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

224 New Customhouse
Denver 2, Colorado

October 14, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2424 (Lead-Zinc-Copper) Slate River Mining Co., Micawber Mine, Gunnison County, Colorado

Enclosed are the original and three copies of the final report on DMEA-2424, the original and one copy of Form 3(b) and a copy of the letter of denial to the applicant.

John F. Shaw for
W. H. King

A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
OCT 2 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

224 New Customhouse
Denver 2, Colorado

October 14, 1952

Slate River Mining Company
P. O. Box 416
Crested Butte, Colorado

Re: DMEA Docket 2424

Gentlemen:

Reference is made to your application for Government aid in exploration work on the Micawber Mine.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position of the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Due to the irregular mineralization, apex rights would be questionable in the direction of your proposed drifting. Under these circumstances, we regret to advise you that your application for Government aid is denied.

Very truly yours,

John F. Shaw

John F. Shaw for
W. H. King
Field Team, Region IV

A. H. Koschmann

A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator - DMEA
WMTraver
Subject
Chron.
AHKoschmann (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 14, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2424 (Lead-Zinc-Copper) Slate Mining Co., Micawber Mine, Gunnison County, Colorado

Enclosed are eight copies of the engineering report by M. N. Salsbury of the Bureau of Mines on DMEA-2424, which requested aid in the amount of $32,446.

The examination shows weak mineralization and it is doubtful if the applicant controls the ground where drifting is proposed.

The examining engineer recommends denial of the loan and we concur in this recommendation.

John F. Shaw
John F. Shaw for
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

10-22-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20
Denver Federal Center
Denver 14, Colorado

October 10, 1952

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Colorado Branch, Mining Division, Region IV

Subject: DMEA 2424 (Lead-zinc-copper-silver), Slate River Mining Company, Micawber mine, Elk River Mining District, Gunnison County, Colorado

Please find enclosed the original and eight copies of a memorandum report, by M. N. Salsbury, on the subject docket.

Salsbury recommends denial of the loan request because work performed since submission of the application has served to expose the Micawber vein as weakly mineralized and does not merit additional exploration. Also, it is questionable if the applicant controls the ground where drifting on the vein is proposed.

I concur with his recommendation.

It developed during the examination that the applicant's representative, R. E. Simpson, was not too concerned about approval of this loan. He has in mind submitting another request to explore the downward extension of an ore shoot mined for a length of 60 or 70 feet along the Micawber vein on the main or "B" level some distance southwest of the location of this proposal.

The brochure furnished by the Region IV Field Team with instructions to make the examination is also returned.

W. M. Traver, Jr.

W. M. Traver, Jr.

Enclosures

WMT/baw

cc 8
DMEA 2424
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20
Denver Federal Center
Denver 14, Colorado

October 9, 1952

Memorandum

To: Chief, Colorado Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: DMEA 2424 (Lead-zinc-copper-silver), Slate River Mining Company, Micawber mine, Elk River Mining District, Gunnison County, Colorado

The Micawber mine was examined by M. H. Salsbury, Bureau of Mines, and D. R. MacLaren, U. S. Geological Survey, on September 18, 1952, as part of the investigation of the subject loan request for $32,466.00.

The property, held under lease by the applicant, consists of three claims--Micawber, Polar Star, and Little Gertie--covering the assumed outcrop of the northeast-southwest trending Micawber vein. At the southwest end, the apex of the vein opened up in the mine is definitely shown to be covered by the Micawber claim, by workings carried up nearly to surface, and by a shaft from surface connecting with the "B" and "C" levels. Toward the northeast, the apex of the Micawber vein is only indicated by several test pits and by a slightly mineralized fault fissure showing in a tunnel at the "D" level, elevation about 11,550 feet, which may or may not be the vein.

The new exploration work at the northeast end of the lowest or "B" level, which was done this summer after the application for exploration assistance was made, is, in part, over the southeast sideline of the

Micawber claim on property not controlled by the applicant. The proposed exploration to the northeast would also lie outside the claims leased by the applicant. Because of the erratic occurrence of the vein or veins disclosed in the new work, while, theoretically, they might be shown to apex on the Micawber claim, there is insufficient evidence to establish that the apex of any vein which might be found or followed in the proposed exploration would be on ground controlled by the applicant.

Inasmuch as the applicant does not control the property which covers the proposed work, the ownership of any ore discovered would certainly be in doubt.

The new work done this past summer on the "B" level shows the newly opened section of the vein to be discontinuous. The mineralization is erratic, and very little profitable ore has been disclosed. This mineralization is not nearly as strong as in the workings farther southwest where, during the last two summers, 2,400 tons of ore averaging 3.9 ounces silver per ton, 5.6 percent lead, 7.9 percent zinc, and 0.56 percent copper were mined from an ore shoot some 60-70 feet long stoped from the "B" level about 90 feet upwards to the oxidized zone.

Because of the doubtful ownership of any ore which might be discovered, the examining team recommends denial of the present loan application.

If the applicant should make an application for assistance to explore the possible downward continuation of the ore shoot already developed, favorable consideration could be given.

The position of the proposed exploration with respect to the claims and other features discussed above are shown on a plan map of the Micawber mine submitted with the application.

Floyd W. Everest
for

M. H. Salsbury
Mining Engineer

MHS/baw

cc 8

September 30, 1952

Memorandum

To: Mr. A. H. Koschmann

From: D. R. MacLaren, Geologist, U. S. Geological Survey

Subject: DMEA Docket 2424, Slate River Mining Company, Micawber Mine, Gunnison County, Colorado.

The subject applicant has requested the Defense Minerals Exploration Administration to assist in a project to explore for lead, zinc, and copper, in sec. 35, T. 13 S., R. 87 W., Gunnison County, Colorado. The applicant proposes to extend the lower level of the Micawber mine 1,000 feet to the northeast at an estimated cost of $32,446, the Government's share to be $16,223.

The property was examined on September 18, 1952, in the company of M. H. Salsbury of the U. S. Bureau of Mines and Robert E. Simpson, Superintendent for the Slate River Mining Company.

The rocks of the area are interbedded sandstones and shales of the Mesaverde series. The beds, striking northwest, dip about 15° SW. and are cut by northeast striking faults that dip 65°-80° SE. It is along one of these faults that the Micawber vein has been developed.

The lenses of ore, which carry pyrite, sphalerite, and galena, with some chalcopyrite and quartz, strike N. 65° E. and dip 65°-80° SE. For about 600 feet the vein is well defined--about 1 to 5 feet thick

between walls of sandstone or shale. Throughout this distance there is no apparent change in the character of the vein as it passes from one rock to the other. At about 600 feet the well-defined vein disappears. However, the mineralization continues more or less in the same direction, as small stringers half an inch to 1 inch thick, in a most irregular and erratic pattern throughout a zone possibly as much as 50 feet wide. The sandstone seems to be somewhat silicified at about the same distance from the portal, and this may account for the rock shattering over a broader area.

The proposed drifting would follow the zone of irregular mineralization, but this has already passed out of the claim limit into ground not controlled by the company. Due to the irregular mineralization it is doubtful that apex rights could be maintained in a court of law, and for this reason it is recommended that the application be denied until such time as the Slate River Mining Company gains control of the ground involved.

The applicant intimated that he would drop the subject application and apply for assistance to diamond drill the vein below that portion from which 2,400 tons of ore averaging 5.6% lead, 7.9% zinc, 0.56% copper, and 3.9 ounces of silver have already been mined. Should this application be received, favorable consideration is recommended.

Noted and approved
A. H. Koschmann

Donald R. MacLaren

COPY

224 New Customhouse
Denver 2, Colorado

October 14, 1952

Slate River Mining Company
P. O. Box 416
Crested Butte, Colorado

Re: DMEA Docket 2424

Gentlemen:

Reference is made to your application for Government aid in exploration work on the Micawber Mine.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position of the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Due to the irregular mineralization, apex rights would be questionable in the direction of your proposed drifting. Under these circumstances, we regret to advise you that your application for Government aid is denied.

Very truly yours,

/s/ John F. Shaw for
W. H. King
Field Team, Region IV

/s/ A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator - DMEA
WMTraver
Subject
Chron.
AHKoschmann (2)

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

224 New Customhouse
Denver 2, Colorado

October 14, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2424 (Lead-Zinc-Copper) Slate River Mining Co., Micawber Mine, Gunnison County, Colorado

Enclosed are the original and three copies of the final report on DMEA-2424, the original and one copy of Form 3(b) and a copy of the letter of denial to the applicant.

John F. Shaw for
W. H. King

A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
OCT 2 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 14, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, RFC Docket 5848 (Lead-Zinc-Copper) Slate Mining Co., Slagmaker Mine, Gunnison County, Colorado

Enclosed are eight copies of the engineering report by H. E. Salsbury of the Bureau of Mines on 5848-5848, which requested aid in the amount of $32,444.

The examination shows weak mineralization and it is doubtful if the applicant controls the ground where drifting is proposed.

The examining engineer recommends denial of the loan and we concur in this recommendation.

John F. Shaw for
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

10-22-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20
Denver Federal Center
Denver 14, Colorado

October 10, 1952

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Colorado Branch, Mining Division, Region IV

Subject: DMEA 2424 (Lead-zinc-copper-silver), Slate River Mining Company, Miscember mine, Elk River Mining District, Gunnison County, Colorado

Please find enclosed the original and eight copies of a memorandum report, by M. H. Salsbury, on the subject docket.

Salsbury recommends denial of the loan request because work performed since submission of the application has served to expose the Miscember vein as weakly mineralized and does not merit additional exploration. Also, it is questionable if the applicant controls the ground where drifting on the vein is proposed.

I concur with his recommendation.

It developed during the examination that the applicant's representative, R. E. Simpson, was not too concerned about approval of this loan. He has in mind submitting another request to explore the downward extension of an ore shoot mined for a length of 60 or 70 feet along the Miscember vein on the main or "P" level some distance southwest of the location of this proposal.

The brochure furnished by the Region IV Field Team with instructions to make the examination is also returned.

W. M. Traver, Jr.

W. M. Traver, Jr.

Enclosures

WMT/baw

cc 8
DMEA 2424
Chron.

REGIONAL DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20
Denver Federal Center
Denver 14, Colorado

October 9, 1952

Memorandum

To: Chief, Colorado Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: DMEA 2424 (Lead-zinc-copper-silver), Plate River Mining Company, Miesmber mine, Elk River Mining District, Gunnison County, Colorado

The Miesmber mine was examined by M. H. Salsbury, Bureau of Mines, and D. R. MacLaren, U. S. Geological Survey, on September 18, 1952, as part of the investigation of the subject loan request for $32,466.00.

The property, held under lease by the applicant, consists of three claims--Miesmber, Polar Star, and Little Gertie--covering the assumed outcrop of the northeast-southwest trending Miesmber vein. At the southwest end, the apex of the vein opened up in the mine is definitely shown to be covered by the Miesmber claim, by workings carried up nearly to surface, and by a shaft from surface connecting with the "B" and "C" levels. Toward the northeast, the apex of the Miesmber vein is only indicated by several test pits and by a slightly mineralized fault fissure showing in a tunnel at the "D" level, elevation about 11,550 feet, which may or may not be the vein.

The new exploration work at the northeast end of the lowest or "B" level, which was done this summer after the application for exploration assistance was made, is, in part, over the southeast sideline of the

Micawber claim on property not controlled by the applicant. The proposed exploration to the northeast would also lie outside the claims leased by the applicant. Because of the erratic occurrence of the vein or veins disclosed in the new work, while, theoretically, they might be shown to apex on the Micawber claim, there is insufficient evidence to establish that the apex of any vein which might be found or followed in the proposed exploration would be on ground controlled by the applicant.

Inasmuch as the applicant does not control the property which covers the proposed work, the ownership of any ore discovered would certainly be in doubt.

The new work done this past summer on the "B" level shows the newly opened section of the vein to be discontinuous. The mineralization is erratic, and very little profitable ore has been disclosed. This mineralization is not nearly as strong as in the workings farther southwest where, during the last two summers, 2,400 tons of ore averaging 3.9 ounces silver per ton, 5.6 percent lead, 7.9 percent zinc, and 0.56 percent copper were mined from an ore shoot some 60-70 feet long stoped from the "B" level about 90 feet upwards to the oxidized zone.

Because of the doubtful ownership of any ore which might be discovered, the examining team recommends denial of the present loan application.

If the applicant should make an application for assistance to explore the possible downward continuation of the ore shoot already developed, favorable consideration could be given.

The position of the proposed exploration with respect to the claims and other features discussed above are shown on a plan map of the Micawber mine submitted with the application.

Floyd H Everett
for

M. H. Salsbury
Mining Engineer

MHS/baw

cc 8

September 30, 1952

Memorandum

To: Mr. A. H. Koschmann

From: D. R. MacLaren, Geologist, U. S. Geological Survey

Subject: DMEA Docket 2424, Slate River Mining Company, Micawber Mine, Gunnison County, Colorado.

The subject applicant has requested the Defense Minerals Exploration Administration to assist in a project to explore for lead, zinc, and copper, in sec. 35, T. 13 S., R. 87 W., Gunnison County, Colorado. The applicant proposes to extend the lower level of the Micawber mine 1,000 feet to the northeast at an estimated cost of $32,446, the Government's share to be $16,223.

The property was examined on September 18, 1952, in the company of M. H. Salsbury of the U. S. Bureau of Mines and Robert E. Simpson, Superintendent for the Slate River Mining Company.

The rocks of the area are interbedded sandstones and shales of the Mesaverde series. The beds, striking northwest, dip about 15° SW. and are cut by northeast striking faults that dip 65°-80° SE. It is along one of these faults that the Micawber vein has been developed.

The lenses of ore, which carry pyrite, sphalerite, and galena, with some chalcopyrite and quartz, strike N. 65° E. and dip 65°-80° SE. For about 600 feet the vein is well defined--about 1 to 5 feet thick

between walls of sandstone or shale. Throughout this distance there is no apparent change in the character of the vein as it passes from one rock to the other. At about 600 feet the well-defined vein disappears. However, the mineralization continues more or less in the same direction, as small stringers half an inch to 1 inch thick, in a most irregular and erratic pattern throughout a zone possibly as much as 50 feet wide. The sandstone seems to be somewhat silicified at about the same distance from the portal, and this may account for the rock shattering over a broader area.

The proposed drifting would follow the zone of irregular mineralization, but this has already passed out of the claim limit into ground not controlled by the company. Due to the irregular mineralization it is doubtful that apex rights could be maintained in a court of law, and for this reason it is recommended that the application be denied until such time as the State River Mining Company gains control of the ground involved.

The applicant intimated that he would drop the subject application and apply for assistance to diamond drill the vein below that portion from which 2,400 tons of ore averaging 5.6% lead, 7.9% zinc, 0.56% copper, and 3.9 ounces of silver have already been mined. Should this application be received, favorable consideration is recommended.

Noted and approved
A. H. Koschmann

Donald R. MacLaren

DMEA-2424

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

224 New Customhouse
Denver 2, Colorado

March 14, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Adm.
Attention: Code 210

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate are DMA Form 3b and applications pertaining to the following requests for Government assistance:

1. Ira L. Moseley DMEA-2426
Box 512
Lordsburg, New Mexico

2. Dan E. Kelly DMEA-2425
Route 4,
Grand Junction, Colorado

3. Slate River Mining Co. DMEA-2424
P. O. Box 416
Crested Butte, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1952

J. H. East, Jr.

J. H. East, Jr.

One copy each of MF-103 and 100 with attachments and 2 maps returned to Region IV, 3-18-52.

SD

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

*Not To Be Filled in by Applicant*

Docket No. DMEA-2424
Metal or Mineral
Date Received 3-17-52
Amount $
Participation (Government %)

Slate River Mining Company
P. O. Box 416
Crested Butte, Colo.

Name and address of applicant

Date March 5, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

## INSTRUCTIONS

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

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

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

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

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

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

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 1952

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

## CERTIFICATION

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

Slate River Mining Company
(Name of company)

By Robert E. Simpson
(Signature of authorized official)

March 5, 1952
(Date)

Secretary-Treasurer
(Title)

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

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

Slate River Mining Company
P. O. Box 416
Crested Butte, Colo.

1. (a) The exploration would be conducted on the group of three claims known as the Micawber mine. These claims are located in section 35, T13S, R87W. The patent numbers are Polar Star 17714, Micawber 2863, and Little Gertie 3390.

   (b) Copy of lease attached.

   (c) The exploration would be conducted along the Micawber vein by extending "B" level drift in a northeasterly direction. There would be no crosscutting as the drift is on the vein now. The work would be conducted upon the Micawber and Little Gertie claims.

2. (a) Lead, zinc, copper, silver bearing ores.

   (b) Question covered in Sec. 12 (a) and (b) MF-100, also operating report for 1951 accompanying MF-100.

3. (a) Proposed work is that of extending "B" level drift for 1,000 feet along the vein to further explore the Micawber vein. See Maps S1 and S4. Total estimated cost is $32,446.00 or a per foot cost of $32.46.

   (b) The equipment owned by us is ready to go and the drift can be started about May first. I have allowed five months for completion of the work. This was estimated on the basis of forty shifts per month, two shifts per day with an average advance of five feet per shift. This allows for Saturdays and Sundays and lost time. The project should be completed before October first.

4. This is discussed in MF-100.

5. This question is answered in section (17) MF-100. No repairs or rehabilitation necessary.

6. No additional buildings or facilities necessary.

7. (a) Rentals:

| | |
|---|---|
| Air operated trammer (Universal Tramairs) @ $137.50 | $687.50 |
| Air compressor, 185 cu. ft. gasoline @ $191.70/mo. | 958.50 |
| Transportation to and from Denver (estimated) | 200.00 |
| | $1,846.00 |

   (b) Purchased:
   An exhausting fan and metal tubing has been included under materials and supplies.

   (c) Furnished by us:

| | |
|---|---|
| Drifter (Sullivan T350 and column) @ $20.00/mo. | $100.00 |
| 4 mine cars, depreciation @ $10.00/mo. | 50.00 |
| Eimco 12B mucking machine @ $51.00/mo. | 255.00 |
| | $405.00 |
| Total rental and depreciation | $2,251.00 |

Slate River Mining Company
P. O. Box 416
Crested Butte, Colo.

8. Labor: To be contracted to skilled drift miners. Labor is very competitive in this area due to the Keystone mine and the C. F. & I. coal mine. Base pay company time at Keystone is $13.80 per shift.

I would recommend $10.00 per foot for breaking and tramming to a siding to be provided every 300 feet. This would include laying track and advancing air, water, and vent pipe.

Calculated contract for tramming with air trammer is $0.50 per car for first 100 feet and $0.04 increase for each additional increment of 100 feet.

| | |
|---|---|
| Drift contract ($10.00 x 1,000) . . . . . | $10,000.00 |
| Tramming (3,500 cars @ avg. $0.78) . . . . . | 2,730.00 |
| Compressor man (½ x 200 shifts @ $13.80) . . . . . | 1,380.00 |
| Installing blower and first 700 ft. tubing . . . . | 110.00 |
| Supervision (includes engineering, sampling, and accounting) . . . . . | 1,250.00 |
| Total labor | $15,470.00 |

9. Materials, Supplies, and Miscellaneous:

| | |
|---|---|
| Explosives . . . . . | $3,150.00 |
| Electric blasting caps . . . . . | 785.00 |
| Lead and connecting wire . . . . . | 38.50 |
| Timken drill bits . . . . . | 2,640.00 |
| Drill steel . . . . . | 418.00 |
| Hose, air and water . . . . . | 193.50 |
| Pipe, 2-inch air, 3/4-inch water . . . . . | 500.00 |
| Rail . . . . . | 1,062.00 |
| Bolts, spikes, fish plates . . . . . | 148.00 |
| Ties . . . . . | 200.00 |
| Compressor fuel (gasoline) . . . . . | 1,090.00 |
| Assaying . . . . . | 300.00 |
| Miscellaneous: Oil, hand tools, repairs . . . . . | 400.00 |
| Ventilation: Exhaust blower and motor; 1,600 feet 16 guage, 15-inch galvanized tubing . . . . . | 3,800.00 |
| Total | $14,725.00 |

10. (a) The amount necessary to complete our share of the project or approximately $15,000.00.

11. This estimate of costs has been carefully made for our own information as well as the government's. There are many items of equipement such as trucks, electric cap lamps, etc. which will be available to the job. These might not otherwise have to be purchased but they will fill a definite need. All equipment is in excellent condition.

We are equipped to take care of engineering and surveying. We would be pleased to have the consultation of government geologists.

It is very possible that some revenue may be received from the drift ore as we were able to ship some of it in 1951.

Also, although we have provided for a rental compressor, the 315 Diesel owned by us will provide a supplement as the 185 is doubtfully large enough. It will also provide a safety factor in case of a breakdown. We did not provide to use this compressor for the drift as we also intend to mine on our already developed ore.

Slate River Mining Company
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11. Continued.

It is our understanding that the interest of the government is in getting good honest and consientious expenditure of their money and a good chance of developing mineral at the minimum expense. We believe that this proposition offers the utmost.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2424

Date received 3-17-52

Slate River Mining Company
P. O. Box 416
Crested Butte, Colo.

Name and address of applicant

Date March 5, 1952

## INSTRUCTIONS

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

## GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☒ Lessee.
   ☐ Contractor.
5. Number of years in production Four months

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

Slate River Mining Company
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1. (a) Crude ore yielding lead, zinc, copper, silver

   (b) Inapplicable

2. Micawber mine

   (a) 95 feet of shaft, 175 feet of raises

   (b) Inapplicable

   (c) 2,250 feet of tunnels

   (d) None

   The mine is not under water and it has no water problem.

3. (a) Mine is located in a westerly direction from Crested Butte a distance of eight miles by road. Ore is loaded on narrow guage railroad at Crested Butte and shipped to Salt Lake City shipping points.

   (b) Elk Mountain mining district

   (c) Section 35, Township 13S, Range 87W

   (d) Gunnison County, Colorado

4. (a) This property was put into operation August 1951 but was forced to shut down the last of December because of a particularly rigorous winter. Operated by Slate River Mining Company.

   (b) Lessee

5. In operation three months.

6. (a) Superintendent, Robert E. Simpson, Crested Butte, Colo. Mining Engineer, Colo. Sch. of Mines 1942. Worked in mining since then except for four years as manager of Simpson Motor Company at Monte Vista, Colorado.

   (b) Manager, R. E. Simpson, Alamosa, Colorado. Owned and operated auto dealership at Alamosa 1943 to September 1951. Has been interested in mining since 1934. Has thorough knowledge of business methods including accounting.

7. (a) This property was first located in the 1880's. A 95-foot tunnel with a 95-foot shaft at its end were put down on the Little Gertie claim at the uppermost end of the property. This working is not open and was not opened by us because it is not on the Micawber vein. A 95-foot shaft was sunk on the lower end of the Micawber claim. This was later intersected by the two tunnels now known as "B" and "C" levels. Later, a third crosscut tunnel further up the hill was driven in upwards of 600 feet with a 150-foot crosscut. Preliminary work shows that this tunnel misses intersecting the vein by at least 200 feet in the main tunnel and 100 feet in the crosscut.

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7. (a) Continued.

Until the time that we took over the property in 1951, there had never been a single pound of ore shipped. About 275 tons of good lead-zinc ore was piled separately on the "3" level dump. This was shipped by us and settled for at 8.48 lead, 6.13 zinc, 0.38 copper, and 5.17 silver.

The reason for no production seems to lie in the facts that there was never a road to the property; the complex nature of the ores; high freight rates from this area; and low prices at the time the property was being worked.

(b) The Micawber property is about one mile from the Irwin district where there were mines, including the old Forest Queen, which purportedly had a production of several hundred thousand dollars.

The American Smelting & Refining Company is currently developing their Keystone property, the portal of which is 1.8 miles from our property. They have developed upwards of 100,000 tons of ore of what they consider economic grade (1.2 Cu, 3 Pb, 7 Zn, 8 Ag) and a large tonnage of slightly lower grade material.

The Daisy mine of the Crested Butte Mining & Milling Company produced, in 1951, some fifteen hundred tons of good lead-zinc-silver ore which was shipped to Combined Metals Reduction Company at Bauer, Utah.

The Daisy, Micawber, and Keystone lie at corners of a triangle around what apparently contained the source of the mineralizing solutions.

(c) No complete reports are available; however, I am enclosing a copy of my report to the company on the 1951 season. This is in the nature of a report on work accomplished and work recommended for the future. My own observations regarding geology are entered under section (12).

10. Production: None prior to 1951

(1951) Newly mined ore: 1,301.99 dry tons containing 146,000 pounds lead; 205,140 pounds zinc; 14,724 pounds copper; and 5,135 ounces silver. Avg. grade 5.60 lead, 7.88 zinc, 0.56 copper, and 3.94 silver.

Dump ore: 267.14 dry tons containing 45,220 pounds lead; 32,780 pounds zinc; 2,054 pounds copper; and 1,381 ounces silver. Avg. grade 8.48 lead, 6.13 zinc, 0.38 copper, and 5.17 silver.

11. Our planned production beginning June 1, 1952 will be twenty-five tons per day from developed ore.

Slate River Mining Compa
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12. (a) The Micawber mine is located in Elk Basin on a fissure vein running in a Northeast-southwest direction with a dip of from 60 to 70 degrees to the southeast. The vein is apexed by three claims end to end. The vein traverses what has been identified as the Mesaverde sandstones and the Mancos shale. The upper end of the basin seems to be a dip slope roughly representing the top of the Mesaverde and the bottom of the Mancos formations. These beds dip an average of 15° almost due south; consequently the drifts along the vein cut the beds at an angle of about nine degrees.

In "B" and "C" levels the wall rock is sandstone with interbedded shales and sandy shales. As a casual observation the sandstones appear to be the most favorable for ore.

Although there are about 2,250 feet of horizontal workings, the work seems to have lacked proper engineering since, of this, only 1,200 feet of tunnel are on the sin and over 300 feet of this is only 65 feet above the other. As a result, about 900 feet of vein has been explored. In nearly all of this the vein was kept in the footwall for easier drilling by hand. There is only one short crosscut into the footwall and this shows a parallel fault about six feet out.

Old samples taken in 1925 showed about 2.1 feet of ore near the end of "B" level but when we opened it up into the footwall it was discovered that there was sandstone "horse" in the middle of the vein and the mineable ore extended seven feet wide in places. Most of the ore varies between two and three feet wide.

"C" level adit as is shown in Map S1 and S4 extends about 200 feet further than "B" level. Ore is showing in "C" level beyond the end of "B" level. In fact, "C" level shows better ore in that distance than it did above the 650 orebody. This leads us to believe that we have a very good chance of opening up another similar orebody with 100 to 150 feet of additional drift on the lower level.; Furthermore, the "B" drift contains eighteen to twenty-four inches of ore between the 650 stope and the face of the drift. Samples show this to be of economic grade when mined in a 2½ to 3 foot width.

The "D" level adit was seemingly driven to crosscut the Micawber vein; however, preliminary investigation shows that they never reached this vein but were sidetracked by a parallel fault. A crosscut was going in the right direction but is about one hundred feet short of the vein. This tunnel is in the less favorable Mancos shale.

It seems logical that future development and exploration should be directed in the direction of the lower or "B" level. The reasons are as follows:

(1) This drift continues in ore and conditions are encouraging for development of more ore.
(2) Best ore has been developed on this level which isat lowest horizon in the Mesaverde.
(3) At the deepest level and would develop most tonnage.
(4) All buildings and installations are located here and the drift is ready to go.
(5) Best ore at Keystone mine has been found at considerable depth in Mesaverde.
(6) Ore and walls are primary and very little affected by oxidation.

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12. (b) (1) Maps S1 and S4 are herewith attached. Engineering work was not completed this year. As soon as the property is reopened, it is planned to make a complete assay map and geologic map. The data on S1 and S6 was located by transit survey with details by stadia except for "D" level which was tied in by Brunton survey.

(2) This question is inapplicable.

13. Crested Butte is the nearest railroad, supply, and residence point. The mine is eight miles from town and is reached over 2½ miles of county road; 1½ miles of private road of the American Smelting & Refining Company; and four miles of road built and maintained by our company. The last four miles has a maximum 7½% grade with most of it 6% or less. Most of the road is at least fifteen feet wide. In the event custom milling becomes available at Keystone we would have a four mile downhill haul to this mill. The entire road is not seriously effected by moisture and can be maintained in normal winters.

14. Ample water is available from underground drainage for all mine work.

15. No electric power is available at present.

16. Our average payroll included six miners, one trammer, and one repairman.

17. Buildings available at the mine were all constructed in 1951:

50-ton ore bin with ore house
14 x 16 compressor house
12 x 14 office
12 x 30 timber shed
Snowsheds connecting all buildings

Equipment:

1 315 cu. ft. Gardner-Denver, Caterpillar diesel powered, has been operated 700 hours
1 Eimco 12B mucking machine, new
1 T350 Sullivan drifter, good condition
1 600 Thor stoper, new
2 475 Thor-Cochise stopers, fair
1 1500 watt Kohler light plant, good
1 12-inch Thor portable electric saw, new
1 Gardner-Denver tugger, new
1 16 cu. ft. mine car, good
1 20 cu. ft. mine car, good
2 20 cu. ft. Type Z cars, new
1 Sullivan slusher, good
1 1000 gallon diesel fuel tank for compressor
1 1948 Dodge Powerwagon with winch, excellent
1 1948 Willys Jeep 3/4 ton pickup, 4 wheel drive, excellent
1 1942 Dodge 3/4 ton Carryall, good
1 4 x 6 crusher for sample crushing
1 Charging rack and ten Edison P3E lamps
1 Berger light mountain transit

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18. The Micawber mine is located in a very favorable position for selling ore to the American Smelting & Refining Company if they erect a mill at their Keystone mine. The metallurgy of the ores is identical and we have been assured that they will give us a good schedule and will provide facilities for handling custom ore. The haul from our mine to their mill would be slightly over four miles on a gentle downhill grade. Although there is not official confirmation, private conversation with personal acquaintances connected with this company, indicate that mill construction will undoubtedly begin this spring. Our freight and hauling amount to about $10.75 per ton when the ore is sent to Utah. Hauling costs to Keystone would probably cost one dollar maximum. With an equitable mill schedule our economic grade of ore could be lowered considerably.

February 8, 1952

Slate River Mining Company
Crested Butte,
Colorado

Gentlemen:

This letter is presented as a report on the operation of the Micawber mine during the season of 1951.

On inspecting the mine early in June, I found the following conditions: (1) "B" level ( lowes and main level) portal was caved completely closed and filled with water; (2) "C" level (next level about 65 feet above) portal was badly filled in but accessible for inspection. Work was begun as follows on June 26th.

Two men began cleaning out "B" level portal and getting it ready for work. This turned out to be quite a job as old timber had to be dug out and new drift sets installed. After getting through the portal cave, we found several inches of mud together with an occasional rock fall. Also, the rail was so rotten that we had to replace rail about half way to the face and ties all of the way. This tunnel was finally put in condition about the last of July. During the last half of July we also carried on some prospecting consisting of blasting a few shots along the vein in different places. The ore bin was completed early in August and broken ore in the mine was mucked up and trammed out. We then began drifting on this level and started a raise to "C" level at about 650 feet from the portal. This was necessary to provide ventilation and prospect the orebody. After this was completed near the end of October, se decided to begin stoping on the sest side of the raise and this stoping continued until closing down. Also, we had just began stoping on the east side.

The "B" heading was continued intermittently and driven a total of about ninety feet. A stope called the 300 stope was started three hundred feet from the portal and driven upward about thirty feet. Due to a lack of working facilities this was not worked after early in the season.

Work was started on cleaning out "C" level the same time as on the lower level. This was quite a mucking job but no retimbering was necessary consequently it did not take as long as "B" level. Work was then started on a narrow orebody about 340 feet from the portal. The old 450 raise which was originally sunk as a shaft was cleaned out and a chute built at the bottom so that the ore could be transferred down to "B" level.. This stope was carried up about thirty-five feet where shale walls were encountered. The ore was being badly diluted by miners not familiar with this kind of mining so the stope was shut down on November 8th.

Between this stope and the end of "C" level several slab rounds were blasted showing ore of some grade the entire distance. No work was done here because our facilities were being used elsewhere.

At the same time the portals were being cleaned out, we began shipping ore from the dump. About 275 tons were loaded out. This fairly well cleaned up the higher grade dump material but lower grade material remains which might be sorted and shipped to a local mill.

New Road. A new road beginning at the mine and ending at the Keystone main level was started in September and completed late in October. It is four and one-tenth miles long on a grade of six to seven and one-half per cent as against several places on the old road in excess of twenty-five. The new road has the added advantage that, in the event custom milling is available at Keystone, we will have a direct haul of only a little over four miles down hill to the market point.

Surface Improvements: There were no useable buildings on the property when we took over. The following construction was accomplished: a fifty-ton ore bin, a 12 x 16 compressor house, a 12 x 14 office, a timber shed, and snowshed inclosures for all track and the ore bin. This should be adequate for the next season's needs.

Man-shifts and Production. Approximately 1,066 man-shifts were worked as follows:

252 Surface repairs and construction of buildings and ore bin.
255 Underground repairs including cleaning out portals and laying track in mine yard.
559 Mining, traming, and current repairs after mine was put in condition. This also includes driving "B" heading.

Thirteen hundred and forty wet tons were mined underground plus about 500 tons still in stopes for a ratio of 3.29 tons per man-shift. This figure compares favorably with other mines of similar conditions especially when consideration is given to the fact that this includes relatively non-productive time consumed while silling out and building chutes in three new stopes. It also included time and ore produced from raising and drifting.

General Condition of Mine. The 650 stope was being worked on both sides of the 650 raise. The east side had only been recently started while the west side had been carried up about thirty feet. Approximately five hundred tons were produced from the raise and two stopes. The ore averages about six feet wide and is the best grade of any ore in the mine. These stopes are in good condition for going to work immediately next season.

The 500 stope has good ore in one end and my recommendation is to continue the manway and chutes as a raise to determine the character of this ore shoot. The type of raise which we have been using can be carried as narrow or as wide as desired so that the ore may be followed.

"B" level heading continues in eighteen inches to two feeto of heavy zinc ore. It also contains heavy lead in places. A forty-two ton shipment of all the material blasted in a drift round settled at the smelter for the following: Copper, 0.33; lead 1.16; zinc, 5.92; and silver, 1.80 ounces. In a regular mining operation this could be

taken in a thirty-inch to three-foot width which would eliminate half the waste taken in a six-foot wide drift therefore at least doubling the value. As the walls are very good in this area and mining costs should be low, I believe we should be able to ne $5.00 per ton shipping crude to Utah and a correspondingly greater recovery with a local mill.

The ore exposure in "C" level indicates that within one hundred to one hundred fifty feet this drift has an excellent chance of widening into ore similar to that of the 650 stoperarea. In fact, the ore exposure above the 650 area is not as good as the exposure further back in the drift above the extension of the lower drift.

On "C" level the 350 stope is a continuation on the B650 orebody. It was taken up about thirty-five feet and has about 65 feet to go to the surface. This closeness to the surface tends to result in unfavorable mining conditions due to softer vein and walls. There is also a high non-sulphide content. I would recommend that the manway be taken upward as a raise for at least twenty feet above the stope back as a prospecting measure before opening it up too wide as a stope. The air is bad in this stope so it should not be entered without proper testing.

Recommendations for Future Engineering and Exploration. These are listed below in the order I rate their importance:

(1) Advance "B" heading a minimum of 150 feet.
(2) Make complete sample and geologic map of the mine. A better understanding of this may help find futurd ore bodies.
(3) Continue the manway in the B300 stope as a raise for a distance of 25 feet unless it develops favorably.
(4) The C340 manway should be continued as a raise as far as the surface if ore persists. This would take about 60 feet of raise.
(5) Crosscut on the footwall side in "B" level. If this is done after driving about 100 feet more drift, it will serve the dual purpose of prospecting and providing a siding for continuing the drift.

Summary. The general outlook for ore in the mine is good. Long range success of the mine will depend largely on two factors; first, a low economic grade because of a local market; and, secondly, working out proper mining methods.

We have been assured that should the American Smelting & Refining Company build a mill that they will make every attempt to buy our ore on an equitable basis. Although there is no official word, everything points to the fact that a mill will be erected this summer.

Considerable study should be made of the mining methods to be used as this will be very important not only in future exploitation but in directing development. The short lift of about sixty feet between "B" and "C" levels is rather disadvantageous toward mining on both levels as it will be necessary to leave a comparatively large level pillar below "C" level. It may be best to abandon this level and stope directly through. The idea of not building chutes and instead using a millhole into a crosscut and mucking into the cars with a mucking machine may be a good method as it uses less timber and support is less of a problem.

Very truly yours,

Robert E. Simpson

Slate River Mining Co.
Crested Butte, Colo.

# MINING LEASE OPTION

THIS MINING LEASE AND OPTION entered into this 15th day of June, 1951, between SOPHIE BOWKLEY, MARY BACHMAN, HAROLD BACHMAN, LOUISE B. HOUCK, RAYMOND E. BOWKLEY, HERBERT L. BOWKLEY AND MARGARET E. BOWKLEY, lessors and optionors, hereinafter referred to as lessors and RALPH E. SIMPSON, ROBERT E. SIMPSON and MARY E. STARR, J. J. WILLIAMS AND D. W. KENNEDY, partners doing business as SLATE RIVER MINING COMPANY of Alamosa, Colorado, lessees and optionees hereinafter called lessees.

W I T N E S S E T H :

Article 1. In consideration of the sum of One Thousand Dollars ($1,000.00), the receipt of which is hereby acknowledged by the lessors, the lessors hereby lease, let and demise on the following terms, the property hereinafter described, and do hereby give and grant unto the lessees their heirs, successors and assigns, the sole and exclusive right, privilege and option to purchase for the price hereinafter mentioned and upon such terms and conditions as hereinafter set forth, all their right, title and interest in three mining claims situate, lying and being in the Ruby Mining District, Gunnison County, State of Colorado, more particularly: Claim known as Micawber, U. S. Survey #2863, Claim, Little Gertie, U. S. Survey #3390, and Claim, Polar Star, U. S. Survey #17714.

Article 2. The term of this lease and option shall be five (5) years from the date hereof, unless sooner terminated in the manner hereinafter provided.

Article 3. Price for which said lessors agree to sell the above described property is Sixty Thousand Dollars ($60,000.00). If paid on or before four (4) years from the date hereof, the lessees shall pay the sum of Fifty-seven Thousand Dollars ($57,000) as the purchase price. Any and all royalties, including advance royalties or other monies paid by the lessees shall be credited upon the purchase price as aforesaid.

Slate Rim Mining Co.
Crested Butte, Colo.



Article 4. Possession and Control of property. The lessees shall have and it is hereby given and granted the right to have and enter into the sole and exclusive possession and control of said properties and any and every part thereof, and during the terms of this agreement to remain in sole and exclusive possession and control thereof, and to explore, drill, investigate, measure, sample, examine, test, develop, work, mine, operate, use and manage the same, along with any and all water and water rights appurtenant thereto; to mine, extract and remove the ores and mineralstherein or appurtenant and belonging thereto; to treat, mill, ship, sell or otherwise dispose thereof and to receive the full proceeds therefrom; and to erect, construct, install, maintain, use and operate buildings, structures, machinery and equipment.

Article 5. Entry and Manner of Work. Lessees agree to take possession of said property immediately upon signing this agreement and to cause all work, development and mining to be done in a careful and minerâike manner, and to conform in all respects with the mining laws and regulations of the State of Colorado.

Article 6. Royalties. (a) Lessees shall pay to lessors royalties on all ores extracted and sold from the demised premises as hereinafter set forth, and in case the lessors own a less interest in said premises or any part thereof than the entire and undivided fee simple estate therein, then the royalties and rentals herein provided for, including the minimum royalty, shall be paid the lessors only in the proportion which the lessors' interest bears to the whole and undivided fee of that portion of the demised premises from which the ore is extracted. Royalties shall be based on net mill or smelter returns according to the following schedule: 10% if average assay does not exceed $50.00 per ton; 15% on ore which assays over $50.00 but less than $100.00 per ton and 20% on ore which assays in excess of $100.00 per ton. Net returns shall be determined by deducting transportation costs from net mill returns, exclusive of premium metal payments and government subsidies,

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on all ore sold to a mill, or from net smelter returns, exclusive of premium metal payments and government subsidies, on all ore sold to a smelter;

(b) Lessees agree to pay to the lessors minimum royalty payments, which payments are to be credited to and applied upon the purchase price. Said payments to be computed at the rate of Two Hundred Dollars ($200.00) per month and shall be payable quaterly hereater.

(c) The lessors reserve the rights to any radioactive ores discovered but the lessees shall mine said ores and, unless prohibited by government law or regulation, pay to the lessors a percentage of the values recovered from said ores. Said percentage is computed in the same manner as those applied to the net smelter or mill returns referred to in Sub-paragraph (a) above. Said payments are additional payments and in no way concern the purchase price.

(d) The commencement, continuance, cessation, resumption, method or extent of actual mining or any mining operations hereunder shall at all times be at the discretion and election of the lessees.

Article 7. Marketing. Products shall be marketed at the best terms obtainable from any responsible mill or smelter, with due regard to freight differentials and any other charges involved. All ores shall be sold in the name of the lessees, with duplicate settlement sheets furnished to lessors. Royalty settlements shall be made on a quarterly basis as heretofore provided. Each settlement shall be accompanied by a duplicate liquidation or settlement sheet for each lot of ore milled, and by a duplicate of the smelter returns for each lot of ore sold to a smelter.

Article 8. Use of Adjacent Properties. The lessees shall have the right to remove ores, waste, water and other materials from the demised premises and to carry on general mining operations pertaining to the demised premises by means of shafts and workings on other properties and to remove ores, waste, water and other materials from other properties and to carry on general mining

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Crested Butte, Colo.



operations pertaining to such other properties on the surface of or through shafts and workings on the demised premises, but until weighed and sampled, all ores extracted and removed from the demised premises shall be kept separate from ores extracted and removed from any other properties.

Article 9. Records and Inspection by Lessors. Lessee's maps and records of all mining operations upon the demised property pertinent to the computation of royalties shall be available for lessors' inspection upon request, but not more often than once each month; and the lessors may enter said property at all reasonable times for the purpose of inspecting the same, and lessees shall facilitate such inspection in every reasonable way, but lessors shall enter at their own risk and so as not to hinder unreasonably the operations of lessees; and the lessors shall indemnify and hold harmless the lessees from any damage, claim or demand by reason of injury to or the presence of the lessors, their guests, agents or representatives or any of them on the demised premises or approaches thereto.

Article 10. Taxes. The lessees shall pay when due and before delinquent all property, production and excise takes including taxes on the personal property of the lessees.

Article 11. State and Federal Laws. Lessees shall comply with the workman's Compensation Laws of Colorado and with Social Security, Unemployment Insurance and all other state and federal laws relating to lessees operations and shall save lessors harmless from any claim for damages or liability by reason thereof.

Article 12. Protection from Liens and Damages. The lessees shall keep the demised premises and the whole and every part thereof free and clear of liens for labor done or work performed upon the demised premises or materials furnished to it for the development or operation thereof under this lease and while the same is in force and effect, and will save and keep harmless the lessors from all costs, loss or damage which may arise by reason of injury

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to any persons or damage to any property as the result of any work or operations of the lessees or of its possession and occupancy of the demised premises.

Article 13. Forfeiture Clause. The failure of the lessees to make or cause to be made any of the payments herein provided for to keep or perform any agreement on its part to be kept or performed according to the terms and provisions of this agreement, shall, at the election of the lessors, work a forfeiture hereof; provided, however, that in the event of a default on the part of the lessees, and the election of the lessors to terminate this agreement on account thereof; the lessors shall give to the lessees a written notice of their intention to declare a forfeiture of this agreement and to terminate the same on account thereof, specifying the particular default or defaults relied upon by them, and the lessees shall have sixty (60) days after redeipt of such notice in which to make good such default or defaults, in which event, there shall be no forfeiture therefore. Waiver or failure to give notice of a particular default or defaults shall not be construed as condoning any subsequent default.

Article 14. Cancellation. Notwithstanding any provision herein to the contrary, the lessees may at any time upon 30 days's written notice to the lessors, cancel and terminate this lease and option. Upon such cancellation and termination of this lease, the lessees shall be under no further obligation of whatsoever kind or nature to the lessors, except for the making of paymants which have already accrued at the date of such cancellation and termination. In the event of the cancellation or determining of this lease and option by the lessees on monies paid to the lessors as heretofore provided, shall be retained by the lessors as liquidated damages.

Article 15. Surrender of the Property. In the event of a valid forfeiture, cancellation or other termination of this lease and option the lessees will surrender to the lessors peaceable possession of the demised premises.

Slate River Mining Co.
Crested Butte, Colo.



Article 16. Removal of Equipment. The lessees shall have and is hereby given and granted six months after a valid forfeiture, cancellation or other termination of this agreement to remove from said property, all warehouse stocks, merchandise, materials, tools, hoists, compressors, engines, motors, pumps, transformers, electrical accessories, metal or wooden tanks, pipes and connections, mine cars, and any and all machinery, trade fixtures, and equipment erected or placed in or upon said property by it, provided that such right of removal shall not extend to buildings, machinery foundations, and underground pipes, tracks, and mine timbers in place unless lessors shall have given their previous written consent thereto. If lessees shall be hampered by inclement weather or climatic conditions or the results thereof from completing the removal of said equipment within the time specified, then such removal may be made within a reasonable time after the termination of such conditions or results.

Article 17. Title. The lessors do hereby covenant, promise and agree to and with the lessees, their heirs, administrators and assigns that they have not done or caused, suffered or produred to be done any act, matter or thing, whereby the said premises or any part thereof with any appurtenances thereto, are or may be charged or encumbered in estate, title or otherwise; and that the demised premises are free and clear from any liens or encumbrances of any kind made or created by the lessors. Said lessors further agree that in the event there shall be any blot on the title of the premises that they will bear one-half of all or any reasonable expenses which may be incurred for the perfection of the title to the demised premises.

Article 18. Notices. Any notices required or permitted to be given hereunder shall be considered as delivered seventy-two (72) hours after the same shall have been deposited in the United States mail, duly registered, with postage prepaid, addressed to the respective addresses given below:

If to lessors; Raymond E. Bowkley
Annandale, New Jersey

and

Slate River Mining Co.
Crested Butte, Colo.



Sophie Bowkley
43 Parsonage Street
Pittstown, Pennsylvania

And if to lessees:

Ralph E. Simpson
Box 271
Alamosa, Colorado

and

J. J. Williams
Alamosa, Colorado

Said addresses for receiving notices may be changed by either party upon three (3) days previous written notice to the other party.

Article 19. Assignment. The lessors herein, hereby, give and grant unto the lessees the right and privilege of assigning this lease and option on obtaining the written consent of the agent of the lessors hereinafter named.

Article 20. The lessees may exercise their option to purchase the demised property at any time by giving to the agent of the lessors forty-five (45) days written notice of their intent. The lessors agree, upon request of said notice, to execute and deliver unto the said lessees a good and valid deed of conveyance.

Article 21. Raymond E. Bowkley is hereby designated as the agent for the lessors named herein and all payments shall be paid by the lessees to the said Raymond E. Bowkley.

Article 22. Inurement. These presents shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

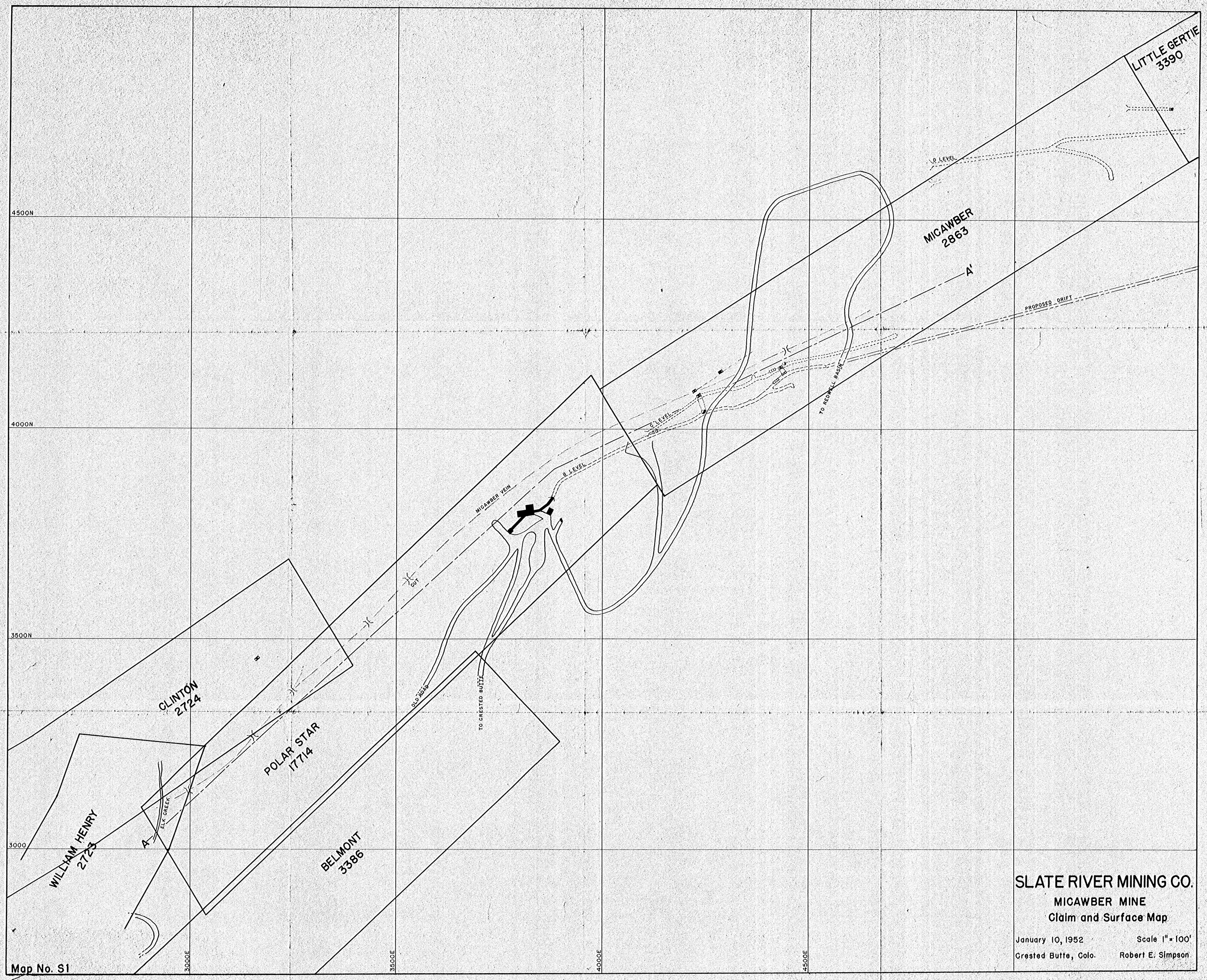
IN WITNESS WHEREOF the lessors and the lessees, by their agent, Raymond E. Bowkley, partner, have executed this agreement as of the day and year first above written.

(Signed) Sophie Bowkley
Mary Bachman
Harold Bachman
Louise Houck
Raymond E. Bowkley
Herbert L. Bowkley
Margaret E. Bowkley
Ralph E. Simpson

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D. C.

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, $300


LITTLE GERTIE
3390
MICAWBER
2863
CLINTON
2724
POLAR STAR
17714
WILLIAM HENRY
2723
BELMONT
3386
10 LEVEL
PROPOSED DRIFT
A'
A
TO REDWELL BASIN
6 LEVEL
8 LEVEL
MICAWBER VEIN
CUT
OLD ROAD
TO CRESTED BUTTE
ELK CREEK
4500N
4000N
3500N
3000
3000E
3500E
4000E
4500E
Map No. S1
SLATE RIVER MINING CO.
MICAWBER MINE
Claim and Surface Map
January 10, 1952
Scale 1" = 100'
Crested Butte, Colo.
Robert E. Simpson

LEGEND

- Productive areas 1951
- Workings on vein
- Workings off vein

# SLATE RIVER MINING CO.

## MICAWBER MINE

### Longitudinal Projection AA'

January 10, 1952 — Scale 1" = 100'

Crested Butte, Colo. — Robert E. Simpson

Map No. S4