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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 3 - 1953

224 New Customhouse
Denver 2, Colorado

August 28, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3092 (Copper), American Mining and Development Company, Carbon County, Wyoming.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

DENIED

Reviewed by
DMEA OPERATING COMMITTEE
9-9-53
(date)

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

224 New Customhouse
Denver 2, Colorado

August 28, 1953.

Mr. Page B. Blakemore
American Mining & Development Company
Newcastle, Wyoming

Re: Docket No. DMEA-3092

Dear Mr. Blakemore:

Reference is made to your application for Government aid on the Big Creek 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 for the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of copper by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W. H. King
W. H. King
Field Team, Region IV

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

HMC:cwm

cc: Docket
Administrator, DMEA
WMTraver
AHKoschmann (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
9-9-53
(date)

DEPARTMENT OF THE INTERIOR
Science Library Distribution

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

August 28, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 3092 (Copper), American Mining and Development Company, Carbon County, Wyoming.

Enclosed are eight copies of the final engineering report on the subject docket.

The applicant requested $20,000.00 for the rehabilitation of two cared tunnels and a limited amount of diamond drilling.

The engineer examiner believes this work is not justified and he recommends that the application be denied. We concur in this recommendation.

W. H. King

W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

9-18-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

Building 20
Denver Federal Center
Denver 14, Colorado
August 17, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: Docket DMEA 3092, Big Creek Mine (Copper), American Mining and Development Company, Carbon County, Wyoming

There are enclosed herewith the original and eight copies of Summary, Conclusions and Recommendations by D. A. MacLaren, and C. M. Harrer, on the subject docket, and of Harrer's engineering report.

Harrer concludes that a large prominent quartz-feldspar dike 20 feet wide, that can be traced for more than 1,000 feet on the surface of the property, contains interstitial staining from numerous copper minerals at the location of one adit. He considers it unlikely that the proposed exploration would result in the development of significant reserves of copper ore, the applicant has no basis for a loan request, and recommends its denial.

I concur with his conclusions and recommendations.

The brochure submitted with your memorandum of July 7, 1953, instructing us to make a field examination is also enclosed.

W. M. Traver

W. M. Traver

Enclosures

cc 8
DMEA 3092
DMEA Carbon.

WMT/ld

Reviewed by
DMEA OPERATING COMMITTEE

9-9-53
(date)

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

200 New Customhouse
Denver 2, Colorado

August 10, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3092, Big Creek Mine, Carbon County, Wyoming

Attached are 8 copies of the geological report by D. R. MacLaren covering DMEA Docket 3092, Big Creek Mine, American Mining and Development Company, Carbon County, Wyoming.

The applicant proposes to explore for copper ore in and about the Big Creek mine by trenching and rehabilitating three caved adits and, if results warrant, by diamond drilling.

The country rock on subject property comprises schist, granite, and granite-gneiss of probable pre-Cambrian age intruded by pegmatite and quartz-feldspar dikes. Copper minerals and pyrite occur as interstitial fillings in coarse quartz that form masses and lenses in the quartz-feldspar dikes. From evidence available, MacLaren concludes that the chance of discovering a significant deposit of copper ore is poor and therefore recommends that an exploration loan be denied.

I concur in this recommendation.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

Reviewed by
DMEA OPERATING COMMITTEE

9-9-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3092, American Mining and Development Co.

Big Creek Mine

Carbon County, Wyoming

Copper

D. R. Maclaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

August 17, 1953

Reviewed by
DMEA OPERATING COMMITTEE

9-9-53
(date)

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

Summary, Conclusions, and Recommendations

By D. R. MacLaren
Geologist
Geological Survey

C. M. Harrer
Mining Engineer
Bureau of Mines

DMEA 3092

BIG CREEK MINE
AMERICAN MINING AND DEVELOPMENT CO.
CARBON COUNTY, WYOMING

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By D. R. MacLaren and C. M. Harrer

American Mining and Development Company, under docket 3092, applied for a Defense Minerals Exploration Administration loan of $20,000.00.

They proposed prospecting the surface of a large quartz-feldspar dike, rehabilitation of two adits for sampling and examination, followed by diamond drilling if the results of sampling and examination prove encouraging.

The Big Creek mine is in Secs. 5, 8, and 9, T. 13 N., R. 81 W., Sixth Principal Meridian, Upper Platte Mining district, Carbon County, Wyo., at an altitude of about 7,800 feet.

Early development at the Big Creek mine consisted of prospecting a large quartz-feldspar dike for copper.

Malachite, azurite, chrysocella, chalcopyrite, and bornite, with pyrite, occur as interstitial fillings in coarsely crystalline quartz veins and masses within the prominent quartz-feldspar dike at the portal of an upper adit. This was developed by two adit levels 40 feet apart, from which small shipments of copper ore were reported to have been made.

The portals of both adits are caved and all underground work is inaccessible.

No other visible evidence of copper mineralization or staining was found along the surface of the dike and its enclosing gneiss-schist for over 1,000 feet northwest of the small exposure at the portal of the

upper adit.

It is believed that this deposit will prove very small and of no strategic importance.

The applicant will make no further effort to investigate the property or open any underground workings for examination without financial assistance from the Defense Minerals Exploration Administration.

The description of the claims in the applicant's Lease and accompanying Consent to Lien (form MF-203) are in error.

It is recommended that American Mining and Development Company's application for a Defense Minerals Exploration Administration loan of $20,000.00 be denied.

AMERICAN MINING AND DEVELOPMENT COMPANY

BIG CREEK MINE

CARBON COUNTY, WYOMING

DMEA DOCKET 3092

Geologic Report

By D. R. MacLaren
U. S. Geological Survey

AMERICAN MINING AND DEVELOPMENT COMPANY
BIG CREEK MINE
CARBON COUNTY, WYOMING

INTRODUCTION

The American Mining and Development Company of New Castle, Wyoming, has applied to the Defense Minerals Exploration Administration for assistance to explore for copper in secs. 5, 8, and 9, T. 13 N., R. 81 W., 6th P. M., Carbon County, Wyoming. The applicant proposes to explore in and about the Big Creek mine by trenching and rehabilitating three caved adits to permit examination and sampling, and should the results of this work be favorable, by diamond drilling a quartz-feldspar dike in which the copper ore occurs. The applicant estimates that the cost of this project will be $20,000 (Government's share 50 percent or $10,000).

The Big Creek mine is easily accessible throughout the year, and may be reached by following one and one-half miles of unimproved "ranch" road that turns east from State Highway 230 about eighteen and one-half miles southwest of Riverside, Wyoming. The property was examined July 22, 1953, in the company of C. M. Harrer of the U. S. Bureau of Mines, Page B. Blakemore, director of operations for the applicant, R. H. Platt, lessor of the claims, and Luis Santos-Yniigo, a Point IV student.

It is concluded that the chance of making a significant discovery of copper ore on this property is poor, and therefore it is recommended that this application be denied.

GEOLOGY

The rocks of the area are schist, granite, and granite-gneiss of probable pre-Cambrian age, intruded by pegmatite and quartz-feldspar dikes. On the applicant's claims (fig. 1, Engineer's Report) a quartz-feldspar dike 20 to 25 feet wide strikes N. 80° W. and dips 85° N., paralleling the foliation of the enclosing schist. East from the upper tunnel of the Big Creek mine, the dike is covered by dump material and surface debris, but to the west it is well exposed for at least 700 feet. At two or three places immediately above the tunnels, lenses and veins of coarsely crystalline quartz have been exposed as a result of caving of the tunnel portals. In the schist the veins appear to pinch out within 20 to 30 feet, but in the quartz-feldspar dike, apparently, they tend to break up into masses and lenses, irregular in outline and varying in size. Bornite and chalcopyrite, commonly coated by malachite and chrysocolla, and some pyrite occur as interstitial fillings in the coarsely crystalline quartz. Beyond a point about 25 feet west of the upper tunnel, no copper minerals were visible at the surface, although the quartz-feldspar dike was examined in detail for a distance of 700 feet westward to a shaft 12 feet deep that exposes the foot wall of the dike. No copper minerals were observed in the shaft.

From the material on the dumps, it appears likely that the ore said to have been shipped from the tunnels came from the veins and irregular masses of quartz. Here it should be mentioned that the last shipment was dumped alongside the road about a quarter of a mile from the tunnels, the reason given by Mr. Platt being that word was received that the ore was too low grade to ship.

CONCLUSIONS AND RECOMMENDATIONS

From the evidence available it is concluded that the chance of discovering a significant deposit of copper ore is poor, and therefore it is recommended that this application be denied.

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

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ILLUSTRATIONS

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DMEA 3092

BIG CREEK MINE
AMERICAN MINING AND DEVELOPMENT CO.
CARBON COUNTY, WYOMING

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

American Mining and Development Company of Newcastle, Wyo., and Washington, D. C., has applied for a Defense Minerals Exploration Administration loan of $20,000.00 to prospect the surface of a large quartz-feldspar dike for copper, to rehabilitate two adits for sampling and examination, and to diamond drill if the results of the sampling and examination prove encouraging.

The property was investigated in the field by a Region IV Defense Minerals Exploration Administration examining team on July 22, 1953. Page B. Blakemore, Director of Operations, for American Mining and Development Company, and Ralph H. Platt, owner and lessor of the subject property, accompanied the examining team.

ACKNOWLEDGMENTS

Page B. Blakemore, Director of Operations for American Mining and Development Company (lessee), and Ralph H. Platt (owner and lessor) accompanied the examining team over the property and submitted what information they had on the property.

LOCATION

The Big Creek copper mine is in Secs. 5, 8, and 9, T. 13 N., R. 18 W., Sixth Principal Meridian, Upper Platte Mining District, Carbon County, Wyo., at an altitude of about 7,800 feet. It is readily accessible from the town of Riverside, Wyo., over state highway 230. At 18.2 miles southeast of Riverside, on highway 230, a good dirt road leads to the lower portal of the mine, 1¼ miles to the northeast. Nearest rail facilities are the Union Pacific railroad at Encampment, Wyo., 20 miles from the mine.

HISTORY AND PRODUCTION

No authentic information was available concerning early operations of the Big Creek mine. Information was limited to vague mention of "several shipments of copper ore" to Salt Lake City, Utah.

OWNERSHIP AND EXTENT

American Mining and Development Company is a Delaware corporation with offices at 1317 F Street, NW, Washington, D. C., and Newcastle, Wyo. Company officers are:

Richard D. Rudolph, President
Newcastle, Wyo.

Charles R. Rudolph, Vice-President
5500 Wriley Road, NW
Washington, D. C.

Margaret Bracken, Secretary
Suite 206, American Building
1317 F Street, NW
Washington, D. C.

Page B. Blakemore
Director of Operations
Newcastle, Wyo.

The company controls seven patented mining claims under a 5-year Lease and Option to Purchase Agreement with Ralph H. Platt, lessor and local rancher of Encampment, Wyo. The agreement is in effect between June 17, 1953-1958, and includes the Bonanza lode claims 1 through 6 and the Copper King lode, all patented as a group under mineral survey number 118. This was verified by an Abstract of Title in the possession of Ralph H. Platt. The claims and all pertinent exploration data are illustrated on figure 1.

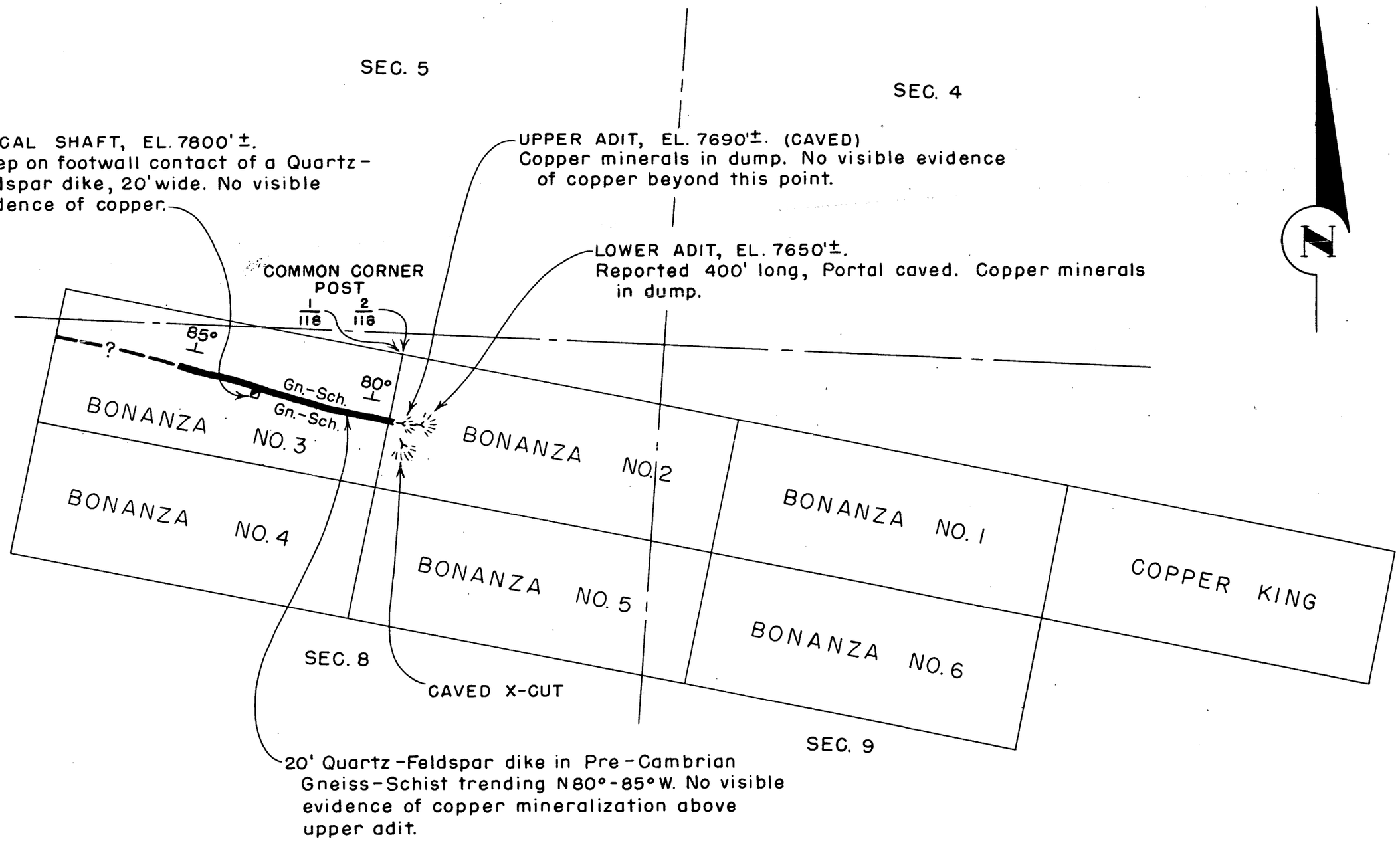
In the Lease and Option to Purchase Agreement and the Owner's Consent to Lien (form MF-203) submitted by the applicant, the claims are wrongly designated as Bonanza lodes 1 through 4 and Copper King lodes 4 through 6. This was brought to the attention of Ralph H. Platt and Page B. Blakemore on July 22, 1953.

DESCRIPTION OF DEPOSITS

The Big Creek mine is an early copper prospect in the Upper Platte Mining District, southeast of Encampment, Wyo. Topography and location are shown on Geological Survey, Saratoga, Wyo., quadrangle.

A large quartz-feldspar dike parallels the schistocity and is enclosed in pre-Cambrian gneiss-schist. The dike outcrop is plainly exposed over its width of 20 feet and for about 1,000 feet along its strike of N. 80° - 85° W. It dips 80° to 85° to the north.

No visible evidence of copper mineralization was found along the surface of the dike and its enclosing gneiss-schist northwest of the upper adit portal. A shaft, 600 feet northwest of the upper adit, is accessible to a depth of 12 feet and exposes the footwall contact be-



T 13 N, R 81 W, 6TH. P.M.

UPPER PLATTE MINING DISTRICT

0 500 1000 1500

SCALE IN FEET

MINERAL RESOURCES BRANCH - MINING DIVISION
REGION IV
BUREAU OF MINES

FIGURE 1 - BIG CREEK MINE, AMERICAN MINING AND DEVELOPMENT CO., CARBON COUNTY, WYO. (DMEA 3092)

tween the dike and the enclosing gneiss-schist. There was no visible evidence of copper mineralization in the shaft.

At the upper adit level, malachite, azurite, chrysocolla, chalcopyrite, bornite, and pyrite occur as irregular interstitial fillings in shattered and recemented quartz within the quartz-feldspar dike. The adit dump contains scattered fragments of the above minerals. Since the adit portal is caved and inaccessible, no positive data on the extent of the deposit or its exploration was obtainable.

The lower adit level is completely inaccessible beyond the caved portal. Fragments of the above-mentioned minerals are scattered over the dump. R. H. Platt stated that the adit was 400 feet long.

On the basis of a study of the dike, the character of dump rock and the lack of any visible copper mineralization and staining above the upper adit level, it is believed that this deposit will prove very small and of no strategic significance. All the features described above are shown on figure 1.

MINEABLE ORE RESERVES

The property may produce very small quantities of copper ore through the efforts of occasional lessees; however, there is no information available on which to base an estimate of ore reserves.

PRESENT STATUS

Exploration and Development

Underground development at the Big Creek mine (fig. 1) consists of two adits driven on an exposure of copper ore in a large quartz-feldspar dike. No information exists on the extent of the upper level.

The lower adit level is reported to be 400 feet long. A short crosscut was driven near the portal of the upper adit. The portals of both of the adits and the crosscut are caved and inaccessible. A shaft, 600 feet northwest of the upper adit portal, was sunk on the footwall contact of the quartz-feldspar dike. It is accessible to a depth of 12 feet.

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment or facilities on the property. All buildings are rotted and useless and no attempt appears to have been made to work the property for a long time.

PROPOSED EXPLORATION

American Mining and Development Company proposes to cut a few trenches and prospect pits on the outcrop of the quartz-feldspar dike for structural examination and indications of copper mineralization. In addition, they propose to clean out and rehabilitate the two adits, now entirely inaccessible, and prepare them for sampling and geologic examination.

If examination indicates that the property does not warrant exploration, any further work will be abandoned.

If the results of examination are encouraging, a limited amount of diamond drilling is proposed, based on the advice of a geologic consultant and representatives of the Defense Minerals Exploration Administration.

ESTIMATED COST OF PROJECT

Cost of trenching, cleaning out, and rehabilitating the upper

and lower adits, sampling, and geologic investigation was estimated at $12,650.00 by the applicant; diamond drilling of about 1,350 feet of holes would be let on independent contracts for about $7,350.00. The total cost of the project was estimated at $20,000.00.

According to Page B. Blakemore, the company has made no detailed investigation of the property and will not make the adit levels accessible to examiners without financial assistance from the Defense Minerals Exploration Administration.

CONCLUSIONS AND RECOMMENDATIONS

Early development of the Big Creek mine was devoted to prospecting a large quartz-feldspar dike for copper. A mass of complex minerals consisting of malachite, azurite, chrysocolla, chalcopyrite, bornite, and pyrite occur as small and irregular interstitial fillings in shattered quartz which outcropped near the portal of the upper adit. This was developed by two adit levels, 40 feet apart, from which small shipments of copper ore were reported made to Salt Lake City, Utah. Records of shipments could not be verified.

No visible evidence of copper mineralization or staining was found along the surface of the dike and its enclosing gneiss-schist for over 1,000 feet northwest of the small copper exposure near the portal of the upper adit level.

The portals of the upper and lower adit levels are caved and all underground work, with the exception of a shaft 12 feet deep, are completely inaccessible.

On the basis of a study of the dike, the character of dump

rock, and the lack of any visible copper mineralization and staining above the upper adit level, it is believed that this deposit will prove very small and of no strategic significance.

There is no information available on which to base an estimate of ore reserves.

The applicant has made no effort toward a detailed investigation of the property and will not make any underground development accessible to examiners without financial assistance from the Defense Minerals Exploration Administration.

The description of the claims in the applicant's Lease and accompanying Consent to Lien (form MF-203) are in error.

It is recommended that American Mining and Development Company's application for a Defense Minerals Exploration Administration loan of $20,000.00 be denied.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 3 - 1953

224 New Customhouse
Denver 2, Colorado

August 28, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3092 (Copper), American Mining and Development Company, Carbon County, Wyoming.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann

Enclosures

DENIED

OFFICE OF THE ADMINISTRATOR

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 3 - 1953

C
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P
Y

224 New Customhouse
Denver 2, Colorado

August 28, 1953

Mr. Page B. Blakemore
American Mining and Developmemt Company
New Castle, Wyoming

Re: Docket No. DMEA-3092

Dear Mr. Blakemore:

Reference is made to your application for Government aid on the Big Creek Mine.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of copper by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W.H. King
Field Team, Region IV

A. H. Koschmann
Field Team, Region IV

DENIED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

August 28, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 3092 (Copper), American Mining and Development Company, Carbon County, Wyoming.

Enclosed are eight copies of the final engineering report on the subject docket.

The applicant requested $20,000.00 for the rehabilitation of two caved tunnels and a limited amount of diamond drilling.

The engineer examiner believes this work is not justified and he recommends that the application be denied. We concur in this recommendation.

W. H. King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

Building 20
Denver Federal Center
Denver 14, Colorado
August 17, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: Docket DMEA 3092, Big Creek Mine (Copper), American Mining and Development Company, Carbon County, Wyoming

There are enclosed herewith the original and eight copies of Summary, Conclusions and Recommendations by D. R. MacLaren, and C. M. Harrer, on the subject docket, and of Harrer's engineering report.

Harrer concludes that a large prominent quartz-feldspar dike 20 feet wide, that can be traced for more than 1,000 feet on the surface of the property, contains interstitial staining from numerous copper minerals at the location of ore adit. He considers it unlikely that the proposed exploration would result in the development of significant reserves of copper ore, the applicant has no basis for a loan request, and recommends its denial.

I concur with his conclusions and recommendations.

The brochure submitted with your memorandum of July 7, 1953, instructing us to make a field examination is also enclosed.

W. M. Traver

W. M. Traver

Enclosures

cc 8
DMEA 3092
DMEA Chron.

WMT/ld

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

August 10, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3092, Big Creek Mine, Carbon County, Wyoming

Attached are 8 copies of the geological report by D. R. MacLaren covering DMEA Docket 3092, Big Creek Mine, American Mining and Development Company, Carbon County, Wyoming.

The applicant proposes to explore for copper ore in and about the Big Creek mine by trenching and rehabilitating three caved adits and, if results warrant, by diamond drilling.

The country rock on subject property comprises schist, granite, and granite-gneiss of probable pre-Cambrian age intruded by pegmatite and quartz-feldspar dikes. Copper minerals and pyrite occur as interstitial fillings in coarse quartz that form masses and lenses in the quartz-feldspar dikes. From evidence available, MacLaren concludes that the chance of discovering a significant deposit of copper ore is poor and therefore recommends that an exploration loan be denied.

I concur in this recommendation.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3092, American Mining and Development Co.

Big Creek Mine

Carbon County, Wyoming

Copper

D. R. MacLaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

August 17, 1953

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

Summary, Conclusions, and Recommendations

By D. R. MacLaren
Geologist
Geological Survey

C. M. Harrer
Mining Engineer
Bureau of Mines

DMEA 3092

BIG CREEK MINE
AMERICAN MINING AND DEVELOPMENT CO.
CARBON COUNTY, WYOMING

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By D. R. MacLaren and C. M. Harrer

American Mining and Development Company, under docket 3092, applied for a Defense Minerals Exploration Administration loan of $20,000.00.

They proposed prospecting the surface of a large quartz-feldspar dike, rehabilitation of two adits for sampling and examination, followed by diamond drilling if the results of sampling and examination prove encouraging.

The Big Creek mine is in Secs. 5, 8, and 9, T. 13 N., R. 81 W., Sixth Principal Meridian, Upper Platte Mining district, Carbon County, Wyo., at an altitude of about 7,800 feet.

Early development at the Big Creek mine consisted of prospecting a large quartz-feldspar dike for copper.

Malachite, azurite, chrysocolla, chalcopyrite, and bornite, with pyrite, occur as interstitial fillings in coarsely crystalline quartz veins and masses within the prominent quartz-feldspar dike at the portal of an upper adit. This was developed by two adit levels 40 feet apart, from which small shipments of copper ore were reported to have been made.

The portals of both adits are caved and all underground work is inaccessible.

No other visible evidence of copper mineralization or staining was found along the surface of the dike and its enclosing gneiss-schist for over 1,000 feet northwest of the small exposure at the portal of the

upper adit.

It is believed that this deposit will prove very small and of no strategic importance.

The applicant will make no further effort to investigate the property or open any underground workings for examination without financial assistance from the Defense Minerals Exploration Administration.

The description of the claims in the applicant's Lease and accompanying Consent to Lien (form MF-203) are in error.

It is recommended that American Mining and Development Company's application for a Defense Minerals Exploration Administration loan of $20,000.00 be denied.

AMERICAN MINING AND DEVELOPMENT COMPANY

BIG CREEK MINE

CARBON COUNTY, WYOMING

DMEA DOCKET 3092

Geologic Report

By D. R. MacLaren
U. S. Geological Survey

AMERICAN MINING AND DEVELOPMENT COMPANY
BIG CREEK MINE
CARBON COUNTY, WYOMING

INTRODUCTION

The American Mining and Development Company of New Castle, Wyoming, has applied to the Defense Minerals Exploration Administration for assistance to explore for copper in secs. 5, 8, and 9, T. 13 N., R. 81 W., 6th P. M., Carbon County, Wyoming. The applicant proposes to explore in and about the Big Creek mine by trenching and rehabilitating three caved adits to permit examination and sampling, and should the results of this work be favorable, by diamond drilling a quartz-feldspar dike in which the copper ore occurs. The applicant estimates that the cost of this project will be $20,000 (Government's share 50 percent or $10,000).

The Big Creek mine is easily accessible throughout the year, and may be reached by following one and one-half miles of unimproved "ranch" road that turns east from State Highway 230 about eighteen and one-half miles southwest of Riverside, Wyoming. The property was examined July 22, 1953, in the company of C. M. Harrer of the U. S. Bureau of Mines, Page B. Blakemore, director of operations for the applicant, R. H. Platt, lessor of the claims, and Luis Santos-Ynigo, a Point IV student.

It is concluded that the chance of making a significant discovery of copper ore on this property is poor, and therefore it is recommended that this application be denied.

GEOLOGY

The rocks of the area are schist, granite, and granite-gneiss of probable pre-Cambrian age, intruded by pegmatite and quartz-feldspar dikes. On the applicant's claims (fig. 1, Engineer's Report) a quartz-feldspar dike 20 to 25 feet wide strikes N. 80° W. and dips 85° N., paralleling the foliation of the enclosing schist. East from the upper tunnel of the Big Creek mine, the dike is covered by dump material and surface debris, but to the west it is well exposed for at least 700 feet. At two or three places immediately above the tunnels, lenses and veins of coarsely crystalline quartz have been exposed as a result of caving of the tunnel portals. In the schist the veins appear to pinch out within 20 to 30 feet, but in the quartz-feldspar dike, apparently, they tend to break up into masses and lenses, irregular in outline and varying in size. Bornite and chalcopyrite, commonly coated by malachite and chrysocolla, and some pyrite occur as interstitial fillings in the coarsely crystalline quartz. Beyond a point about 25 feet west of the upper tunnel, no copper minerals were visible at the surface, although the quartz-feldspar dike was examined in detail for a distance of 700 feet westward to a shaft 12 feet deep that exposes the foot wall of the dike. No copper minerals were observed in the shaft.

From the material on the dumps, it appears likely that the ore said to have been shipped from the tunnels came from the veins and irregular masses of quartz. Here it should be mentioned that the last shipment was dumped alongside the road about a quarter of a mile from the tunnels, the reason given by Mr. Platt being that word was received that the ore was too low grade to ship.

CONCLUSIONS AND RECOMMENDATIONS

From the evidence available it is concluded that the chance of discovering a significant deposit of copper ore is poor, and therefore it is recommended that this application be denied.

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

Engineering Report

By C. M. Harrer
Mining Engineer
Bureau of Mines

DMEA 3092

AMERICAN MINING AND DEVELOPMENT CO.
BIG CREEK MINE
CARBON COUNTY, WYOMING

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DMEA 3092

BIG CREEK MINE
AMERICAN MINING AND DEVELOPMENT CO.
CARBON COUNTY, WYOMING

ENGINEERING REPORT

By

C. M. Harrer

INTRODUCTION

American Mining and Development Company of Newcastle, Wyo., and Washington, D. C., has applied for a Defense Minerals Exploration Administration loan of $20,000.00 to prospect the surface of a large quartz-feldspar dike for copper, to rehabilitate two adits for sampling and examination, and to diamond drill if the results of the sampling and examination prove encouraging.

The property was investigated in the field by a Region IV Defense Minerals Exploration Administration examining team on July 22, 1953. Page B. Blakemore, Director of Operations, for American Mining and Development Company, and Ralph H. Platt, owner and lessor of the subject property, accompanied the examining team.

ACKNOWLEDGMENTS

Page B. Blakemore, Director of Operations for American Mining and Development Company (lessee), and Ralph H. Platt (owner and lessor) accompanied the examining team over the property and submitted what information they had on the property.

LOCATION

The Big Creek copper mine is in Secs. 5, 8, and 9, T. 13 N., R. 18 W., Sixth Principal Meridian, Upper Platte Mining District, Carbon County, Wyo., at an altitude of about 7,800 feet. It is readily accessible from the town of Riverside, Wyo., over state highway 230. At 18.2 miles southeast of Riverside, on highway 230, a good dirt road leads to the lower portal of the mine, 1¼ miles to the northeast. Nearest rail facilities are the Union Pacific railroad at Encampment, Wyo., 20 miles from the mine.

HISTORY AND PRODUCTION

No authentic information was available concerning early operations of the Big Creek mine. Information was limited to vague mention of "several shipments of copper ore" to Salt Lake City, Utah.

OWNERSHIP AND EXTENT

American Mining and Development Company is a Delaware corporation with offices at 1317 F Street, NW, Washington, D. C., and Newcastle, Wyo. Company officers are:

Richard D. Rudolph, President
Newcastle, Wyo.

Charles R. Rudolph, Vice-President
5500 Wriley Road, NW
Washington, D. C.

Margaret Bracken, Secretary
Suite 206, American Building
1317 F Street, NW
Washington, D. C.

Page B. Blakemore
Director of Operations
Newcastle, Wyo.

The company controls seven patented mining claims under a 5-year Lease and Option to Purchase Agreement with Ralph H. Platt, lessor and local rancher of Encampment, Wyo. The agreement is in effect between June 17, 1953-1958, and includes the Bonanza lode claims 1 through 6 and the Copper King lode, all patented as a group under mineral survey number 118. This was verified by an Abstract of Title in the possession of Ralph H. Platt. The claims and all pertinent exploration data are illustrated on figure 1.

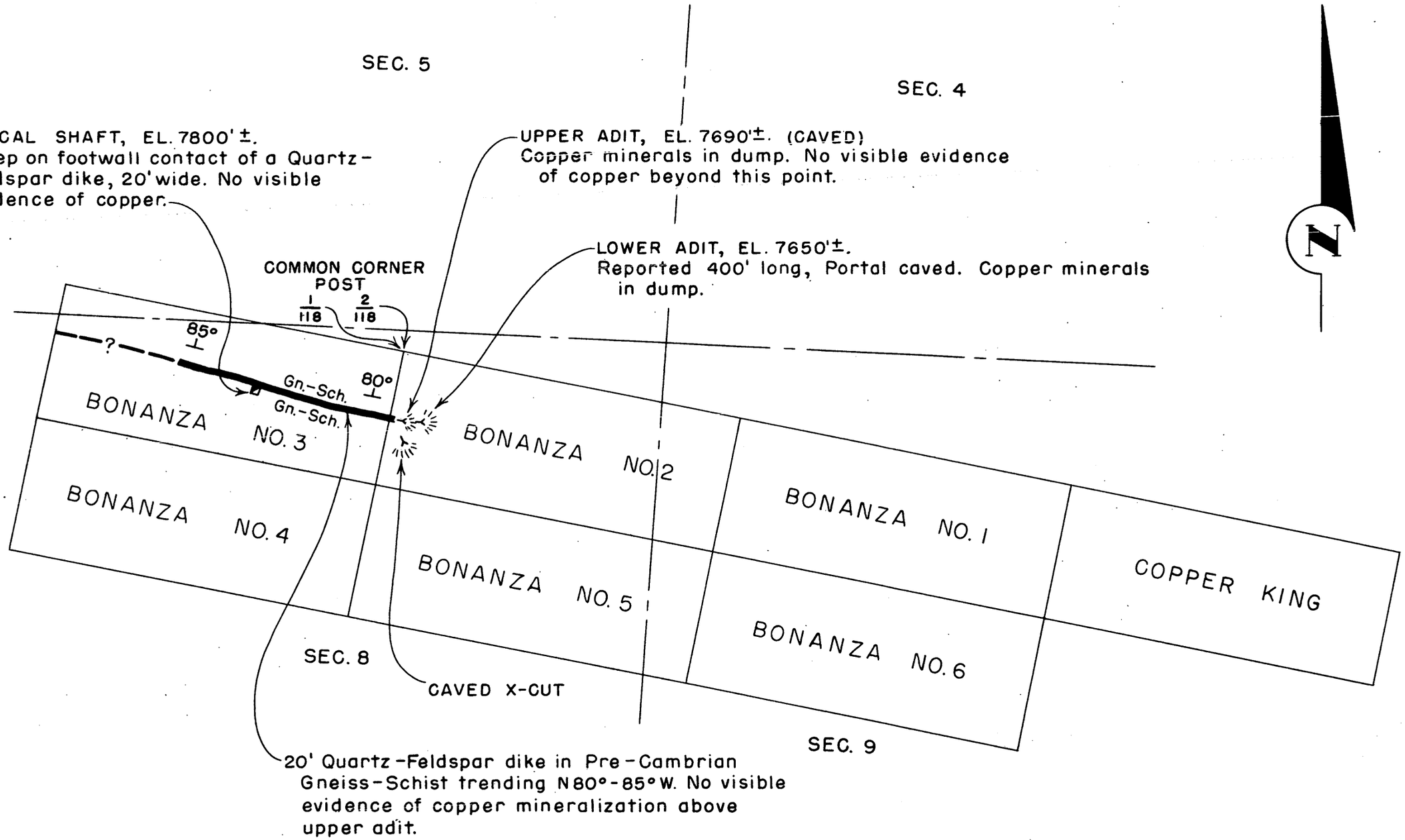
In the Lease and Option to Purchase Agreement and the Owner's Consent to Lien (form MF-203) submitted by the applicant, the claims are wrongly designated as Bonanza lodes 1 through 4 and Copper King lodes 4 through 6. This was brought to the attention of Ralph H. Platt and Page B. Blakemore on July 22, 1953.

DESCRIPTION OF DEPOSITS

The Big Creek mine is an early copper prospect in the Upper Platte Mining District, southeast of Encampment, Wyo. Topography and location are shown on Geological Survey, Saratoga, Wyo., quadrangle.

A large quartz-feldspar dike parallels the schistocity and is enclosed in pre-Cambrian gneiss-schist. The dike outcrop is plainly exposed over its width of 20 feet and for about 1,000 feet along its strike of N. 80° - 85° W. It dips 80° to 85° to the north.

No visible evidence of copper mineralization was found along the surface of the dike and its enclosing gneiss-schist northwest of the upper adit portal. A shaft, 600 feet northwest of the upper adit, is accessible to a depth of 12 feet and exposes the footwall contact be-



T 13 N, R 81 W, 6TH. P.M.

UPPER PLATTE MINING DISTRICT

0 500 1000 1500

SCALE IN FEET

MINERAL RESOURCES BRANCH - MINING DIVISION
REGION IV
BUREAU OF MINES

FIGURE 1 - BIG CREEK MINE, AMERICAN MINING AND DEVELOPMENT CO., CARBON COUNTY, WYO. (DMEA 3092)

tween the dike and the enclosing gneiss-schist. There was no visible evidence of copper mineralization in the shaft.

At the upper adit level, malachite, azurite, chrysocolla, chalcopyrite, bornite, and pyrite occur as irregular interstitial fillings in shattered and recemented quartz within the quartz-feldspar dike. The adit dump contains scattered fragments of the above minerals. Since the adit portal is caved and inaccessible, no positive data on the extent of the deposit or its exploration was obtainable.

The lower adit level is completely inaccessible beyond the caved portal. Fragments of the above-mentioned minerals are scattered over the dump. R. H. Platt stated that the adit was 400 feet long.

On the basis of a study of the dike, the character of dump rock and the lack of any visible copper mineralization and staining above the upper adit level, it is believed that this deposit will prove very small and of no strategic significance. All the features described above are shown on figure 1.

MINEABLE ORE RESERVES

The property may produce very small quantities of copper ore through the efforts of occasional lessees; however, there is no information available on which to base an estimate of ore reserves.

PRESENT STATUS

Exploration and Development

Underground development at the Big Creek mine (fig. 1) consists of two adits driven on an exposure of copper ore in a large quartz-feldspar dike. No information exists on the extent of the upper level.

The lower adit level is reported to be 400 feet long. A short crosscut was driven near the portal of the upper adit. The portals of both of the adits and the crosscut are caved and inaccessible. A shaft, 600 feet northwest of the upper adit portal, was sunk on the footwall contact of the quartz-feldspar dike. It is accessible to a depth of 12 feet.

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment or facilities on the property. All buildings are rotted and useless and no attempt appears to have been made to work the property for a long time.

PROPOSED EXPLORATION

American Mining and Development Company proposes to cut a few trenches and prospect pits on the outcrop of the quartz-feldspar dike for structural examination and indications of copper mineralization. In addition, they propose to clean out and rehabilitate the two adits, now entirely inaccessible, and prepare them for sampling and geologic examination.

If examination indicates that the property does not warrant exploration, any further work will be abandoned.

If the results of examination are encouraging, a limited amount of diamond drilling is proposed, based on the advice of a geologic consultant and representatives of the Defense Minerals Exploration Administration.

ESTIMATED COST OF PROJECT

Cost of trenching, cleaning out, and rehabilitating the upper

and lower adits, sampling, and geologic investigation was estimated at $12,650.00 by the applicant; diamond drilling of about 1,350 feet of holes would be let on independent contracts for about $7,350.00. The total cost of the project was estimated at $20,000.00.

According to Page B. Blakemore, the company has made no detailed investigation of the property and will not make the adit levels accessible to examiners without financial assistance from the Defense Minerals Exploration Administration.

CONCLUSIONS AND RECOMMENDATIONS

Early development of the Big Creek mine was devoted to prospecting a large quartz-feldspar dike for copper. A mass of complex minerals consisting of malachite, azurite, chrysocolla, chalcopyrite, bornite, and pyrite occur as small and irregular interstitial fillings in shattered quartz which outcropped near the portal of the upper adit. This was developed by two adit levels, 40 feet apart, from which small shipments of copper ore were reported made to Salt Lake City, Utah. Records of shipments could not be verified.

No visible evidence of copper mineralization or staining was found along the surface of the dike and its enclosing gneiss-schist for over 1,000 feet northwest of the small copper exposure near the portal of the upper adit level.

The portals of the upper and lower adit levels are caved and all underground work, with the exception of a shaft 12 feet deep, are completely inaccessible.

On the basis of a study of the dike, the character of dump

rock, and the lack of any visible copper mineralization and staining above the upper adit level, it is believed that this deposit will prove very small and of no strategic significance.

There is no information available on which to base an estimate of ore reserves.

The applicant has made no effort toward a detailed investigation of the property and will not make any underground development accessible to examiners without financial assistance from the Defense Minerals Exploration Administration.

The description of the claims in the applicant's Lease and accompanying Consent to Lien (form MF-203) are in error.

It is recommended that American Mining and Development Company's application for a Defense Minerals Exploration Administration loan of $20,000.00 be denied.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. DMEA-3092
Metal or Mineral
Date Received 6/29/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: American Mining and Development Company, a Delaware Corporation, Offices at Newcastle, Wyoming.

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. See Attached Sheet.

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not Applicable

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Patented Lode Claims Bonanza Nos. 1, 2, 3, 4, in Secs. 5 and 8, Copper King Lode Claims, Nos. 4, 5, 6 in Sec. 9, Survey No. 118, T-13-N, R-81-W of 6th P. M.

(*b*) State any mine name by which the property is known. Big Creek Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. Lease and Option Agreement attached.

(*e*) If you own the land, describe any liens or encumbrances on it Not applicable.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Not Applicable.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration proje*[redacted] (*a*) State the mineral or minerals for whic[redacted] wish to explore Copper

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 30 days and be completed within 5 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of 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.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—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 the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[X] Money [X] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated June 22, 1953

American Mining and Development Company
(Applicant)

By Page B. Blackmore
Director of Operations

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—66551-1

AMERICAN MINING AND DEVELOPMENT COMPANY
Encampment, Wyoming

1.(e) Richard D. Rudolph, President
Encampment, Wyoming

Charles R. Rudolph, Vice-President
5500 Wriley Road, NW
Washington, D. C.

Margaret Bracken, Secretary
Suite 206, American Building
1317 F Street, NW
Washington, D. C.

Page B. Kinnamore, Director of Operations
Encampment, Wyoming

4.(a) Two tunnels were driven to the vein a number of years ago, and some high grade copper ore mined and shipped. Small piles of ore on the dumps indicate an average copper content of over 15%. The vein workings can not be examined because the tunnels are caved and choked with debris. The operator had no interest in the former operations on this property. Workings are inaccessible for examination.

4.(b) No authentic records of past production available, but statements of reliable persons familiar with the property when operated, indicate that a few carloads of highgrade ore were shipped. No known ore reserves.

4.(c) Fractures in granite filled with copper minerals. Vein deposit. High-grade copper ore on dumps and statements of reliable individuals familiar with the operation conducted many years ago, together with favorable surface indications, warrant the proposed program of exploration.

4.(d) The surface and mine workings to be examined, are situated in the NW/4 of Section 9, T-13-N, R-81-W, and are accessible from Highway 230, via a good ranch road about one mile long. (Refer to attached map.)

Railhead at Encampment, Wyoming, approximately 20 miles from mine, 19 miles of which is on Highway 230. Small supplies obtainable in Encampment. Mining equipment obtainable in Denver, Colorado. Residence point, Encampment, Wyoming. Refer to attached USGS map of Saratoga Quadrangle.

4.(e) Sufficient labor is available at Encampment, Wyoming, as well as mine timber, small supplies, etc. No power available. Water: The mine tunnels are just above Big Creek, which has a large and continuous flow throughout the year. The former operator built a rock filled dam across this stream (part of which is intact) with the intention of developing power for mining and milling operations.

AMERICAN MINING AND DEVELOPMENT COMPANY
Newcastle, Wyoming

5.(b) Outline of proposed work: Cut a few trenches and prospect pits on surface for structural examination. Clean out and retimber two caved tunnels and workings. Cut fresh faces on working faces, for sampling and examination, to obtain structural and geological data. A competent geological consultant is to be employed to make examination and report as soon as funds are accessible.

If data obtained does not warrant further exploration, the project will be abandoned.

If data warrants it, the operator, with advice of geologist and representatives of D. M. E. A. will lay out a limited pattern of diamond core drilling to explore the deposit, in order to determine the economic possibilities thereof.

5.(d) The proposed exploration would be managed and supervised by Page B. Blakemore, graduate mining and metallurgical engineer, member A.I.M.E., whose experience in mining enterprises extends over 35 years. The officers of the American Mining and Development Company, are well known and substantial attorneys, petroleum producers, business and mining men.

6. Estimate of Costs

6.(a) Independent Contracts
Diamond Core Drilling:

5 holes 150 feet @ $5.00/ft.	$3750.00
2 holes 300 feet @ $6.00/ft.	3600.00

6.(b) Prospect pits, cleaning tunnels and workings for examination. (Estimated 400 feet)

4 Laborers 40 shifts @ $11.20 shift	1792.00
1 Timberman 40 shifts @ $12.00 shift	480.00
1 Machine man 5 shifts @ $12.00 shift	60.00
1 Foreman 40 shifts @ $15.00 shift	600.00
1 Supervisor 4 months @ $700.00/mo.	2800.00
1 Geologist, Consultant	500.00

6.(c) Operating Materials and Supplies to be purchased.

1 Pick and Handle	$ 5.00
3 L. H. Shovels @ $3.50 ea.	10.50
2 Wheelbarrows @ $25.00 ea.	50.00

To be furnished by Operator
1 Pick and Handle
2 L. H. Shovels
1 Sledge and Handle
2 Pipe Wrenches
2 5-gal. Gas Cans
2 Monkey Wrenches
1 3-gal. Gal. Bucket
1 Electric Firing Battery
1 Axe

AMERICAN MINING AND DEVELOPMENT COMPANY
Newcastle, Wyoming

6.(c) (Cont'd.)

Supplies to be purchased	
7 Cases 60% Dynamite	$ 30.00
Electric Detonators	10.00
Ammeniator Wire	10.00
9 Safety Hats @ $5.00 ea.	45.00
12 Carbide Lamps @ $2.00 ea.	24.00
Carbide	50.00
Lubricants (Truck and Compressor)	50.00
Gasoline (Truck and Compressor)	300.00
9 Safety Goggles @ $3.00	27.00
Mine Timber	900.00

6.(d) Operating Equipment:

To be Rented	
1 185 c.f.m. Gasoline Driven Air Compressor, 1 month	$ 175.00
haulage to mine and return	75.00
1 Jackhammer, 1 month	50.00
1 Set Air Hose, 1 month	9.00
1 Set Water Hose, 1 month	5.00
1 Pickup truck, 4 months @ $200.00	800.00
To be Purchased	
1 Air Line Oiler	22.00
1 Set Drill Steel	17.00
24 Bits @ 60¢ ea.	14.40
400 ft. 1" Black Pipe @ 20¢ ft.	80.00
400 ft. 1/2" Black Pipe @ 15¢ ft.	60.00
1 55-gal. Steel Drum for Drill Water	6.00
To be furnished by Operator	
1 Plymouth Suburban Car - 4 months @ $100.00/mo. (use allowance)	400.00

6.(e) Rehabilitation and Repairs - NONE

6.(f) New Buildings - NONE

6.(g)

Analytical work, Copper, GAS Assays	$ 150.00
Accounting, part time	400.00
Workmen's Comp., Employees Liability and Auto Insurances	1800.00
Payroll taxes	163.00
Contingencies	680.00
TOTAL	$20,000.00
D.M.E.A. Participation - 50%	$10,000.00
Operator's Participation - 50%	$10,000.00