development work itself will consist of lengthening the tunnels into the ore body and all the tunnels should make ore.

As soon as enough tonnage has been blocked out we plan on the immediate erection of a 200T capacity mill and will probably figure on negotiating a second loan from the DMA.

If there is anything you would suggest to expediate this program or any advice which would expediate same we would appreciate it. With the spring weather commencing an early start is desired.

Yours very truly,
signed W. A. Noon

WAN:M

C O P Y

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

C O P Y

Feb. 19, 1951
Re Docket No. DMA-393

Mr. W. A. Noon
Drummond, Montana

Dear Mr. Noon:

The 50-scale maps of the Sunrise Mine arrived a few days ago and form a good basis for evaluating the Queen Vein and we should be glad to have you submit an application for a development loan on that deposit. Whether you would extend the Main Tunnel, the No. 1 W. Tunnel, or the No. 3 W or 4W is a matter for you to decide.

It will be necessary, if you wish to apply for a loan under the Defense Production Act, to compky and submit the required forms, NSRB-146. Five of these are enclosed, together with a copy of the pertinent regulations. Reference may be made where appropriate to material already submitted, and sections not applicable may be so designated.

Your present application for a loan of $25,000 is to explore below a surface showing at a depth of 367 feet by driving an adit 539 feet. Since the only specified surface ore showing consists of one shaft which ran out of ore at a depth of about 30 feet we cannot consider this a very promising exploration project. It definitely does not qualify as a development-production project.

The Defense Minerals Administration is about to announce the details of a program to assist in the exploration of critical and strategic mineral deposits. As soon as possible we will send you a copy of the announcement, so that you can determine whether or not to apply for assistance in the exploration of the "lead" vein.

Sincerely yours

(S) Tom Lyon, Chief
Copper branch

Enc. 6

Feb. 12, 1941

Re. Docket No. WA-393

Department of the Interior
Defense Minerals Administration
Mr. Tom Lyon, Chief, Copper Branch
Washington D.C.

Dear Mr. Lyon:

We are in receipt of your airmail letter of February 10th and are greatly relieved to know you received the maps we sent you as we were worried that they might have been lost during the recent tie-up of railroad mail service.

We also acknowledge receipt of the six forms, DMD-140 which we will fill out as per your suggestion with the idea of proceeding on the development of the Sunrise Copper sulphide ore body from which we are now shipping. These papers will reach you in a few days.

I enclose herewith a tabulation of the last two cars shipped showing the net smelter returns for the crude ore.

U.P. 80023 shipped February 6th
U.P. 80203 shipped February 10th

This ore is coming from the tunnel shown on Mr. Reynold's map as the Main Tunnel. As stated previously the tunnel extends around 300' in length, approximately 200' into the sulphide ore body. We are opening these stopes by hand and the vein is proving to be of a very good width running as wide as 6 ft. to 7 ft. in places.

You will note that the last two cars shipped are an improvement over the earlier cars and run a little better in value than Mr. Reynold's estimate (see page 26 Reynold's Report where he gives the crude ore at a value of $7.34 per T., net smelter returns.)

Referring to our letters dated February 3rd and 7th, on the subject of tungsten possibilities in this ore body, as these stopes are opened up there seems to be encouragement that the tungsten in this ore can be commercialized. We will forward you the results of our sampling of this tungsten as the work progresses.

May we take this opportunity to thank you for your promptness in cooperation.

Yours very truly

WAHoon:m

Tabulation of cars shipped from
Sunrise Mine

WEEKLY RETURN

| Car Number | Gross Lbs. | Percent Water | Pounds Dry | Percent Copper | Oz Ag. | Oz. Gold | Treatment Charge | Price Per Ton | Value Dollars |
|---|---|---|---|---|---|---|---|---|---|
| TP 80623 2-5-1951 | 93080 | 1.8 | 91405 | .89 | 1.2 | 0.205 | 5.50 | 11.57 | 526.78 |
| TP 80295 2-16-1951 | 77040 | 1.8 | 75653 | .97 | 2.1 | 0.200 | 5.50 | 12.86 | 486.46 |

Office of Administrator

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

March 5, 1951

Memorandum

To: Tom Lyon

From: James Douglas

Would you be good enough to write an appropriate reply to Bill Broadgate with respect to the W. A. Noon letter of February 22nd.

James Douglas
G. McC.

James Douglas
Deputy Administrator

March 2, 1951

Mr. William C. Broadgate
Consultant to Senator Murray
Senate Office Building
Washington, D. C.

Dear Bill:

I have your note of February 26th to which was attached a letter of February 22nd from Mr. W. A. Noon, Drummond, Montana, addressed to you with regard to his Sunrise Mine. You have asked I supply the answers to Mr. Noon's inquiries.

I must leave for New York tomorrow to be absent from Washington for a matter of two weeks because of my wife's health. Therefore I will not have the opportunity before leaving to dig into the problem presented by Mr. Noon to determine the background of Mr. Noon's problem. In order that you may have a prompt response to your note, I am asking Tom Lyon, Director of our Supply Division, to furnish you with an answer to Mr. Noon's last letter of February 22nd. You should hear from Mr. Lyon shortly.

Yes, by all means, let's have lunch together upon my return from New York.

With kindest regards.

Sincerely yours,

JAMES DOUGLAS

James Douglas
Deputy Administrator

JDouglas/af

Copy to: Files
Admin. Reading File
Mr. Strobel
Mr. Lyon ✓
Mr. Douglas

(Incoming note from Broadgate, letter from Mr. Noon and all attchs. sent to Mr. Lyon with memo of 3/5/51)

MAR 8 1951
LANDON F. SMOOT
MAR 7 12 53 PM '51
BUREAU OF MINES
WASHINGTON, D. C.

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

March 1, 1951

Department of the Interior
Defense Minerals Administration
Mr. Tom Lyon, Chief
Copper Branch
Washington 25, D.C.

File DMA 393

Dear Mr. Lyon:

In accordanse with your letter of Feb. 19th, we herewith enclose 4 copies of NSRB-146 to submit for loan under the Defense Production Act. We believe that this, together with previous data sent you, gives you sufficient pertinent facts to work from. If there is any other data desired we will be glad to furnish same.

Attached to page 6 (sub-head 13) have sent you one copy of article from Engineering & Mining Journal, May, 1950. This for your information.

Also for your information, the showing of tungsten (scheelite) in the SUNRISE MINE is getting progressively better as we drive into the sulphide ore body. There is a possibility that this may be a commercial ore body for development of tungsten along with the copper. Will send you further assays as we proceed.

At your convenience will you forward us blanks (NSRB-146) for use here. We will appreciate receipt of copy of the announcement by the DMA regarding program and details planned for the exploration of critical and strategic mineral deposits.

In addressing correspondence concerning Docket DMA-393 please send to W. A. Noon, Drummond, Montana. Again thanking you for assistance in handling this application, beg to remain

Yours very truly

W. A. Noon

WAN:m
4 enc

dma 393

Form NSRB-146
(Nov. 1950)

UNITED STATES GOVERNMENT

**APPLICATION FOR GOVERNMENT LOAN**
**UNDER SEC. 302 OF**
**DEFENSE PRODUCTION ACT OF 1950**

FORM APPROVED
BUDGET BUREAU NO. 25-R002

AMOUNT OF LOAN REQUESTED: $50,000.00

TERMS OF LOAN REQUESTED:

DATE OF APPLICATION: February 26, 1951

TO BE FILLED IN BY DELEGATE AGENCY

(DATE RECEIVED)

COMM.
AGRIC.
INT.
D.T.A.

FILE NO. DMA 393

NAME AND ADDRESS OF APPLICANT (Street, City, Zone, State)

W. A. Noon
Box 333, Drummond
Montana

Operating-Manager for QUEEN MINING SYNDICATE, a Partnership

**INSTRUCTIONS**

Application should be filed with the Department of Commerce, Department of Agriculture, Department of Interior, or the Defense Transport Administration, whichever has the primary interest in the facilities, products, or processes involved. However, for convenience of the applicant, he may file with any government agency with which he has contract or other pertinent relationships and such agency will arrange for the transmittal of the application to the appropriate office.

Submit four (4) signed copies of the application. Name and address of applicant should be stamped or typed for identification of each sheet of the application and all accompanying papers. When a question is inapplicable, this should be so stated on the form. Additional sheets may be attached in answering any questions or in providing other supporting information.

**1. PURPOSE OF LOAN**

Give a brief general statement of the purpose of the loan requested, including in the table below estimated amounts for such major purposes as land acquisition, building construction, purchase of plant, purchase of equipment, working capital, repayment of debt, etc. Statement should make clear whether funds will be used for expansion of capacity, development of technological processes, or production of essential materials.

General Statement

Working capital to be used in underground work on the copper-sulphide ore-body of the SUNRISE MINE, from which present shipments are being made, to develop sufficient tonnage to warrant a full scale mining and milling program.

(For fuller details see letter of recommendation by John R. Reynolds, Mining Engineer, dated 2 February, 1951, and REPORT by John R. Reynolds dated 1 February, 1948.) Now in your files.

| NATURE OF EXPENDITURE | AMOUNT |
|---|---|
| The development work would consist of expansion of the present capacity by (1) purchase and installation of modern electrical equipment where necessary (2) the employment of larger crews, (3) the increase in amount of crude ore being mined while development work is in progress, (4) more than double crude ore shipments (unless advisable to stockpile for milling later), (5) determine the advisability of installing a 200 Ton mill. (See letter of J.R.Reynolds, Page #1, Sub-head "a", #3) | |
| Total amount applied for | $50,000.00 |

**2. PROPOSED METHOD FOR REPAYMENT OF LOAN**

State sources of funds, and proposed schedule of repayment

Loan under Defense Production Act,

Repayment on basis of percentage of either net profits or net smelter returns

**3. NATURE OF BUSINESS AND DESCRIPTION OF PROJECT**

Describe fully the business activity for which the funds are intended. In so doing, identify the materials and services to be produced, describe the facilities and processes involved, and explain in detail any research activity and the nature of the results expected. Attach blueprints and specifications, if available, and furnish other technical details to the extent that they are not covered elsewhere in the application.

Operation of the SUNRISE MINE, (copper, gold, silver and tungsten) situated in Section 35, Twp. 9 N, Range 14 W, MPM, Henderson (unorganized) Mining District, Granite County, Montana

Reached by (gravel) County Road, 5 mi. from U.S.Hy. 10A, and Northern Pacific R.R. siding at Stone, Montana. This road is open throughout entire year. (For details see (1) REPORT OF SUNRISE MINE by John R. Reynolds, 2/1-'48; (2) REPORT by BUREAU OF MINES, SUNRISE COPPER-GOLD MINE by John W. Cole, May, 1950, #4689; (3) REPORT by Arthur Lakes, Mining Engineer, May 22, 1949, on SUNRISE MINING PROPERTY, Granite County, Montana; and (4) 50-Scale maps now in your files by J.R.Reynolds.)

Mine property consists of 21 patented lode claims, 5 unpatented lode claims and 7.3 acres of deeded ground.

The underground development consists of around 7000' of adit tunnels of various sizes from a few feet to 1200 feet, driven into the ore. (For further details see 50-Scale maps by J.R. Reynolds, now in your files.)

Equipment consists of what is necessary for hand mining now in operation;- gasoline operated compressor, air lines, light rails, two small 1-Ton mine cars, a 100T crude-ore truck bin.

Electric power line was built to the mine in the fall of 1950, with transformers on hand for installation of any future equipment.

Limited development work in the sulphide zone makes it difficult to estimate definite figures of present ore tonnage and additional reserves. The development of 488,888 Tons of commercial milling ore is recommended (for further details see 50-Scale maps; Reynold's REPORT of 2/1-'48, pages 29, 30 and 30A; Table between pages 6 and 7; also assay results from late carload shipments during January and February 1951, now in your files.)

The average of all crude-ore shipments from the mine shows 2.8 cu., 1.28 oz. ag., and 0.18 oz. au. per Ton.

There is no mill on the property today. Production records are based on crude ore shipped to the Anaconda Copper Mining Company at Anaconda Smelter, and all mill and metallurgical tests have been tabulated and worked out on pages 31 to 42 in the Reynold's REPORT of 1 February, 1948, now in your files.

As soon as sufficient sulphide ore is blocked out, plans call for a 200 Ton plant to be erected on the property.

**4. Relationship to National Defense** - Continued

(e) In what respects will the use of the funds aid indirectly in expediting the carrying out of government defense contracts or related operations?

Production of copper

(f) Are there available alternative methods or facilities to accomplish the same purpose as that for which these funds are intended? (For instance, unused capacity, possibility of multiple shift operations, idle facilities, readily convertible equipment, sub-contracting?) If answer is yes, explain why alternatives are not used.

None

**5. Maximum Designed Production**

| List separately materials or services identified in item 3 (a) | Unit of measure (b) | Maximum designed production with existing facilities (c) | Average percentage of maximum designed production used in quarter preceding filing of application (d) | Maximum designed production including use of funds applied for (e) |
|---|---|---|---|---|
| | Ton | | | |
| Production of copper | Crude | Aprox. 500 | Started ship- | |
| | Ore | Per. Mo. | ments, Jan. 1951 | |
| | | | | |
| " " " | " | ~~Aprox. 1000~~ | | Aprox. 1000 |
| | | ~~Per. Mo.~~ | | Per. Mo. |
| | | | | |
| (If milling crude ore is warranted as blocked out by proposed | | | | ? |
| development work - see report J.R.Reynolds, in your files) | | | | ! |

**6. Employment**

(a) Number currently employed at location(s) where funds are to be used. (Use pay period ending nearest 15th of month preceding filing of application.)

3 miners and foreman (mining crude ore)

(b) Maximum feasible employment with existing facilities.

(1) Single shift operation. 3 miners and foreman

(2) Multiple shift operation (specify how many shifts). 2shifts, 3 miners, 1 tramner.

(c) Estimated additional employees required by the use of the funds applied for.

Crew of 6 miners, 2 tramners, shift boss, foreman
Mining Engineer part time for development work depending on headings worked.

**7. Timing**

(a) On what date(s) are the requested funds needed? At once

(b) On what expected date(s) will applicant begin to use such funds and obtain output from the use of such funds? Wherever possible, give planned schedule of output.

Present mining operation can be expanded and development work start immediately.
(For full details see 50-scale maps #3 and #4; Page #54, paragraphs 1, 2, 3, 4, Reynold's REPORT, now in your files.

8. Output from the use of funds applied for will be for the following purposes:
a. For the following principal prime defense contracts (if any) with the United States Government:

| Date of contract (a) | Contracting Government Agency (b) | Program symbol (2 digits) or other contract identification (c) | Materials or services (d) | Delivery date(s) (e) | Amount (Dollars) (f) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | Not applicable | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

b. For the following subcontracts (if any) with U.S. Government prime defense contractors:

| Date of contract (a) | Materials or services (b) | Supplied to (Give name and address of firm) (c) | Delivery date(s) (d) | (e) Government agency receiving end product or services (f) Program symbol (2 digits) or other contract identification | Amount (Dollars) (g) |
|---|---|---|---|---|---|
| | | not applicable | | (e) / (f) | |
| | | " | | (e) / (f) | |
| | | " | | (e) / (f) | |

c. For the following classes or types of customers not covered by contracts listed above (list materials or services to be provided and, wherever possible, also indicate final product use):

A schedule for mine and milling operation with a 200 ton mill is proposed when a sufficient copper-sulphide ore body has been developed to justify the installation of a mill.
See pages 45 to 50, report of J. P. Reynolds, 3 February, 1960
Production of Copper

9. **Feasibility**

(a) Estimate anticipated requirements for manpower, equipment, raw materials, energy, fuel, transportation facilities, water supply, housing, community facilities, and other factors of production, for (1) preparation of the facilities and (2) actual operation thereof. (The estimates may be limited to those factors of substantial significance to the preparation and operation of the facilities for which the funds are intended.)

Labor will be principally local miners, residents of the district which is a mining district.
Electric power is available at the property.
Henderson Creek supplies enough water for a 200 T. mill operation under available water rights.
Rail and Highway facilities excellent. Good gravel roads connect with paved Highway US-10A and Northern Pacific Railroad siding, Stone, Montana, five miles from property.

(b) Discuss and evaluate the availability of each of the above factors in the area(s) where the funds will be used.

No problem

10. The following applications for necessity certificates for tax amortization (Under Section 124A of the Internal Revenue Code) for facilities at the location(s) covered by this application have been filed since January 1, 1950.

| Date of application (a) | Government file number (b) | (Estimated) Total of facilities in dollars on each application (c) | (d) If final action has been taken, give date of | |
|---|---|---|---|---|
| | | | Issuance | Denial |
| | | | | |
| | | | | |
| | | | | |
| | Not applicable | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

11. **Recent Efforts to Obtain Credit** NONE

(a) Banks—List names and addresses of all Banks of Deposit of Applicant within the last 5 years: *(Mark with an asterisk (*) bank or banks in which deposits are now kept)*

Bank Deposits in Flint Creek Valley Bank, Philipsburg, Montana

11. **Recent Efforts to Obtain Credit** - Continued

(b) State efforts to obtain credit, within 60 days preceding date of application, from banks, the Reconstruction Finance Corporation, or other sources, results, and reasons if refused. (NOTE.- Section 302 of the Defense Production Act of 1950 states that a loan may be extended "only to the extent that it is not otherwise available on reasonable terms." Accordingly, Applicant should show that it has applied to each bank named in (a) above, or explain the reason for not doing so. The fact that a loan of the particular maturity and terms applied for is refused by a bank or banks is not sufficient to comply with the statute, if credit on reasonable terms is available. State whether a bank will participate in the loan, and if so, state name of bank and amount of participation. Full particulars must be given.) List the names and addresses of banks and other lending institutions to which applications for credit have been made, and in each case state date of application, amount of credit available, if any, maximum term for which credit is available, what consideration, if any, was given to possible guarantee of loan under Federal Reserve Regulation V, and reason for refusal or reason loan was not obtained. Indicate whether or not application was definitely refused for further credit on any basis.

None

12. What other forms of government financial assistance, if any, have been received or requested by the applicant in connection with the purposes of the loan herein applied for? If applicant plans to request such assistance in the future, give details. None

13

History of the SUNRISE MINE is fully dealt with on pages 5 and 6 of the Reynold's REPORT of 2 February, 1948.

QUEEN MINING SYNDICATE, a partnership, holds Bond & Lease on the SUNRISE MINE on a basis of an 8% royalty on net Smelter returns from all crude ore shipped and a 5% royalty on net Smelter returns from all mill concentrates. (In computing net Smelter returns the railroad freight to any Smelter is deducted from Smelter returns.)

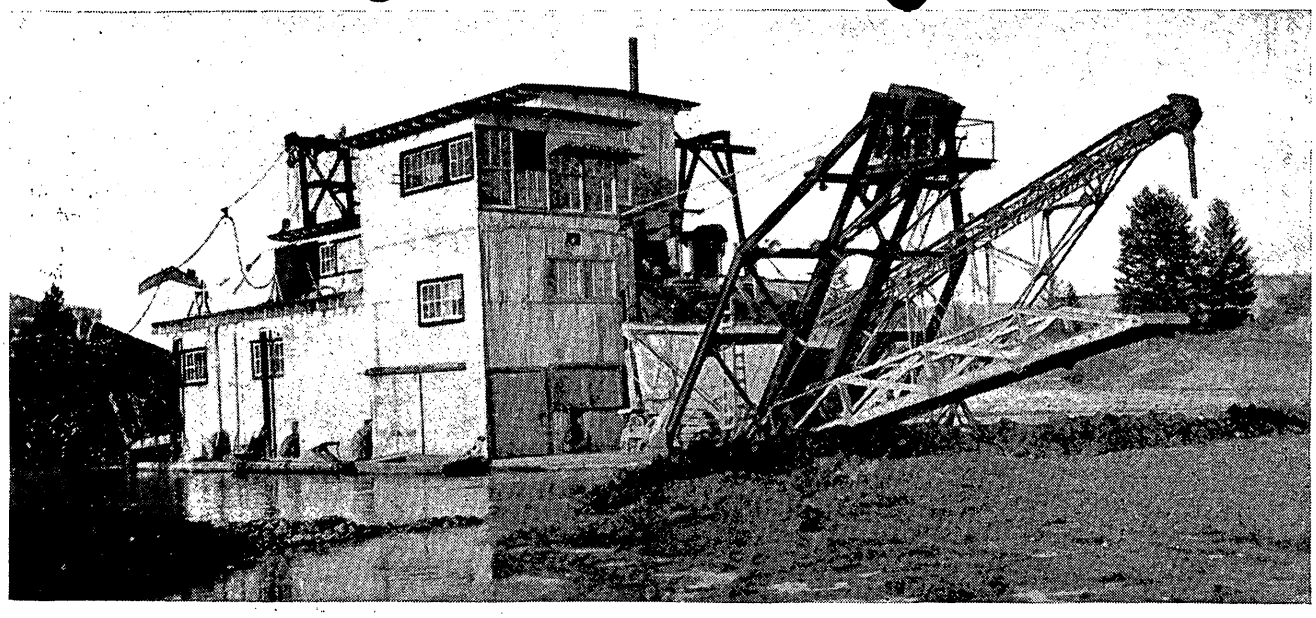
All royalties are applied against the purchase price of $50,000. Lease extension is for 4½ years from 22 June, 1951 and a payment of $5000.00 (less royalties paid) is due on that date. The amount of payment due 22 June, 1951 is approximately $4000.00 Agreement calls for a payment of $10,000.00 per year thereafter (with 6% interest) until the purchase price is paid. All taxes are paid up.

13. **HISTORY, MANAGEMENT, LEASED AGREEMENTS, INSURANCE, ETC.** Schedules attached.

These subjects should be fully covered in statements attached hereto. Outline past management experience or other basis for showing competence of the Applicant to perform in accordance with expressed purpose of the application. If plant was purchased, state price, form and terms of payment, date of purchase, from whom and under what circumstances purchase was made. If it is proposed to construct or acquire new facilities (including equipment), state estimated cost and basis of such estimate, form and terms of payment, and from whom purchases of facilities will be made. State whether Applicant, or the business or plant, has been in receivership, bankruptcy, Chapter X, XI or XII, in hands of creditors, committee, or whether Applicant has effected a compromise with creditors, and if so, discuss fully. Indicate whether business is conducted in leased premises and whether any facilities are leased from others and describe terms of any lease agreements. List type and amount of insurance carried on plant property. Describe briefly any pending or threatened litigation affecting Applicant.

13

W. A. Noon, Acting "Operating Manager" for QUEEN MINING SYNDICATE, has had thirty years experience in various mining enterprises, both placer and quartz. Has been Field Engineer for the H & H Mines etc. Since 1941 has been operating-manager of the Henderson Creek Dredge, a tungsten-gold placer operation on Henderson Creek.

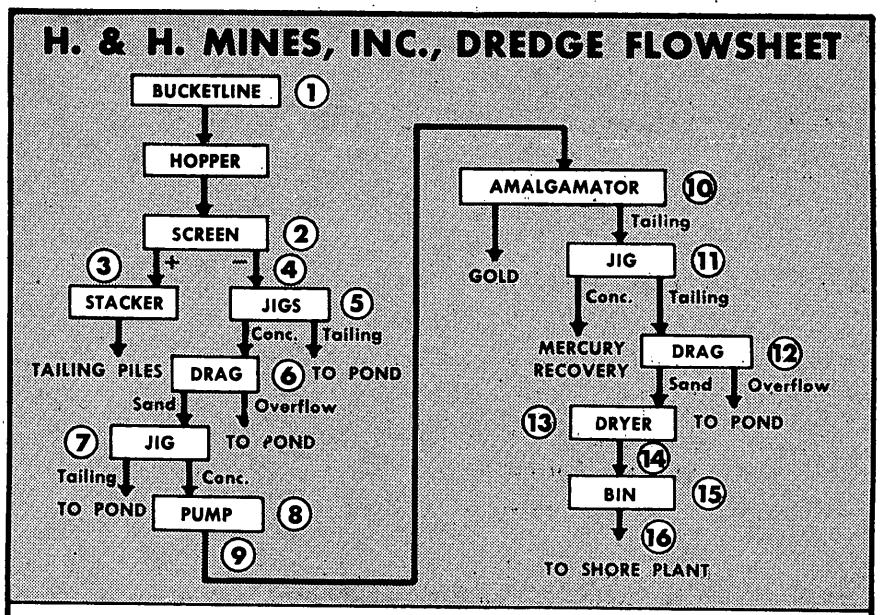


TUNGSTEN CONCENTRATE leaves this dredge via conveyor belt on bow gantry (note discharge spigot) into trucks.

# Unique Bucketline Dredge

**Here is the only U. S. gold dredge that L-208 couldn't shut down. The WPB kept it going because of the tungsten concentrate the dredge produces. This placer ship-to-shore operation is as interesting as it is different.**


W. A. NOON
Manager
H. & H. Mines, Inc.
Drummond, Mont.


*LEGEND*

1. Line has 66 bolted-lip buckets, 3⅞ cu. ft. each; capacity, 2,800 cu. yd. per day.
2. Trommel screen, 4½x25 ft.; screening section 18 ft. long, ½-in. round holes.
3. Stacker, 26-in. belt.
4. Distributor for screen undersize, 1,400 cu. yd. daily.
5. Rougher jigs, 16 cells, 42x42-in. Pan American placer type, balanced. Arranged in 8 flow lines, 4 on each side of screen, 2 cells to each.
6. Dewatering Esperanza-type, drag, 14-in., 45 tons of concentrate daily.
7. Cleaner jig, 2 cells in series, 42x42-in. Pan American placer type.
8. Wilfley sand pump, 2-in., 9 tons daily.
9. Mercury feeder.
10. Titan amalgamator.
11. Scavenger jig, 2-cell, 18x18-in. Pan-American pulsator type.
12. Dewatering drag, 7-in.
13. Rotary dryer, 3x12-ft., oil fired.
14. Two bucket elevators, 23 ft. and 18 ft., c-to-c of pulleys.
15. Storage bins, 5-ton.
16. Belt conveyor on bow gantry to trucks.

THE GOLD-HUNTERS working along Henderson Creek in Montana back in the 1860's were baffled and annoyed by a heavy grey sand they ran into. It clogged their riffles and spoiled their tempers. Nobody knew, or cared, what it was.

This grey sand, which the old-timers dug out of their sluice boxes and tossed aside, is scheelite. It fluoresces beautifully under ultra-violet light. We are recovering it not only from these 1860 tailings, but from virgin placer ground as well. To do that, we have to combine dredging with milling, both aboard the dredge and on shore, in

## "An Egg for Breakfast in Yugoslavia," or "How Foreign Correspondents Get By."

TO: Russell Anderson, McGraw-Hill World News, New York
FROM: Jack Christie, Frankfurt, Germany

Dear Russ:

Enclosed is my expense account covering the trip to Yugoslavia for Engineering and Mining Journal.

I had no idea that Yugoslavia was going to be so expensive. The official exchange rate of 50 dinars to the dollar is unrealistic in the extreme. You can get 300 if you know where to look.

I found almost at once that my having three square meals a day would be out of the question. For me to insist upon eating what I wanted could only have resulted in Mr. McGraw's mortgaging the building on 42nd Street to get me out from behind the "Iron Curtain." And, anyway, I must admit that my stomach wasn't strong enough to eat three full-sized meals.

I wish to apologize to the Accounting Department for having had an egg for breakfast on two or three occasions. However, I did this purely for prestige purposes. There were occasions when there was someone at the table I wanted to impress. I did try to make up for extravagances of this sort by skimping on succeeding meals until I felt I'd evened the score.

I was prepared to complain about the closet-like room they handed me when I got to the hotel in Belgrade. But, when I found out what it was costing per night, without extras, I told the management I was highly pleased with it. I was afraid they'd suggest a more expensive room.

But, my luck in this respect didn't hold. The lights went out in my room on the third day and nobody seemed to know how to fix the fuses or switch or whatever had gone wrong. And, there were no candles to be had. So I have to move anyway.

The move to another room was heartbreaking for two reasons: (1), it meant 60 c. more per night and by the third day I knew that every 60 c. was going to count, (2), it meant moving from the second to the third floor and that wasn't good because sometimes the water pressure is out of kilter and the water doesn't get up to the third.

Still I had nothing really serious to complain about, and went happily along until, by virtue of having to stay longer than I anticipated, I realized that my financial position was becoming desperate.

In fact, during the last few days I was sort of panicky as to how I'd make ends meet. Then, one gloomy March day, as I sat in my room watching an interesting specimen of bug traversing the floor, I recalled another gloomy March day back in 1932 when FDR declared: "We have nothing to fear but fear itself." That thought changed the entire course of my economic existence in Belgrade.

I had, in fact, been toying with the idea of resorting to the black market. But, in Yugoslavia it's risky business. They like to think that their society is free of such sordid influences. And, indeed, there's not nearly the blackmarketing in Yugoslavia that I've seen elsewhere.

Nevertheless, I determined to take the risk. I managed to make arrangements to meet an Italian in the men's room of another hotel and there passed him some dollars for dinars. He could change them for lira in Trieste.

Prior to doing this I had made a very careful appraisal of my wardrobe with the idea of hocking something at one of the city's bucket shops. But I could see my way clear to part only with a pair of trousers. These were the trousers I wore on my trip to the mines. I suspected them of being lousy anyway, even though I had sprayed them with DDT. I didn't want to put them back in my suitcase.

The trousers, however, I had tentatively committed and couldn't count on for current expenses. A fellow correspondent had been extremely helpful in loaning me some heavy clothing for my trip to the mines. This poor devil was as hard up as I. So, I decided to will him the trousers and he could hock them when they got back from the cleaners. We thought he ought to get at least a thousand dinars for them.

You will note that in Part V of the enclosed document I point out that I ceased detailed entries when I began digging into the black dinars. There was no point in keeping track on this down to the last dinar. It wouldn't mean anything anyway, because what exchange rate would I use? I'm sure that we've come out ahead on this deal, but next time I'll have to raise my sights on the estimated cost.

Anyhow, I was allowed to visit both mines unaccompanied. They let me make complete inspections at both properties. The only trouble I had was in trying to get economic information, because the Tito regime has a hard and fast rule against divulging such figures. My estimates in these articles are based on countless interviews. I got bits and pieces of information from everyone who might know anything at all about Bor and Trepca.

I've tried to make these articles objective, because the Yugoslavs can take criticism, if it's constructive. Certainly, whatever we think of Tito and his government, there's no doubt but that Yugoslavia could be a big factor in the mining business. The reserves are there, and Tito's determined to mine them.

How about another trip down there next year? I liked it.

Best regards,
Jack Christie

---

of their present political predicament, will have Western technical assistance in their bid for industrialization that they would not otherwise. But it will be technical assistance in the strictest sense.

For, it is certain that the regime will see that this assistance is confined to the basic requirements of getting new equipment installed and personnel trained. In other words, the regime will be careful to see that Western financial assistance becomes no wedge for influencing policy.

More positive effects on industry will come from Tito's own efforts to distinguish his brand of socialism from that of the Kremlin. One step of particular significance to mining already has been taken in this direction. That is the recent measure providing for decentralization of authority over industry.

The decree calls for a divorcement of planning functions and operational control. The planners are to form the federal ministeries in Belgrade. Those charged with operational control are to be assigned to the governments of the republics and in some cases down to districts and municipalities.

Yugoslavia's economy is largely of a regional nature. This is particularly true of the extraction industries, where the decentralization is being initiated. Thus, there is now an opportunity both to shorten the chain of command and to create a more or less specialist type of control close to mining operations.

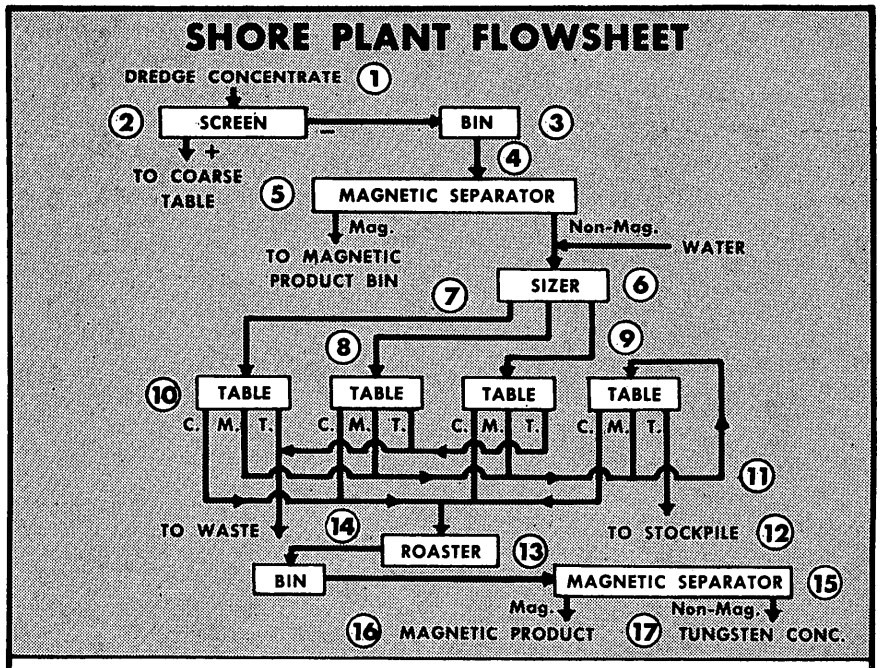
The move fits into the Tito concept that a nation should adapt socialism to the peculiar needs of its economy and not be forced to accept a rigid pattern laid down and controlled by Moscow.

The trouble is, of course, that Titoism may prove distinctive only in an ideological sense. It may continue as a veneer covering a police state no different than any other.

Anyone who has experienced this cramped feeling of a police state has reason to doubt that any one form can lead to a more productive economy than another. Time will tell whether or not Tito can prove otherwise.

FINAL CONCENTRATE is produced in this shore plant. Combined flowsheets use jigs, tables, magnetic separation.

# Recovers Placer Scheelite




**LEGEND**

1. Dredge concentrate, runs about 2% $WO_3$.
2. Vibrating screen, Hum-mer, ⅛-in.
3. Receiving bin, 50-ton.
4. Feeder, 12-in.
5. Stearns magnetic separator, type K, 3-roll, 20-in.
6. Fahrenwald hydraulic sizer.
7. Fraction: minus 15 mesh, plus 45 mesh.
8. Fraction: minus 45 mesh, plus 65 mesh.
9. Fraction: minus 65 mesh, plus 100 mesh.
10. Four Straub-Overstrom Universal tables: one coarse, one fine, one slime, one middlings.
11. Wilfley sand pump 2-in.
12. Mids. table tailing stockpiled, 5% $WO_3$.
13. Rotary roaster, oil fired.
14. Bucket elevator, 27½ ft. c-to-c.
15. Stearns magnetic separator, 3-roll, 10-in. type K.
16. Magnetic product, mostly magnetite, but still runs 17% $WO_3$.
17. Tungsten concentrate, above 60% $WO_3$, runs as high as 73%.

a way that is unique in my experience.

Our dredge is running on Henderson Creek in the Sapphire Mountain Range about 17 miles south of Drummond, Granite County, Mont. The area has a long history of gold production, its total gold output prior to 1910 was about $1,000,000. Presence of tungsten had been known for some time when we became interested in the region.

## Sampling Method

After World War II began, we tested the Henderson Creek area with the purpose of producing tungsten concentrate for war requirements. We sank about 105 caisson shafts on specific crosscuts for the full length of the creek, a distance of 4½ miles. Bulk samples came from each shaft and were washed in a sampling unit that used the same sort of equipment now on our operating dredge.

First the samples went over steel washing boxes with slotted sand traps on the lower ends of the riffled sluices. Concentrates went to a small sample mill and over jigs and tables. The final concentrate was amalgamated, then assayed for its tungsten content. As a result, we could estimate the actual tonnage and gold values in the creek bed on a yardage basis.

The Henderson Creek deposit is about 15 ft. deep, with an average channel width of 400 ft. Water

grade is about 3%. The tungsten occurs as particles of scheelite ($CaWO_4$), derived from a network of small veins in a granite batholith. This granite intruded a Newland lime formation in the Belt series (Algonkian age). It was cut by Henderson Creek at its source.

Mineable gravel is small in size and without boulders, but it is tight in some sections and hard to dig. The bedrock is a clay-like sediment, easily cleaned.

The scheelite particles range in size from 10 mesh to microscopic fineness. Tungsten content is remarkably pure. There are very few penalizing minerals with it. The gold is moderately fine and averages 920 fine.

The early miners referred to worked a Tertiary channel running the whole length of Henderson Creek on its north side about 15 ft. higher than the present creek level. When we found scheelite in the tailings of the old ground sluices, we bulldozed this material over into the dredge channel all along the creek.

## Mill Tests Made

After we had estimated the value of the gravel in Henderson Creek, we had mill tests made to work out a proper flow sheet. Tests were made by jig manufacturers and in the laboratories of northwest mining departments.

These tests showed that a low-grade scheelite concentrate could be made on board the dredge without heavy tailing loss. But to raise the grade of the final product to 60% $WO_3$, a shore plant was required. Tests showed that tabling and magnetic separation could do the job. The operation is now run as indicated in the accompanying flowsheets.

In the fall of 1942, a 3-cu.ft. riffle-type Yuba dredge was brought to Henderson Creek from Elk City, Idaho, 550 miles away. The dredge was entirely rebuilt at the working site.

Its hull, 86x36 ft. originally, was lengthened by adding two 6x6x16-ft. pontoons forward and two 5x6x16-ft. pontoons aft. Purpose was to increase stability.

The main drive motor, for the digging ladder, was increased from 50 hp. to 75 hp. Digging depth is 28 ft. below the water line. We equipped the dredge with 66 new bolted-lip buckets, each having a capacity of 3⅞ cu.ft., against the 3-cu.ft. units formerly used.

Just under the trommel screen, we put sixteen 42x42-in. Pan American placer-type jigs, eight cells to port and eight to starboard, each arranged in four flow-lines of two cells each. These did the rough concentration job.

A 42x42-in. Pan American two-cell jig is used as a cleaner, and a Pan American pulsator jig was added as a final scavenger. Two dewatering drags, two Wilfley sand pumps, a Titan amalgamator, and an oil-fired rotary dryer make up the rest of the flowsheet.

## Dredge Like Mill

The deck of the dredge looks like a mill. Every foot of deck space is used. Operation is satisfactory with a day shift of the dredgemaster, winchman, oiler, groundman, and bulldozer operator. On other shifts, the dredge is run by the winchman and one oiler.

We try to keep recovery of $WO_3$ on the dredge at a maximum. We have plenty of screen area in the jigs for the yardage handled. On the jig beds, we use only enough steel shot to keep the screens covered. The rest of the 4-in. bed is made of hematite.

On the first of each of the two rougher jig cells ("A" cells) we used 5/16-in. shot. We use ¼-in. shot on the second, or "B" cells. We have tried several kinds of jig screens and have settled on 3/16x ⅝-in. punched, stainless steel screens on the "A" cells, and ⅛x ⅝-in. punched, stainless steel on the "B" cells.

Rougher jigs run at 125 strokes per minute, and the cleaner jig at 160 strokes per minute.

The Titan amalgamator picks up practically all the gold in the cleaner jig concentrate. The remainder, and any quicksilver from the Titan, is caught in the pulsator (Crangle type) jig. The dewatered concentrate is dried as shown in the flowsheet, then elevated by two bucket elevators to a 5-ton storage bin. From this bin, the concentrate is fed through a valve to a belt conveyor hung from the bow gantry. This conveyor discharges directly into dump trucks, filling a truck in about 3 minutes.

## The Shore Plant

The trucks take the low-grade dredge concentrate to the shore plant for retreatment. Designed for one-man operation, this plant includes equipment for screening, sizing, tabling, roasting, and magnetic separation. The various units are arranged as shown in the accompanying flowsheet.

Final products are a high-grade scheelite concentrate and a magnetic concentrate that is practically pure magnetite. The dredge product runs about 2% $WO_3$, but the final product of the shore plant runs as high as 73% $WO_3$. The established commercial minimum grade is 60% $WO_3$. Our concentrates are sacked for shipment in 6-ply multiple-wall paper bags which are closed with wire ties.

The magnetic concentrate is now being stored pending shipment to some sink and float plant for use as heavy medium. It is a clean product, nearly all magnetite. During the war it went to shipyards, where it was mixed in with the concrete ballast in naval vessels.

Henderson Creek's flow of water is limited, and during the dry season there isn't enough water to carry the dredging operation. To build up our supply, we repaired two of the ditches used in the 1860's that brought water from Boulder Creek 8 miles south. We built three electric pump stations to boost this water to the head of our water shed. Total hydrostatic head is 430 ft.; pump capacity is 2,000 gpm. We use 16-in., 12-gage slip-joint hydraulic pipe between stations. Power for all uses comes over a 23,000-volt line of the Montana Power Co. between the dredging site and the substation at Mellen, Mont.

## Nearly $1,000,000

The Henderson Creek dredge began running on April 26, 1943, and except for seasonal shut-downs caused by 40-below cold snaps, the dredge has run ever since. The WPB's gold mine closing order, L-208, didn't affect us because of our tungsten production, a critical material at that time. We understand that our dredge was the only bucketline dredge in the United States that ran all during the war. At that time, all our concentrate went to the Metals Reserve Co. At present our tungsten production is sold on the open market.

Combined gold and tungsten produced on Henderson Creek since 1943 is nearing a value of $1,000,000. Our monthly yardage is averaging 90,000 cu.yd.

The dredge has been under the same management during this whole period; with myself as manager, W. J. Noon as operating superintendent, James Tabor as metallurgist and engineer, and Victor Griffith as dredgemaster.

**14. NAMES AND ADDRESSES OF OFFICERS, DIRECTORS, OR PARTNERS, AND IN ADDITION THERETO, THE FIVE LARGEST STOCKHOLDERS IF A CORPORATION.**

| NAME AND ADDRESS of Partners (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 Applicant (d) | Number of shares held in applicant: Common (e) | Number of shares held in applicant: 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) |
|---|---|---|---|---|---|---|---|
| Jas. H. Hollon | Drummond, Mont. | District Mgr. Montana Power Co. Mayor of Drummond Active in Mine Developments in Montana for many years. | | | | | |
| Geo. D. Lyon | Missoula, Mont. | Lyon Construction Co. McQuarrie, Mont. Heavy Material Bridge & Road Contractor Investor in Montana Mining Developments | | | | | |
| William Howell | Drummond, Mont. | Road Construction and Gen. Contractor Mine Operator | | | | | |
| W. J. Noon | Elk City, Idaho | Placer Operator (Bucket Type Dredge) General Mine Operator | | | | | |
| Wm. McGuire | Anaconda, Mont. | Mine Operator | | | | | |
| W.A.Noon | Drummond, Mont. | Mine Owner and Operator (Quartz & Placer) | | | | | |

partnerships.

Not applicable

Does any officer, director, large stockholder, or partner of Applicant receive any commission, bonus, or other payment in cash or services from any concern or partnership with which Applicant has business dealings? If not, so state. If so, give names of such officers, directors, stockholders, or partners and amounts of such commissions, bonuses, or payments.

Not applicable

**17. COMPENSATION SCHEDULE**

INSTRUCTIONS: The schedule shall show the amount of compensation being paid to all employees of Applicant receiving compensation at a rate in excess of $10,000 per annum, including employees paid on a part-time basis where the rate of compensation exceeds $10,000 per annum computed on a full-time basis. If Applicant is a corporation, the schedule should show the compensation, regardless of amount, being paid to all officers, directors, and such stockholders as have an interest in Applicant's business of 10 percent or more. If Applicant is a partnership, the schedule should show the compensation being paid to, or being withdrawn by, all partners for their personal use. If Applicant is an individual, the schedule should show the amount being withdrawn by Applicant for his personal use. In each case the listed person's connection with the business should be indicated (i.e., whether an officer, director, stockholder, partner, owner, etc.). The calendar basis for the compensation should likewise be shown. Attorneys or firms of attorneys on a regular retainer or salary basis should be included. The schedule should include a separate notation indicating the source and amount of any compensation being paid by a company or firm directly or indirectly controlling, affiliated with, or controlled by, Applicant. If the space provided herein is insufficient, the schedule should be continued on the reverse side or appropriate continuation sheets should be attached.

No compensation being withdrawn by partners for personal use.

17. **COMPENSATION SCHEDULE** - Continued

The term "compensation", as used herein and such schedule, shall include all salaries, fees, bonuses, commissions, retainers, regular drawing accounts, and other payments, direct or indirect, in money or otherwise, for personal services.

| Name (a) | Position (b) | Compensation paid during previous fiscal year (c) | Present compensation (d) |
|---|---|---|---|
| Mining operation now on contract basis | | | |

18. **COLLATERAL**

(a) The applicant offers the following described collateral as security for repayment of the loan applied for.

| Description (a) | Date acquired (b) | Cost (c) | Book Value (Net) (d) | Appraised* value (e) |
|---|---|---|---|---|
| Property now held: | not applicable | | | |
| To be acquired: | not applicable | | | |

* This column need be filled in only if a recent appraisal has been made. If so, identify appraiser below.

| Name (a) | Title (b) | Date (c) |
|---|---|---|
| | not applicable | |

(b) Describe existing liens, if any, on property listed above.

none

## EXHIBIT A - CURRENT FINANCIAL STATEMENT

As of _____
(Date not more than 30 days prior to date of application)

### ASSETS None except-

**CURRENT ASSETS**

1. Cash. Partners personally supply funds for present ..... $ _____
2. Notes receivable.... mining operations being conducted. _____
   Less reserve for doubtful notes..... under contract. _____
3. Accounts receivable:
   - Current..... $ _____
   - Past due not over 4 months..... _____
   - Past due over 4 months..... _____ $ _____
   - Less reserve for doubtful accounts..... _____ _____
4. Inventories:
   - Raw materials..... $ _____
   - Work in process..... _____
   - Finished goods..... _____ $ _____
   - Less reserve for inventory losses..... _____ _____
5. Other current assets (describe) _____ _____

TOTAL CURRENT ASSETS..... $ _____

**FIXED AND OTHER ASSETS**

6. Plant used in business:
   - Land..... $ _____
   - Buildings..... _____
7. Machinery..... _____
8. Equipment, furniture, and fixtures..... _____ $ _____
   - Less reserve for depreciation..... _____ _____
9. Investments—stocks and bonds..... _____
10. Investments in affiliated companies..... _____
11. Receivables due from affiliated companies..... _____
12. Real estate not used in business..... _____
13. Due from officers, directors, employees, stockholders..... _____
14. Deferred charges..... _____
15. Other assets. Control the Bond & Lease and 3 additional located claims, some light equipment now in use _____

TOTAL ASSETS..... $ _____

### LIABILITIES None except-

**CURRENT LIABILITIES**

16. Notes payable (see schedule 1, page 10):
    - Banks..... $ _____
    - Trade creditors..... _____
    - Officers, stockholders, relatives..... _____
    - Insurance companies..... _____ $ _____
17. Accounts payable..... _____
18. Other current liabilities:
    - Delinquent taxes: Real estate..... $ _____; Federal..... _____
    - Wages and salaries..... _____
    - Due officers..... _____
    - Accrued interest, rent, taxes, wages, etc..... _____
    - Bond & Lease payments, none due till June 22, 1951 _____

TOTAL CURRENT LIABILITIES..... $ _____

**FIXED AND OTHER LIABILITIES**

19. Machinery liens..... _____
20. Mortgage debts (see schedule 2, page 10)..... _____
21. Bonds or debentures (see schedule 2, page 10)..... _____
22. Other liabilities..... _____

**NET WORTH**

23. Common stock (if Applicant is incorporated)..... $ _____
24. Preferred stock (if Applicant is incorporated)..... _____
25. Surplus (if Applicant is incorporated)..... _____ _____
26. Capital and Surplus Account (if Applicant is partnership or individual)..... _____

TOTAL LIABILITIES..... $ _____

27. Contingent liabilities (explain) _____ $

NOTE.— Submit copy of last available audit or of financial statement at close of last fiscal period (if such date differs from date of above statement).

Mining operations commenced January, 1951---

## SCHEDULE I - Notes Payable (in detail)

| Name and address | Maturity | Amount | State amount and character of collateral | Name of guarantor(s) and/or endorser(s) |
|---|---|---|---|---|
| | None | | | |

## SCHEDULE 2 - Mortgage Debt (real estate and/or chattels) or Bond Issue

| Names and addresses of holders | Date of maturity | Interest rate | Unpaid principal amount | Date to which interest is paid |
|---|---|---|---|---|
| | None | | $ | |
| TOTAL | X X X X X X X | X X X X X X | $ | X X X X X X X X X X X X X X X X X |

If mortgage secures a bond issue, state whether bonds are principally held by management and/or stockholders or by others, and attach copy of mortgage indenture.

## EXHIBIT B - CONDENSED COMPARATIVE STATEMENT OF INCOME AND EXPENSES

For years ended _____
(Insert date of end of fiscal year)
*(000.00 omitted)*

| | (Figures for 3 preceding years) 19 | 19 | 19 | Current year as of date of Exhibit A |
|---|---|---|---|---|
| 1. Net sales | | | | |
| 2. Cost of goods sold | | | | |
| 3. Gross profit on sales (line 1 minus line 2) | | | | |
| 4. Other income (itemize) | not applicable | | | |
| 5. Total (line 3 plus line 4) | | | | |
| 6. Salaries (officers or partners)* | | | | |
| 7. Selling and all other expenses | | | | |
| 8. Total of lines 6 and 7 | | | | |
| 9. Profit or loss before depreciation and Federal taxes (line 5 minus line 8) | | | | |
| 10. Depreciation | | | | |
| 11. Federal Income and Excess Profits Taxes | | | | |
| 12. Net profit or loss (line 9 minus lines 10 and 11) | | | | |
| **ANALYSIS OF SURPLUS** | | | | |
| 13. Total surplus at beginning of period | | | | |
| 14. Net profit or loss for period | | | | |
| 15. Line 13 plus line 14 if profit; line 13 minus line 14 if loss | | | | |
| *Add:* | | | | |
| 16. Surplus paid in during period | | | | |
| 17. Surplus resulting from revaluation of assets | Not applicable | | | |
| 18. Other additions to surplus (itemize) | | | | |
| 19. Total of lines 15 to 18, inclusive | | | | |
| *Deduct:* | | | | |
| 20. Dividends | | | | |
| 21. Other charges to surplus (itemize) | | | | |
| 22. Total of lines 20 and 21 | | | | |
| 23. Surplus at end of period (line 19 less line 22), MUST AGREE WITH SURPLUS AS SHOWN IN BALANCE SHEETS | | | | |

* To include all payments of any kind (commissions, bonuses, withdrawals) to officers or partners.

NOTE—If years included in the above tables are not adequately representative of applicant's financial experience, information may be submitted for additional years.

**EXHIBIT C - CONDENSED COMPARATIVE STATEMENT OF CONDITION**

For years ended _____
(Insert date of end of fiscal year)

(000.00 omitted. Use figures to nearest thousand. For instance, the figure $3,489.36 should be written as 3; the figure $3,689.36 should be written as 4)

| ASSETS | (Figures for 3 preceding years) 19 | 19 | 19 | Current year as of date of Exhibit A |
|---|---|---|---|---|
| CURRENT ASSETS: | | | | |
| 1. Cash | | | | |
| 2. Receivables (after deducting reserves) | | | | |
| 3. Inventories. Some light equipment for hand mining. | | | | |
| 4. Other current assets: Partners personally supply funds for present mining operation | | | | |
| TOTAL CURRENT ASSETS | | | | |
| FIXED AND OTHER ASSETS: | | | | |
| 5. Plant accounts (before depreciation): | | | | |
| Machinery, equipment, etc. | | | | |
| Delivery equipment | | | | |
| Real estate and buildings used in business | | | | |
| 6. Other assets (as investments, real estate not used in business, etc.): Bond & Lease, 3 additional located claims. | | | | |
| TOTAL ASSETS | | | | |
| **LIABILITIES** | | | | |
| CURRENT LIABILITIES: | | | | |
| 8. Notes payable | | | | |
| 9. Accounts payable | | | | |
| 10. Accrued liabilities | | | | |
| 11. Other current liabilities: Bond & Lease payments- $4000.00 due 22 June 1951. | | | | |
| TOTAL CURRENT LIABILITIES | | | | |
| FIXED AND OTHER LIABILITIES: | | | | |
| 12. Mortgage debts | | | | |
| 13. Debentures | | | | |
| 14. Other fixed liabilities: | | | | |
| RESERVES: | | | | |
| 15. Reserve for depreciation | | | | |
| 16. Other reserves: | | | | |
| NET WORTH: | | | | |
| 17. Common stock (issued) (if Applicant is incorporated) | | | | |
| 18. Preferred stock (issued) (if Applicant is incorporated) | | | | |
| 19. Surplus (if Applicant is incorporated) | | | | |
| 20. Capital and surplus account (if Applicant is partnership or individual) | | | | |
| TOTAL LIABILITIES | | | | |

NOTE— If years included in the above table are not adequately representative of applicant's financial experience, condition statements may be submitted for additional years. Work started January, 1951, by Queen Mining Syndicate.

## EXHIBIT D

**AGREEMENT AS TO COMPENSATION FOR SERVICES RENDERED OR TO BE RENDERED TO APPLICANT IN CONNECTION WITH APPLICATION AND/OR LOAN**

To induce the United States Government and its agencies to make a loan under Sec. 302 of the Defense Production Act of 1950 to _____ (hereinafter called "Applicant") and in consideration of the making of a loan to Applicant, the undersigned, having been retained by Applicant for the purpose of rendering professional or other services in connection with its application for a loan or loans, hereby represents, warrants, and agrees that the undersigned has not been paid, has not made any agreement with the Applicant to be paid, and has not procured any person to pay or agree to pay, and will not, directly or indirectly, charge or receive any bonus, fee, or commission in any form in connection with the said application for, or the obtaining of, the loan applied for by the Applicant, or any compensation in any form for services rendered or to be rendered in connection therewith except for the services and in the amounts stated below:

| Name | Description of services | Amount paid | Amount to be paid |
|---|---|---|---|
| None | None | $ None | $ |

To induce the making of the loan and the employment of the undersigned by Applicant, the undersigned hereby further warrants, covenants and agrees, upon the consideration herein specified, and in consideration of the employment of the undersigned by Applicant, as above recited, that if the amount of compensation stated above for any such services shall not be deemed reasonable by any agency of the United States Government, the undersigned will reduce the charge for such services to such amount as shall be deemed reasonable by such agency, and will not, directly or indirectly, charge or collect from the Applicant or any other person, any sum in excess of the amount so deemed reasonable; and that if the undersigned has heretofore collected, from the Applicant or any other person, as compensation for any such services, any amount deemed by such agency to be unreasonable, the undersigned will refund to Applicant or such other person such sums as are in excess of the amount deemed reasonable. The undersigned further warrants, covenants and agrees that if the amount of the compensation for any such services is not determinable at the date of application, or is not stated above, it will not collect or charge any sum as compensation for such services without the prior written approval of the Government agency with which this application is officially filed as to the nature of the services for which such compensation is to be paid and the amount of such compensation.

No compensation to be paid for services rendered to applicant in connection with this loan. application.

Witness: _____

Address of witness: _____

QUEEN MINING SYNDICATE

By W. A. Noon

Dated Feb. 26, 1951, 19 51

NOTE—Corporations must execute foregoing certificate in corporate name, by duly authorized officer, and seal must be affixed and duly attested; partnerships must execute in firm name, together with signature of a general partner. If no compensation is paid or to be paid for services rendered in connection with application or loan, this should be so stated and the Applicant should sign this Exhibit.

## CERTIFICATION

The Applicant hereby certifies that the statements made in the foregoing application, and all exhibits and documents submitted in connection therewith, are true and correct statements to the best of Applicant's information and belief and are submitted as a basis for credit. The Applicant agrees to reimburse any agency of the United States Government upon demand for any expenses incurred in connection with or arising out of this application or any loan made pursuant hereto.

Dated Feb. 26, 1951, 19____

Witness: _____ (For individual applicants)

_____ (Signature)

Witness: Ed Sherson (For partnership applicants)

QUEEN MINING SYNDICATE (Full name of firm)

By W. A. Noon, a general partner. (Signature)

(For corporate applicants)

*(CORPORATE SEAL)*

_____ (Full corporate name of Applicant)

Attest: By _____ (Signature) (Title)

_____ (Signature), _____ (Title)

The United States Criminal Code, 18 U.S.C., Sec. 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: 1950 O - 916171

AIR MAIL

~~LAMDON F. STROUD~~

Mr. Lyon

W. A. NOON
PHONE 2551 OR 2741
DRUMMOND, MONTANA

BUREAU OF MINES
WASHINGTON, D.C.
FEB 15 9 16 AM '51

February 7, 1951

Mr. Tom Lyon, Vice Chairman
Copper Commodity Committee
Defense Minerals Administration
Washington, D. C.

File: D.M.A-393

Dear Mr. Lyon:

Supplementing our last letter of Feburary 3rd, subject Sunrise mine, we herewith enclose a letter from John R. Reynolds, consulting engineer of Kellogg, Idaho, who made the detailed report on the above property which is already in your possession. Mr. Reynolds' letter is self-explanatory.

We also enclose a copy of our check assay No. 2005, car # N.P. 50047, shipped from the Sunrise Mine, showing tungstic oxide content. This was a 50 ton pulp sample, cut by the Washoe Sampler of the Anaconda Copper Mining Company of Butte, Montana.

Yours very sincerely,

W. A. Noon

W. A. Noon

WAn.da
Encl.-2

Telephone 3-3302

Con. Serial 14138

ASSAY REPORT

# UNION ASSAY OFFICE, Inc.

J. V. SADLER, President
A. C. SELBY, Vice-Pres. & Treas.
A. C. SELBY, Jr., Secretary

Salt Lake City 11, Utah

Mine Sunrise Mine

RESULTS PER TON OF 2000 POUNDS

Jan. 25, 1951

| LOT | GOLD Ozs. per Ton | SILVER Ozs. per Ton | LEAD Wet on Ore | COPPER Per Cent | INSOL. Per Cent | ZINC Per Cent | SULPHUR Per Cent | TUNGSTIC OXIDE Per Cent | IRON Per Cent | LIME Per Cent | Per Cent |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2005-Lot 8843 N.P. 50047 | 0.180 | | | 2.24 | | | | 0.06 | | | |

Remarks

Sampled By Washoe Sampler

Charges $ 8.00

J. V. Sadler

P. O. BOX 622

PHONES: OFFICE 598; RES. 356-W

# PRESTON AND REYNOLDS

MINE ENGINEERING & GEOLOGICAL SERVICE

ROOM 109 IDAHO FIRST NATIONAL BANK BLDG.

KELLOGG, IDAHO

Feb. 3, 1951

Mr. W. A. Noon
Drummond, Montana

Dear Mr. Noon:

I have your letter of Jan. 31st concerning the Sunrise Mine, near Maxwell, Montana. I was glad to hear that you are again making regular shipments from the mine.

Concerning Mr. J. K. Richardson's letter of Jan. 19th, dealing with your application for a DMA loan, I will give you my thoughts on the information that he requested:

a. Size of loan or purchase contract and terms of repayment:

I am not to familiar with the work that has been done since I made my examination, particularly that on the lead vein. From talking to John Cole of the U.S. Bureau of Mines and from reading Arthur Lake's report it seems to me that the Queen vein is still your best bet. I am, therefor, basing my estimates on that vein.

I would request an initial loan of $ 40,000 for the proposed development work. This development work should indicate whether or not the instillation of a mill is warranted. If it is found advisable to put in a mill I suggest that you look into the possibility of moving the flotation mill from the Brooklyn Mine, near Maxville. I understand that this mill is in good condition and that it is for sale for about $20,000.

It is difficult for me to say as to how your loan should be repaid. I would suggest, however, that it be repaid from either the net profits or from the net smelter returns.

b. Production schedule:

I assume that Mr. Richardson has a copy of my report complete with maps. Much of the data that he requests in his letter can be found in the report.

c. Details of proposed expenditure:

I think that your most logical development program would be to drift on either the Main Tunnel or No. 1 W. to a point from which the proposed raise to connect with the bottom of the Russell Incline can be driven. This connection should then be made and the raise that I have indicated on the map as No. 3 should be driven until the oxidized zone has been reached. I estimate that this work could be done for about $ 40,000. If the ore is found as expected this work will indicate sufficient tonnage to warrant a full scale mining and milling program, along the lines outlined in my report.

d. Costs per pound of copper produced:

In my report I estimated that from a geological standpoint as much as 488,880 tons of ore averaging 2.3% copper might be recovered. The cost of copper produced would, therefor, be $ 0.002 per pound based on a loan of $ 40,000.

If I can be of any additional help on this matter please feel free to call on me. The Sunrise is a good property and I am certain in my own mind that fairly large tonnages of ore can be easily developed there. The Bureau of Mines missed a good bet when they didn't put a couple of diamond drill holes through the Queen vein.

Very truly yours,

PRESTON & REYNOLDS

John R. Reynolds

John R. Reynolds

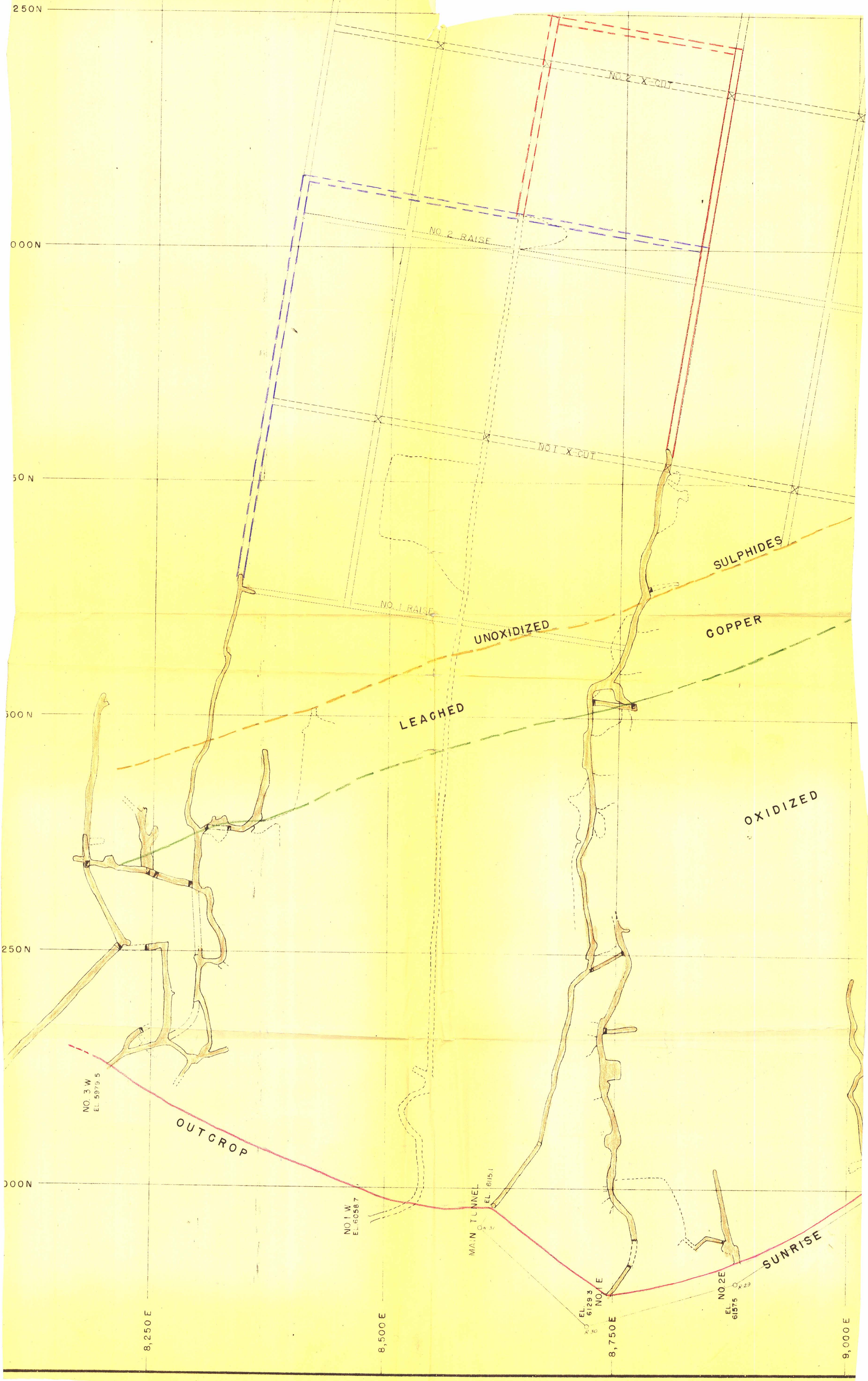
488,880 x 2.3 = 11,230 T. Cu

11,230 T = 22,460,000 lb.

40,000 / 22,460,000 = 0.18 cents

say, 2/10 cent per lb. Cu.

to repay 40,000


250N
000N
50N
500N
250N
000N
NO. 2 X-CUT
NO. 2 RAISE
NO. 1 X-CUT
NO. 1 RAISE
SULPHIDES
UNOXIDIZED
COPPER
LEACHED
OXIDIZED
NO. 3 W
EL. 5979.5
OUTCROP
NO. 1 W
EL. 6058.7
MAIN TUNNEL
EL. 6115.1
EL. 61293
NO. 1 E
NO. 2 E
EL. 61575
SUNRISE
8,250 E
8,500 E
8,750 E
9,000 E