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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1952

October 23, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2655, Copper King Mining Co., Copper King Mine, Laramie County, Wyoming

Enclosed are four copies of the final report on DMEA-2655, two copies of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

COPY

224 New Customhouse
Denver 2, Colorado

October 23, 1952

Copper King Mining Co.
408 Boyd Building
Cheyenne, Wyoming

Re: DMEA Docket 2655

Gentlemen:

Reference is made to your application for Government aid on the Copper King Mine.

Projects approved by the Defense Minerals Exploration Administration must, in its judgement, 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 strategic copper by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application for exploration aid is denied.

Very truly yours,

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

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

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

BY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 28, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2633 (Copper) Copper King Mining Co., Copper King Mine, Laramie County, Wyoming

Enclosed are eight copies of the engineering report on DMEA-2633 by F. D. Everett.

The applicant requests $37,906.20 for diamond drilling twenty holes totaling 4,988 feet.

The assays of samples from five diamond drill holes indicate a slight increase in copper values in the first 150 feet below surface and a consistent decrease below that point. The deposit is medium sized but extremely low grade.

Everett concludes that this is a poor prospect at the present time and recommends that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

11-3-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Room 137, Building 20
Denver Federal Center
Denver 14, Colorado
October 16, 1958

Memorandum

To: Executive Officer, Field Team, Region IV

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

Subject: DMEA 2655 (Copper), Copper King Mining Company, Copper King mine, Laramie County, Wyoming

Please find enclosed the original and eight copies of the "Summary, Conclusions, and Recommendations", by F. D. Everett and D. R. MacLaren, and of Everett's engineering report on the above docket.

Everett concludes the deposit contains a considerable tonnage of low-grade copper ore which could probably be increased appreciably by 2,485 feet of core drilling at a cost of $17,000.00. However, under existing economic conditions, there is no possibility of the property's supporting a profitable operation on the scale the available tonnage would justify. In addition, a complex metallurgical problem is injected due to oxide, combined oxide-sulfide, and sulfide ore at different depths, and the owners admit their only intention is to develop sufficient reserves to make the deposit attractive to some large operator. Denial of the loan is recommended.

I concur with the recommendations.

According to the application, the property is leased to Ferguson and Dimmson by the State of Wyoming and there is no assignment to the Copper King Mining Company. Also, the State of Wyoming will not subordinate. These two factors may mean some legal involvements.

The brochure provided by the Region IV Field Team is also returned.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures
WMT/mmh
cc 8
DMEA 2655
DMEA Chron.

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

200 New Customhouse
Denver 2, Colorado

October 6, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2655, Copper King Mine, Laramie County, Wyoming.

Attached are 8 copies of the geological report by D. R. MacLaren covering DMEA Docket 2655, Copper King Mine, Laramie County, Wyoming.

The applicant proposes to explore a low grade copper deposit by diamond drilling 20 holes for a total of 4928 feet at an estimated cost of $37,906.20.

The host rock of the copper deposit is a diorite dike, which has intruded pre-Cambrian granite gneiss and schist. It is considerably fractured, and along the fractures occur narrow quartz stringers stained with copper and iron oxide. Some fractures carry small streaks and blebs of chrysocolla, and others carry slightly oxidized pyrite and chalcopyrite. Five diamond drill holes have been put down by the American Smelting and Refining Company. Assays of the cores show that the ore is relatively low grade; the values increase some from the surface down to 150 feet, but show a rather consistent decrease below the 150-foot level.

Because of the consistently low values, the decrease of the values below the 150-foot level, and the lack of evidence of a zone of secondary enrichment, MacLaren concludes that this is a poor prospect. He, therefore, recommends that the loan be denied.

I concur in this recommendation.

Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2655, Copper King Mining Company, Copper King Mine

Laramie County, Wyoming

Copper

F. D. Everett, Mining Engineer
Bureau of Mines

D. R. Maclaren, Geologist
U. S. Geological Survey

October 10, 1952

Reviewed by
DMEA OPERATING COMMITTEE

11-3-52
(date)

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

Summary, Conclusions, and Recommendations

By F. D. Everett
Mining Engineer
Bureau of Mines

and

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

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By F. D. Everett and D. R. MacLaren

The Copper King Mining Company has applied for a Defense Minerals Exploration Administration loan of $37,906.20 to explore a low-grade copper property by diamond drilling twenty holes totaling 4,928 feet (docket DMEA 2655). The applicant estimated 5,000,000 tons of ore might be indicated that would assay 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper.

Small streaks and blebs of chrysocolla occur in joints of various attitudes within an easterly striking diorite dike about 2,000 feet long and 200 feet wide. The country rock at the surface is hard and fresh under a thin iron-stained coating and shows none of the pits and cavities typical of a leached gossan.

A shaft, accessible to the 130-foot level, indicated sulfides as increasing below 80 feet.

The assays of samples taken from five diamond drill holes indicated only a slight increase of copper values in the first 150 feet below the surface and a consistent decrease below that point.

The deposit is medium sized but extremely low grade, the principal values being in gold and copper. Because of the various directions in strike and dip of the joints and fractures, diamond drilling at an angle is not expected to increase the grade of the deposit.

Beneficiation costs would be comparatively high because of the low-grade material which contains both oxide and sulfide copper minerals. A profit is not indicated from a mining and milling operation at the Copper King mine.

The application is not recommended for approval.

COPPER KING MINE

LARAMIE COUNTY, WYOMING

DMEA DOCKET 2655

Geologic Report

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

COPPER KING MINE
LARAMIE COUNTY, WYOMING

INTRODUCTION

The Copper King Mining Company of Cheyenne, Wyoming, has requested the Defense Minerals Exploration Administration to participate in a program to explore for copper in the Silver Crown district, sec. 36, T. 14 N., R. 70 W., Laramie County, Wyoming. The applicant proposes to diamond drill 20 holes totaling 6,920 feet, at an estimated cost of $37,986.20, the Government's share to be $18,993.10.

The Copper King mine may be reached by following an excellent gravel road 20 miles west of Cheyenne toward Hecla, and thence over one mile of unimproved dirt road. The property was examined on September 8 and 9, in the company of Floyd Everett, U. S. Bureau of Mines, and three officers of the Copper King Mining Company, M. E. Ferguson, President; A. F. Reedel, Vice President; and P. W. Dixon, Secretary.

Prior to 1900 a 157-foot shaft was put down at the point of the best surface showing. On the 60 level a crosscut was driven roughly north and south for a total of 120 feet. On the 130 level a total of 100 feet of drift and crosscut were driven. During this period of activity, two tunnels were driven from the surface, one for 50 feet, and the other for 100 feet. In 1930 the American Smelting and Refining Company put down 9 vertical diamond drill holes. The assays of the core samples accompany the application. Two reports of examinations made by Wyoming State Geologists, one in 1907 by W. C. Beeler, the other in 1912 by C. E. Jenison, also accompany the application.

It is concluded that the chances of discovering a copper deposit of minable grade are poor, and it is recommended that this application be denied.

GEOLOGY

The rocks of the area are pre-Cambrian granites, schists, and gneisses that have been intruded by dioritic dikes. Near the north edge of the area to be explored the contact between the Shoman granite and a medium to fine grained gray granite, that is easily recognized (fig. 2), strikes in an easterly direction. A few yards south of this contact, an easterly striking diorite dike, 2,000 feet long and about 200 feet wide, intrudes the gray granite. The dike is extensively cut by joints in various attitudes, the majority tending to parallel the strike of the dike. The resulting blocks vary from about 3 to 5 feet on a side. Some of the fractures contain narrow quartz stringers stained with copper and iron oxides; others contain small streaks and blobs of chrysocolla. From the surface the rock is hard and fresh under a thin iron stained coating, and shows none of the pits and cavities typical of the leached gossan overlying secondary copper deposits.

A shaft said to be 157 feet deep was accessible only to the 130 level. On the 60 level a crosscut to the south could not be reached from the ladders but one to the north was accessible. The jointing systems were similar to those seen on the surface with a slight apparent increase in the amount of copper oxides. Some of the joints contained fresh to slightly oxidized pyrite and chalcopyrite in quartz stringers, and occasionally fresh sulfides were found within the rock mass. The 130 level (fig. 3) was flooded except

for a few feet from the shaft where loose muck had accumulated. The portion of the level that was accessible showed an increase in the amount of sulfides both along the joint planes and in the freshly broken rock, and about the same apparent amount of copper oxides. The sulfides were mostly pyrite with some chalcopyrite and possibly bornite. The amounts were small and very sparsely scattered. Oxides were fairly abundant throughout the entire depth of the shaft. It is believed that the apparent slight increase of copper oxides underground is due to the evaporation for the past 50 years of copper bearing solutions seeping from the joints where they have been exposed in the walls of the shaft and on the levels.

Two short surface tunnels driven in the dike (fig. 2) show only a few stains of copper oxides along joint planes and no pitting on the weathered rock surfaces.

The American Smelting and Refining Company put down 5 diamond drill holes (fig. 2). The cores were not available at the time of the examination, but the assays of the core samples are included in the application. For the purpose of gaining a clearer idea of how the values vary, a table has been prepared in which the assays have been averaged for each 50 foot interval.

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. 4
0-50	.430% Cu	.526% Cu	.122% Cu	.292% Cu
50-100	.700% Cu	.634% Cu	.170% Cu	.310% Cu
100-150	.594% Cu	.981% Cu	.190% Cu	.306% Cu
150-200	.433% Cu	.348% Cu*	.219% Cu	.284% Cu
200-250	.355% Cu	.436% Cu		
250-300	.336% Cu	.235% Cu		
300-350	.335% Cu**			
350-400	.205% Cu			
400-450	.226% Cu			
450-500	.240% Cu			

* - Assays 165-190 inclusive are missing.
** - Assays 330-340 inclusive are missing.

These assays indicate only slight increase of values in the first 150 feet below the surface and a rather consistent decrease below that level.

In 1912 Janison took two samples on the 80 level that averaged .519% Cu and seven more on the 130 level that averaged .714% Cu. More recently, C. R. Boyle took three samples on the 130 level (fig. 3) that averaged .56% Cu.

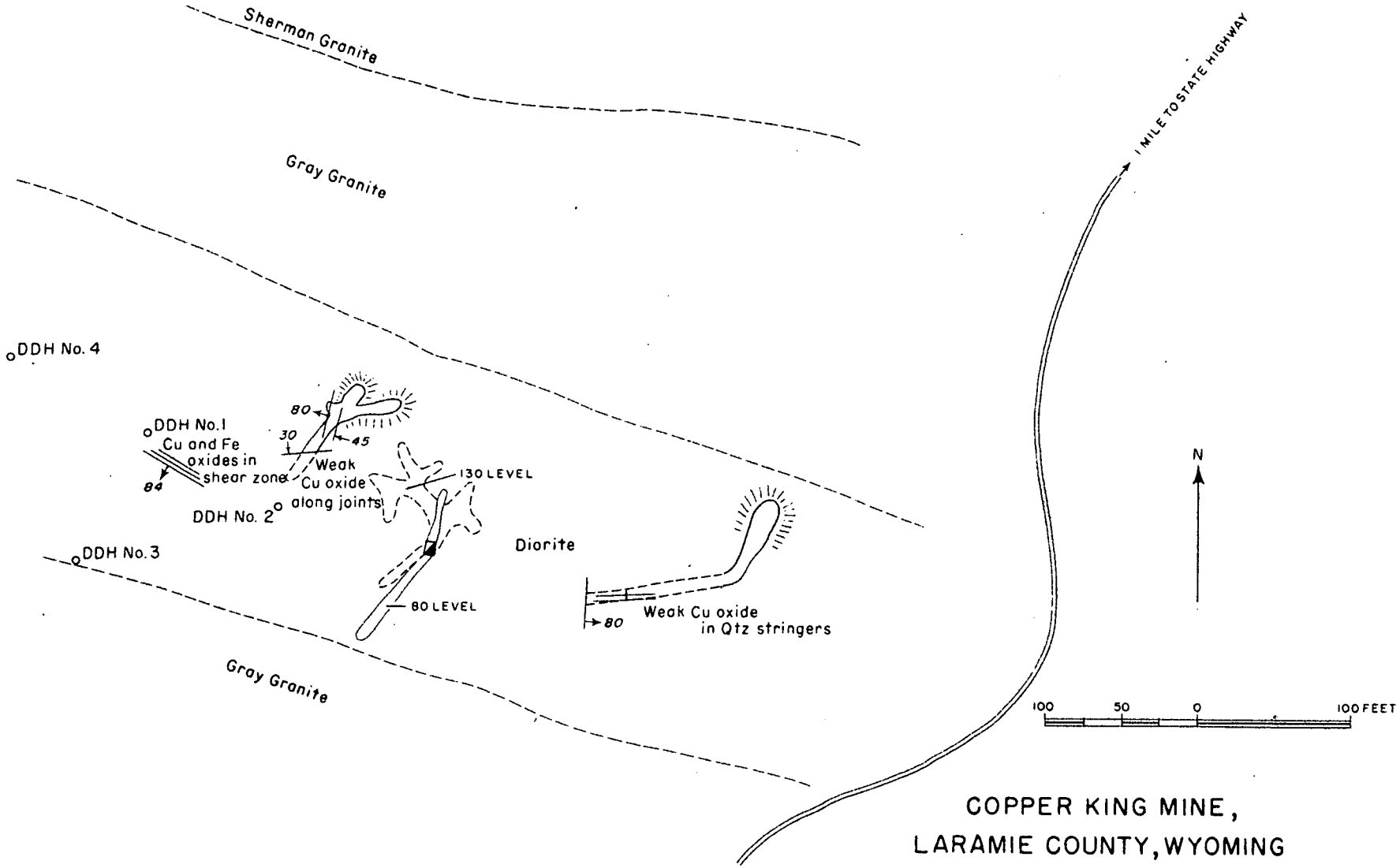
CONCLUSIONS AND RECOMMENDATIONS

Because of the consistently low assay values of many samples taken from the most promising area; the decrease of the assay values below the 150 foot level; and the lack of any criteria that might suggest a zone of secondary enrichment, it is concluded that this is a poor prospect.

It is recommended that this application be denied.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA DOCKET NO. 2655

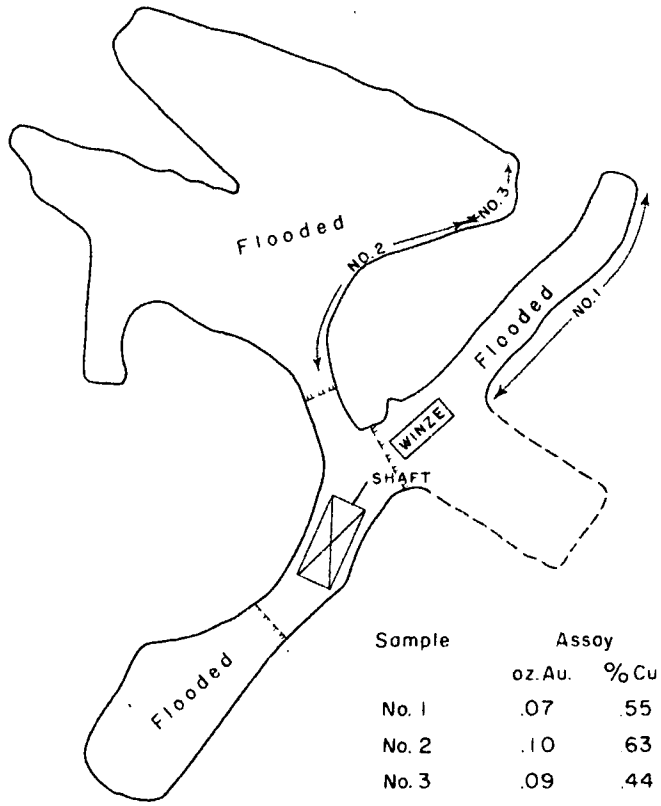


COPPER KING MINE,
LARAMIE COUNTY, WYOMING
SKETCH SHOWING GEOLOGY AND EXPLORATION WORK

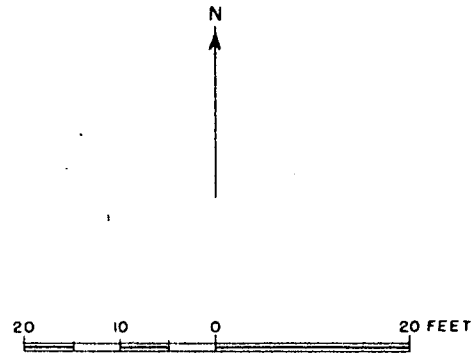
Note: Base map furnished by applicant

By D.R. MacLaren September 8, 1952

Figure 2



Sample	Assay oz. Au.	Assay % Cu
No. 1	.07	.55
No. 2	.10	.63
No. 3	.09	.44



COPPER KING MINE, LARAMIE COUNTY, WYOMING

SKETCH OF 130 LEVEL SHOWING LOCATION OF SAMPLES TAKEN BY C.R. BOYLE

Note: Copied from sketch furnished by applicant

By D.R. MacLaren September 18, 1952

Figure 3

DMA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

Engineering Report

By F. D. Everett
Mining Engineer
Bureau of Mines

BMRA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

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*See figures following geologic report.

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

ENGINEERING REPORT

By

F. D. Everett

INTRODUCTION

The Copper King Mining Company has applied to the Defense Minerals Exploration Administration for Government assistance in exploration work estimated to cost $37,906.20 (DMEA 2655). The purpose of the work is to diamond drill a large low-grade body of copper ore to determine the grade and tonnage of ore reserves. The applicant estimated that, by diamond drilling 4,988 feet, about 5,000,000 tons of ore assaying 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper might be indicated.

The examining field team was of the opinion that a larger tonnage might be explored for with less diamond drilling by spacing holes farther apart and drilling deeper. The applicant agreed, at the time of the examination, to a modified project requiring a minimum of 2,485 feet of drilling. The modified project is estimated to cost $17,000.00.

The field examination was made September 8 and 9, 1952, by a Bureau of Mines - U. S. Geological Survey field examining team. H. E. Ferguson, P. W. Dinneen, and H. E. Ruckman, representing the applicant, accompanied the engineers to the property.

ACKNOWLEDGMENTS

H. E. Ferguson, president of the Copper King Mining Company, was most cooperative in showing the Copper King property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Copper King mine is 22 miles west of Cheyenne, Wyo., by way of a good graveled road (fig. 1). The property comprises all of sec. 36, T. 14 N., R. 73 W., 6th P. M.

The Colorado and Southern Railroad passes through Silver Crown, Wyo., 10 miles northeast of the property. The Union Pacific Railroad passes through Granite Canyon and Buford, 3 and 8 miles, respectively, south and west of the mine. Both of these, as well as the Chicago, Burlington, and Quincy Railroad, have shipping facilities at Cheyenne.

The altitude at the property is between 7,500 and 8,000 feet. The topography consists of well rounded rolling hills. The climate is semiarid; temperatures go below zero in winter while summers are very mild. Year-around operations are possible if snow removal equipment is available.

The mine is in a region devoted to stock raising.

HISTORY AND PRODUCTION

Early reports by the Wyoming State Geologist refer to the deposit as the Arizona mine. Reportedly, the mine was worked first in the early eighties and, prior to 1900, all the underground work had been completed. In 1938, the American Smelting and Refining Company contracted the drilling of five vertical diamond drill holes.

The property is not credited with any production.

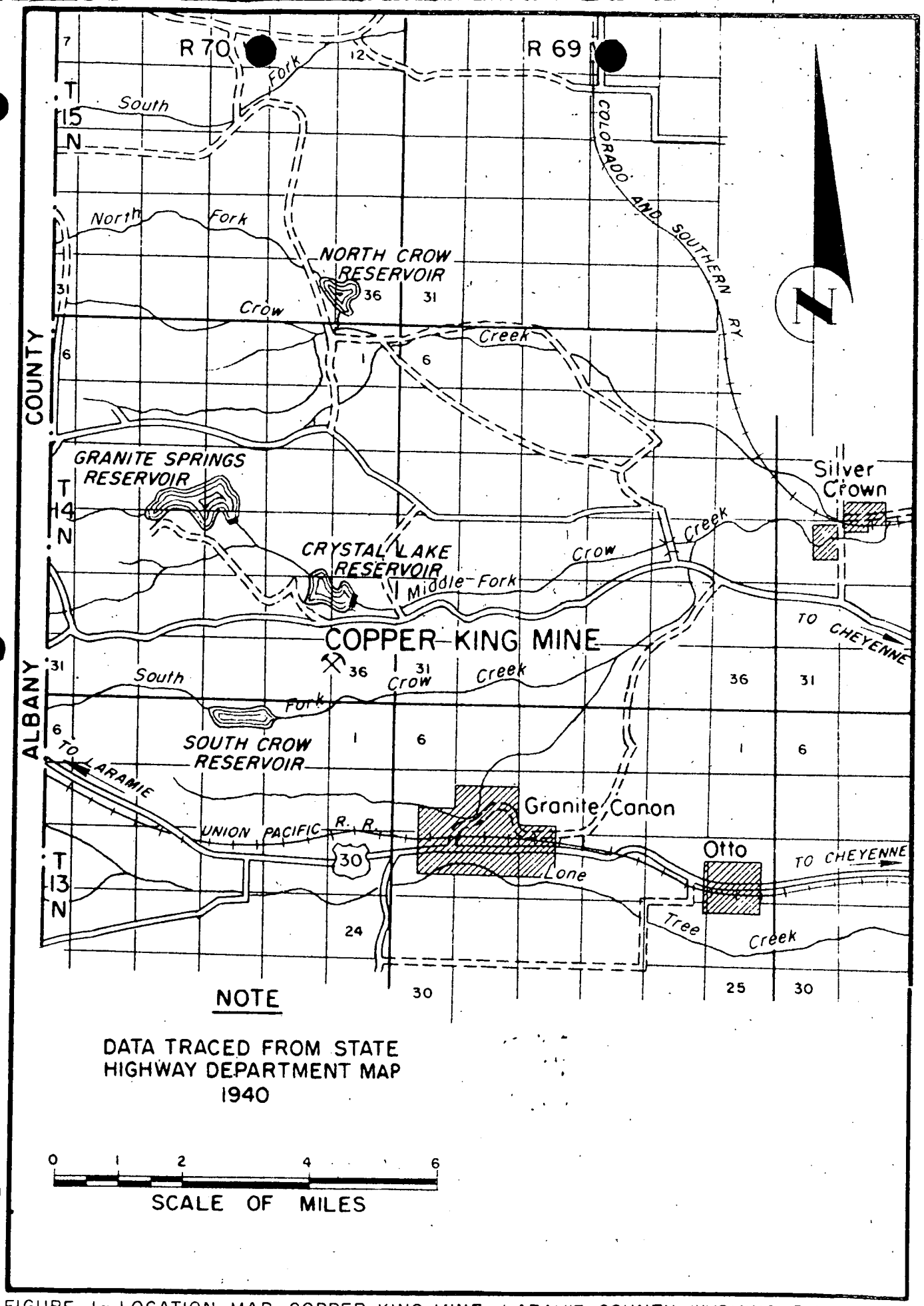


FIGURE 1 - LOCATION MAP, COPPER KING MINE, LARAMIE COUNTY, WYOMING, DMEA 2655

OWNERSHIP AND EXTENT

The property, comprising all of sec. 36, T. 14 N., R. 70 W., 6th P. M., is leased from the State of Wyoming by E. E. Ferguson and P. W. Bizzoco, Sr. The lease has 5 years remaining with an option for extension.

DESCRIPTION OF THE DEPOSITS

The deposit is in the pre-Cambrian complex which is characteristic of the Colorado Front Range and the Laramie Range. Rocks in the area are mostly granite with some gneiss and schist. The copper deposit is in a dike-like structure of pink granite or diorite bordered by gray granite. The higher mineralized portions are in extremely hard, siliceous rock. The mineralized zone contains many fractures and joints, some of which are filled with quartz. On the surface the rocks show greenish copper oxide staining, principally as crack and joint filling. Copper oxide staining was observed on the walls of the shaft. Chalcopyrite minerals were observed on the 80-foot level and at the bottom of the shaft. Chalcopyrite appeared to be concentrated in the extremely siliceous rocks and in the narrow cracks and joints. The granitic rock at the 130-foot level did not appear to contain any disseminated chalcopyrite.

The country rock is extremely hard and the only timber required in the shaft is for ladder support.

The ore zones will probably have to be determined by assay limits. The best assays from former diamond drill samples appeared consistently from holes 1 and 2 which were drilled in the most highly mineralized zone in line with the shaft. Hole 4, also drilled in line with the shaft

and holes 1 and 2, contained only one 10-foot interval with over 0.5 percent copper.

MINEABLE ORE RESERVES

The five diamond drill holes drilled by the American Smelting and Refining Company furnished samples which are probably the most representative of the deposit. The highest assay from any 5-foot sample interval was 1.36 percent copper. The average grade of material encountered in 965 feet of diamond drilling from three holes(Nos. 1, 2, and 4)west of the shaft is 0.061 ounce gold and 0.079 ounce silver per ton and 0.403 percent copper. Several grab samples taken from the shaft dump by W. E. Young, Bureau of Mines mining engineer, in 1950, assayed 0.12 ounce gold and 0.15 ounce silver per ton and 0.6 percent copper.

Underground development and diamond drilling have not indicated any reserves of commercial ore. The applicant's representative is of the opinion that, if holes were drilled at an angle, more joints and veinlets filled with gold and copper mineral would be encountered, which would probably be true if they were vertical. The examining team, however, observed joints and fractures at almost every angle in the underground workings and, if that is the case, vertical holes would prove as indicative as those drilled at an angle.

The applicant's representative estimates the deposit to contain 1,000,000 tons of indicated ore averaging 0.097 ounce gold and 0.23 ounce silver per ton and 0.99 percent copper. The area assumed in the calculations is 400 feet long by 150 feet wide and, if considered as carrying to a depth of 200 feet, would yield the estimated 1,000,000 tons, using a factor of 12 cubic feet. The calculated grade is questionable.

PRESENT STATUS

Exploration and Development

The shaft is reportedly 157 feet deep but it is filled with water and debris to the 130-foot level. At the time of the examination, water was over boot tops on the 130-foot level except at the station, and the level could not be thoroughly examined (fig. 3, with geologic report). Actually, the mine makes very little water, the amount presently in the mine workings having collected in a period of 11 months.

Three adits are located on the property, one being outside the limits of the mineralized zone (fig. 2, with geologic report).

Five vertical diamond drill holes also shown on the figure have been drilled in or near the mineralized zone. Hole depths are: 1 - 500 feet, 2 - 300 feet, 3 - 200 feet, and 4 - 200 feet. Hole 5 was drilled outside the mineralized zone.

Mining and Milling Equipment

There are no mining or milling equipment, buildings, or other facilities on the property.

PROJECT PROPOSALS, WITH COSTS

Exploration and Development

The applicant proposes to explore the copper deposit by diamond drilling and requested financial assistance to drill 4,928 feet in twenty holes; the cost was estimated at $6.00 a foot, or a total of $29,568.00. Supervision, supplies, and hauling water would increase the cost to $37,906.20.

The applicant, at the time of the field examination, agreed to a modified proposal of 2,485 feet of diamond drilling in five holes as shown on figure 4.

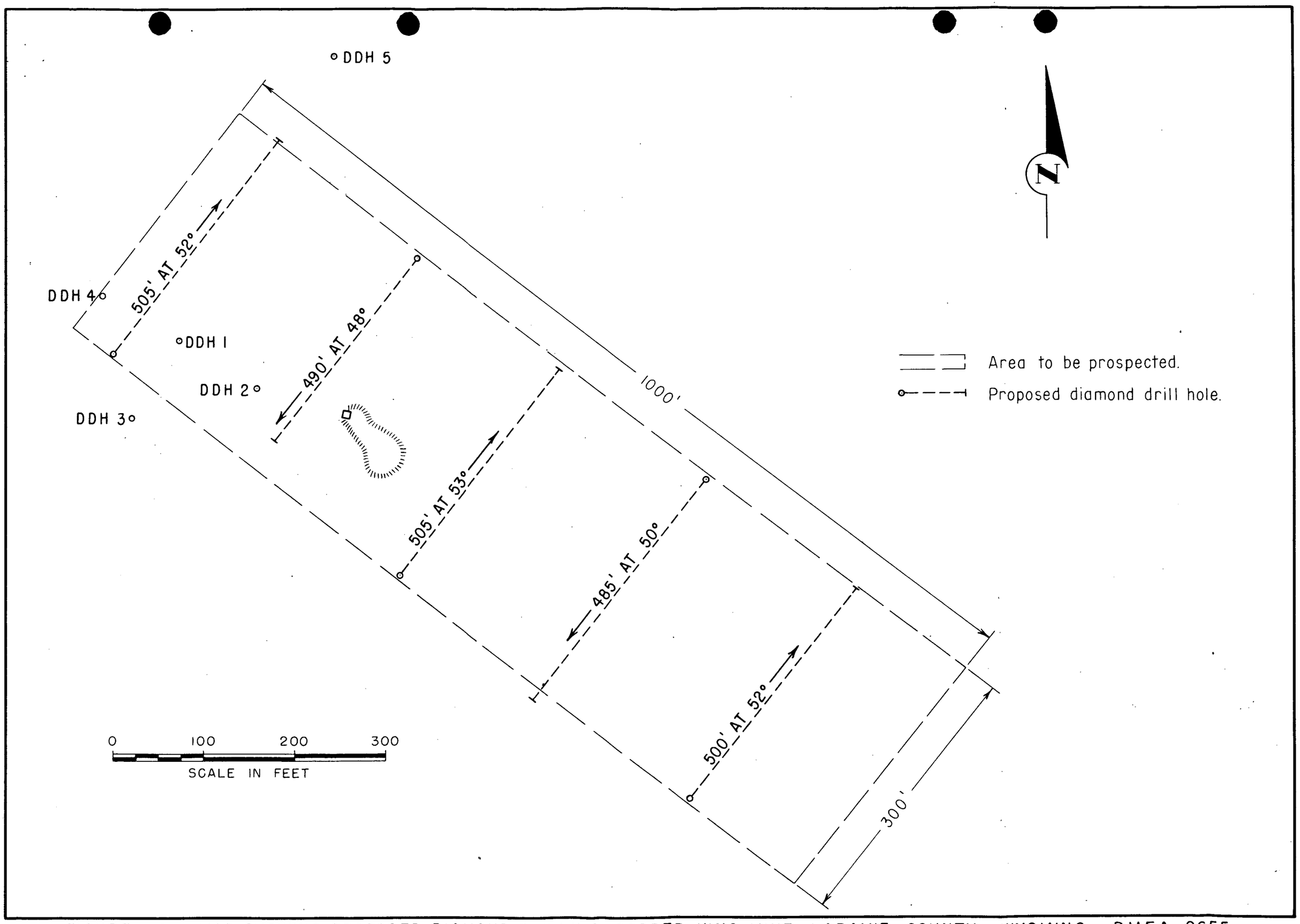


FIGURE 4.—MAP SHOWING PROPOSED DIAMOND DRILLING, COPPER KING MINE, LARAMIE COUNTY, WYOMING. DMEA 2655

Holes would be drilled in sequence as indicated on the map by the applicant.

Hole Number	Dip	Length Feet
6	-52°	505
11	-48°	490
14	-53°	505
19	-50°	485
22	-52°	500

A bid of $4.75 per foot was received by the applicant from Joy Manufacturing Company. This is presumed to be for AX bit and, as some BX bit size would probably have to be drilled, $5.25 is estimated as the average cost per foot. If an average of 20 feet of drilling a day were realized, it would require about 122 days for completion of the project.

2,485 feet of drilling at $5.25	$13,046.25
Supervision, sampling, splitting, and boxing core 1 man at $10.00 per day for 122 days	1,220.00
Hauling water 1 man at $12.00 per day for 122 days	1,464.00
Core boxes	375.00
Sample bags	100.00
Truck 122 days at $5.00 per day	610.00
Miscellaneous extra drilling costs such as casing and cementing	184.75
Total	$17,000.00

New Equipment and Facilities

No new equipment or facilities would be purchased. A truck would be rented for $5.00 a day to haul water.

Transportation

Good roads allow easy access to the property.

Manpower

Manpower could probably be recruited in the vicinity. Semiskilled labor in the area is being paid $1.62 an hour.

Power

Electric power transmission lines pass within 1/2 mile of the mine shaft. No power would be required for the exploration project.

Water

Some water is available from Crow Creek, 1/2 mile from the shaft. Additional water would have to be developed by drilling. Ample water is believed available for drilling on a one-shift-per-day basis.

Finances

The company has adequate money to finance 50 percent of the cost of the project.

PRODUCTION PLAN

The Copper King Mining Company does not contemplate operating the property. Mr. Ferguson, President, stated he hoped enough ore would be indicated by the exploration to interest some large mining company in purchasing the property.

Engineers or geologists of the Kennecott Corporation, the New Jersey Zinc Company, and the American Smelting and Refining Company have previously examined the deposit.

[illegible]

[illegible]

[illegible]

Mining Method

Open pit mining appears to be applicable. For a 1,000-ton-a-day operation, mining would cost about $1.50 a ton. After 500 feet of open pit mining, the underground block caving method would probably be applied.

Milling Method

The merits of the property are, in part, decided on by milling. As some oxide ore is reported to extend to the 130-foot level and probably 60 to 70 percent to the 80-foot level, provisions must be made for milling oxide ore or stripping the rock as waste.

For complete recovery of the copper, leaching methods would have to be used for the oxides, and, in addition, flotation equipment would be necessary for the sulfides.

A metallurgical report on tests made at the Intermountain Experiment Station of the Bureau of Mines, at Salt Lake City, on ore from the Copper King mine is quoted:

> "A head sample cut from the ore lot assayed 0.61 percent Cu, 5.4 percent Fe, 0.2 ounce Ag, and 0.1 ounce Au per ton.
>
> "Microscopic study of the ore showed that the copper was represented by small amounts of chalcopyrite, covellite, bornite, metallic copper, and malachite. These minerals were associated with a gangue composed chiefly of quartz associated with pyrite and magnetite. The ore minerals and pyrite are all finely crystalline, being 65-mesh and finer in size.
>
> "The chief metal value in the ore is gold and, as the ore is not only complex but finely crystalline, only flotation methods were tried. In the most successful test, the ore was ground in a ball mill at 50 percent solids to minus 65-mesh and the ore minerals floated and cleaned in two stages. First, the sulfide minerals were floated using xanthate collector, pine oil frother, and copper sulfate as an activator. The oxide minerals were then sulfidized with sodium sulfide activated with copper sulfate and collected with xanthate. The rougher concentrates were cleaned by refloatation. Test data are summarized in the following table.

Metallurgical Results

Product	Weight, percent	Assay, percent		Oz./ton		Distribution, percent			
		Cu	Fe	Au	Ag	Cu	Fe	Au	Ag
Sulfide concentrate	1.0	27.0	24.0	4.15	7.1	44.3	4.4	44.7	32.7
Oxide concentrate	2.1	10.3	10.6	1.25	1.8	36.1	4.1	27.7	17.5
Combined cleaner tails	5.6	0.71	6.4	0.15	0.3	6.5	6.7	8.5	7.8
Rougher tail	91.3	0.09	5.0	0.02	0.1	13.1	84.8	19.1	42.0
Calculated heads	100.0	0.61	5.4	0.09	0.2	100.0	100.0	100.0	100.0
Combined concentrate	3.1	15.8	14.8	2.19	3.52	80.4	8.5	72.4	90.2

"The data given indicate that 80 percent of the copper, 72 percent of the gold, and 90 percent of the silver are recoverable in a combined sulfide and oxide concentrate assaying 15.8 percent Cu, 2.19 ounces Au, and 3.52 ounces Ag per ton."

The value of the ore represented by this test is calculated as follows:

Gold:	0.09 ounce x .72 (percent recovery) x $31.00	=	$2.00
Silver:	0.2 ounce x .50 (percent recovery) x $0.70	=	.07
Copper:	0.61 percent or 12.2 pounds x .80 (percent recovery) x $0.21	=	2.05
	Total value per ton		$4.12

The milling charge would probably be in excess of $2.50 a ton.

INDICATED PROFIT OR LOSS

Estimated mining and milling costs are $1.50 and $2.50 a ton, respectively, or a total of $4.00 a ton. Ore containing 0.09 ounce gold and 0.1 ounce silver per ton and 0.6 percent copper could yield

$4.12 a ton. In addition to mining and milling, such charges as royalty, concentrate freight costs, and smelter treatment of concentrates must be added.

A profit is not indicated under present economic conditions.

CONCLUSIONS

The Copper King deposit is reasonably large but very low grade. Although the applicant credits the property with about 1,000,000 tons of ore to a depth of 200 feet, averaging 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper, available data indicate a smaller body of ore to this depth, assaying 0.06 ounce gold and 0.079 ounce silver per ton and 0.403 percent copper.

A project of diamond drilling for 2,485 feet at a total estimated cost of $17,000.00 would adequately explore and indicate the merits of the property.

The ore above 80 feet from the surface is predominately in oxide form and below 80 feet to 130 feet is a combination of oxide and sulfide minerals. Low-grade copper oxide ore adds considerable complexity to economical beneficiation.

Geologically, the attitude of joints and fractures controlling mineral deposition appeared to trend in almost any direction. It is doubtful if diamond drilling from the surface at an angle as proposed by the applicant would materially increase the grade of ore reserves.

The Copper King Mining Company expressed no desire to operate the property but prefers to sell its interests. There is at present no prospective purchaser although at least three large operating mining companies have made examinations.

Economically, a profit is not indicated from an operation at the property at the present time. However, in the foreseeable future, economic conditions may change and the demand for critical minerals may become sufficient to make the deposit worthy of consideration as a source of copper or gold.

RECOMMENDATIONS

The application is recommended for denial.

ash

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

224 New Customhouse
Denver 2, Colorado

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1952

October 23, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2655, Copper King Mining Co., Copper King Mine, Laramie County, Wyoming

Enclosed are four copies of the final report on DMEA-2655, two copies of Form 3b, and a copy of the letter of denial to the applicant.

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann

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

224 New Customhouse
Denver 2, Colorado

October 23, 1952

Copper King Mining Co.
408 Boyd Building
Cheyenne, Wyoming

Re: DMEA Docket 2655

Gentlemen:

Reference is made to your application for Government aid on the Copper King Mine.

Projects approved by the Defense Minerals Exploration Administration must, in its judgement, 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 strategic copper by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you 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:oc
cc: Administrator (DMEA)
WMTraver
Subject
Chron.
Koschmann (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 22, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2695 (Copper) Copper King Mining Co., Copper King Mine, Laramie County, Wyoming

Enclosed are eight copies of the engineering report on DMEA-0695 by F. D. Everett.

The applicant requests $37,906.80 for diamond drilling twenty holes totaling 4,980 feet.

The assays of samples from five diamond drill holes indicate a slight increase in copper values in the first 150 feet below surface and a consistent decrease below that point. The deposit is sudden sized but extremely low grade.

Everett concludes that this is a poor prospect at the present time and 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

Region IV

Room 137, Building 20
Denver Federal Center
Denver 14, Colorado
October 16, 1952

Memorandum

To: Executive Officer, Field Team, Region IV

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

Subject: DMEA 2655 (Copper), Copper King Mining Company, Copper King mine, Laramie County, Wyoming

Please find enclosed the original and eight copies of the "Summary, Conclusions, and Recommendations", by F. D. Everett and D. R. MacLaren, and of Everett's engineering report on the above docket.

Everett concludes the deposit contains a considerable tonnage of low-grade copper ore which could probably be increased appreciably by 2,485 feet of core drilling at a cost of $17,000.00. However, under existing economic conditions, there is no possibility of the property's supporting a profitable operation on the scale the available tonnage would justify. In addition, a complex metallurgical problem is injected due to oxide, combined oxide-sulfide, and sulfide ore at different depths, and the owners admit their only intention is to develop sufficient reserves to make the deposit attractive to some large operator. Denial of the loan is recommended.

I concur with the recommendations.

According to the application, the property is leased to Ferguson and Dinneen by the State of Wyoming and there is no assignment to the Copper King Mining Company. Also, the State of Wyoming will not subordinate. These two factors may mean some legal involvements.

The brochure provided by the Region IV Field Team is also returned.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures
WMT/amh
cc 8
DMEA 2655
DMEA Chron.

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

200 New Customhouse
Denver 2, Colorado

October 6, 1952

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2655, Copper King Mine, Laramie County, Wyoming.

Attached are 8 copies of the geological report by D. R. MacLaren covering DMEA Docket 2655, Copper King Mine, Laramie County, Wyoming.

The applicant proposes to explore a low grade copper deposit by diamond drilling 20 holes for a total of 4928 feet at an estimated cost of $37,906.20.

The host rock of the copper deposit is a diorite dike, which has intruded pre-Cambrian granite gneiss and schist. It is considerably fractured, and along the fractures occur narrow quartz stringers stained with copper and iron oxide. Some fractures carry small streaks and blebs of chrysocolla, and others carry slightly oxidized pyrite and chalcopyrite. Five diamond drill holes have been put down by the American Smelting and Refining Company. Assays of the cores show that the ore is relatively low grade; the values increase some from the surface down to 150 feet, but show a rather consistent decrease below the 150-foot level.

Because of the consistently low values, the decrease of the values below the 150-foot level, and the lack of evidence of a zone of secondary enrichment, MacLaren concludes that this is a poor prospect. He, therefore, recommends that the 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
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2655, Copper King Mining Company, Copper King Mine

Laramie County, Wyoming

Copper

F. D. Everett, Mining Engineer
Bureau of Mines

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

October 10, 1952

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

Summary, Conclusions, and Recommendations

By F. D. Everett
Mining Engineer
Bureau of Mines

and

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

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By F. D. Everett and D. R. MacLaren

The Copper King Mining Company has applied for a Defense Minerals Exploration Administration loan of $37,906.20 to explore a low-grade copper property by diamond drilling twenty holes totaling 4,928 feet (docket DMEA 2655). The applicant estimated 5,000,000 tons of ore might be indicated that would assay 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper.

Small streaks and blebs of chrysocolla occur in joints of various attitudes within an easterly striking diorite dike about 2,000 feet long and 200 feet wide. The country rock at the surface is hard and fresh under a thin iron-stained coating and shows none of the pits and cavities typical of a leached gossan.

A shaft, accessible to the 130-foot level, indicated sulfides as increasing below 80 feet.

The assays of samples taken from five diamond drill holes indicated only a slight increase of copper values in the first 150 feet below the surface and a consistent decrease below that point.

The deposit is medium sized but extremely low grade, the principal values being in gold and copper. Because of the various directions in strike and dip of the joints and fractures, diamond drilling at an angle is not expected to increase the grade of the deposit.

Beneficiation costs would be comparatively high because of the low-grade material which contains both oxide and sulfide copper minerals. A profit is not indicated from a mining and milling operation at the Copper King mine.

The application is not recommended for approval.

COPPER KING MINE

LARAMIE COUNTY, WYOMING

DMEA DOCKET 2655

Geologic Report

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

COPPER KING MINE
LARAMIE COUNTY, WYOMING

INTRODUCTION

The Copper King Mining Company of Cheyenne, Wyoming, has requested the Defense Minerals Exploration Administration to participate in a program to explore for copper in the Silver Crown district, sec. 36, T. 14 N., R. 70 W., Laramie County, Wyoming. The applicant proposes to diamond drill 20 holes totaling 4,928 feet, at an estimated cost of $37,906.20, the Government's share to be $18,953.10.

The Copper King mine may be reached by following an excellent gravel road 22 miles west of Cheyenne toward Hecla, and thence over one mile of unimproved dirt road. The property was examined on September 8 and 9, in the company of Floyd Everett, U. S. Bureau of Mines, and three officers of the Copper King Mining Company, H. E. Ferguson, President; A. F. Roedel, Vice President; and P. W. Dineen, Secretary.

Prior to 1900 a 157-foot shaft was put down at the point of the best surface showing. On the 80 level a crosscut was driven roughly north and south for a total of 120 feet. On the 130 level a total of 180 feet of drift and crosscut were driven. During this period of activity, two tunnels were driven from the surface, one for 50 feet, and the other for 100 feet. In 1938 the American Smelting and Refining Company put down 5 vertical diamond drill holes. The assays of the core samples accompany the application. Two reports of examinations made by Wyoming State Geologists, one in 1907 by H. C. Beeler, the other in 1912 by C. E. Jamison, also accompany the application.

It is concluded that the chances of discovering a copper deposit of mineable grade are poor, and it is recommended that this application be denied.

GEOLOGY

The rocks of the area are pre-Cambrian granites, schists, and gneisses that have been intruded by dioritic dikes. Near the north edge of the area to be explored the contact between the Sherman granite and a medium to fine grained gray granite, that is easily recognized (fig. 2), strikes in an easterly direction. A few yards south of this contact, an easterly striking diorite dike, 2,000 feet long and about 200 feet wide, intrudes the gray granite. The dike is extensively cut by joints in various attitudes, the majority tending to parallel the strike of the dike. The resulting blocks vary from about 3 to 5 feet on a side. Some of the fractures contain narrow quartz stringers stained with copper and iron oxides; others contain small streaks and blebs of chrysocolla. From the surface the rock is hard and fresh under a thin iron stained coating, and shows none of the pits and cavities typical of the leached gossan overlying secondary copper deposits.

A shaft said to be 157 feet deep was accessible only to the 130 level. On the 80 level a crosscut to the south could not be reached from the ladders but one to the north was accessible. The jointing systems were similar to those seen on the surface with a slight apparent increase in the amount of copper oxides. Some of the joints contained fresh to slightly oxidized pyrite and chalcopyrite in quartz stringers, and occasionally fresh sulfides were found within the rock mass. The 130 level (fig. 3) was flooded except

for a few feet from the shaft where loose muck had accumulated. The portion of the level that was accessible showed an increase in the amount of sulfides both along the joint planes and in the freshly broken rock, and about the same apparent amount of copper oxides. The sulfides were mostly pyrite with some chalcopyrite and possibly bornite. The amounts were small and very sparsely scattered. Oxides were fairly abundant throughout the entire depth of the shaft. It is believed that the apparent slight increase of copper oxides underground is due to the evaporation for the past 50 years of copper bearing solutions seeping from the joints where they have been exposed in the walls of the shaft and on the levels.

Two short surface tunnels driven in the dike (fig. 2) show only a few stains of copper oxides along joint planes and no pitting on the weathered rock surfaces.

The American Smelting and Refining Company put down 5 diamond drill holes (fig. 2). The cores were not available at the time of the examination, but the assays of the core samples are included in the application. For the purpose of gaining a clearer idea of how the values vary, a table has been prepared in which the assays have been averaged for each 50 foot interval.

DEPTH	HOLE NO. 1	HOLE NO. 2	HOLE NO. 3	HOLE NO. 4
0-50	.430% Cu	.526% Cu	.122% Cu	.292% Cu
50-100	.700% Cu	.634% Cu	.170% Cu	.340% Cu
100-150	.594% Cu	.981% Cu	.196% Cu	.306% Cu
150-200	.433% Cu	.348% Cu*	.219% Cu	.284% Cu
200-250	.355% Cu	.436% Cu		
250-300	.336% Cu	.235% Cu		
300-350	.335% Cu**			
350-400	.205% Cu			
400-450	.226% Cu			
450-500	.240% Cu			

* - Assays 165-190 inclusive are missing.
** - Assays 330-340 inclusive are missing.

These assays indicate only slight increase of values in the first 150 feet below the surface and a rather consistent decrease below that level.

In 1912 Jamison took two samples on the 80 level that averaged .519% Cu and seven more on the 130 level that averaged .714% Cu. More recently, C. R. Boyle took three samples on the 130 level (fig. 3) that averaged .56% Cu.

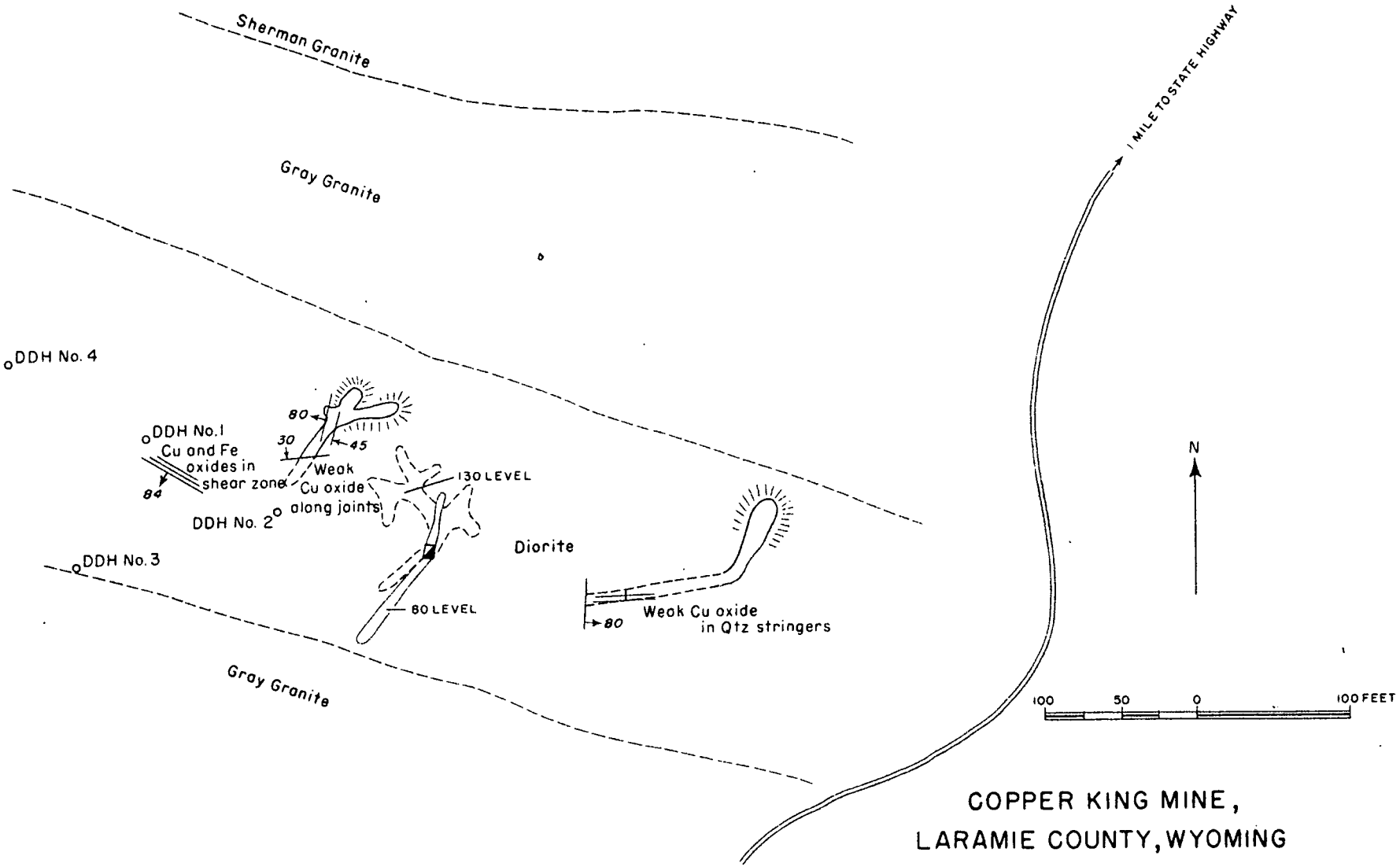
CONCLUSIONS AND RECOMMENDATIONS

Because of the consistently low assay values of many samples taken from the most promising area; the decrease of the assay values below the 150 foot level; and the lack of any criteria that might suggest a zone of secondary enrichment, it is concluded that this is a poor prospect.

It is recommended that this application be denied.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA DOCKET NO. 2655

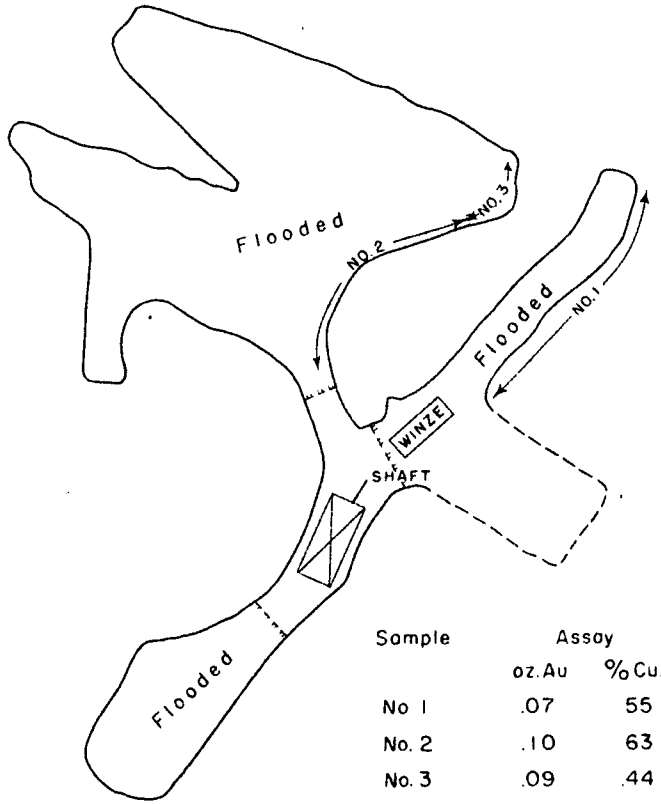


COPPER KING MINE,
LARAMIE COUNTY, WYOMING
SKETCH SHOWING GEOLOGY AND EXPLORATION WORK

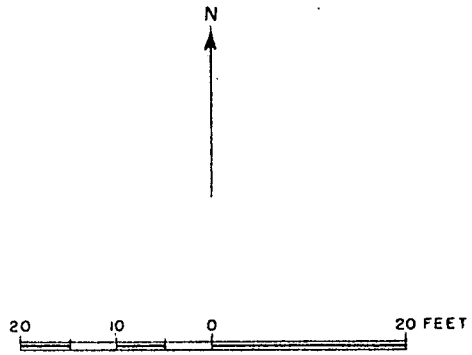
Note: Base map furnished by applicant

By D.R. MacLaren September 8, 1952

Figure 2



Sample	Assay	
	oz. Au	% Cu.
No 1	.07	55
No. 2	.10	63
No. 3	.09	.44



COPPER KING MINE, LARAMIE COUNTY, WYOMING

SKETCH OF 130 LEVEL SHOWING LOCATION OF SAMPLES TAKEN BY C.R. BOYLE

Note: Copied from sketch furnished by applicant

By D.R. MacLaren September 18, 1952

Figure 3

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

Engineering Report

By F. D. Everett
Mining Engineer
Bureau of Mines

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

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*See figures following geologic report.

DMEA 2655

COPPER KING MINING COMPANY
COPPER KING MINE
LARAMIE COUNTY, WYOMING

ENGINEERING REPORT

By

F. D. Everett

INTRODUCTION

The Copper King Mining Company has applied to the Defense Minerals Exploration Administration for Government assistance in exploration work estimated to cost $37,906.20 (DMEA 2655). The purpose of the work is to diamond drill a large low-grade body of copper ore to determine the grade and tonnage of ore reserves. The applicant estimated that, by diamond drilling 4,928 feet, about 5,000,000 tons of ore assaying 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper might be indicated.

The examining field team was of the opinion that a larger tonnage might be explored for with less diamond drilling by spacing holes farther apart and drilling deeper. The applicant agreed, at the time of the examination, to a modified project requiring a minimum of 2,485 feet of drilling. The modified project is estimated to cost $17,000.00.

The field examination was made September 8 and 9, 1952, by a Bureau of Mines - U. S. Geological Survey field examining team. H. E. Ferguson, P. W. Dinneen, and H. E. Ruckman, representing the applicant, accompanied the engineers to the property.

ACKNOWLEDGMENTS

H. E. Ferguson, president of the Copper King Mining Company, was most cooperative in showing the Copper King property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Copper King mine is 22 miles west of Cheyenne, Wyo., by way of a good graveled road (fig. 1). The property comprises all of sec. 36, T. 14 N., R. 70 W., 6th P. M.

The Colorado and Southern Railroad passes through Silver Crown, Wyo., 10 miles northeast of the property. The Union Pacific Railroad passes through Granite Canyon and Buford, 3 and 8 miles, respectively, south and west of the mine. Both of these, as well as the Chicago, Burlington, and Quincy Railroad, have shipping facilities at Cheyenne.

The altitude at the property is between 7,500 and 8,000 feet. The topography consists of well rounded rolling hills. The climate is semiarid; temperatures go below zero in winter while summers are very mild. Year-around operations are possible if snow removal equipment is available.

The mine is in a region devoted to stock raising.

HISTORY AND PRODUCTION

Early reports by the Wyoming State Geologist refer to the deposit as the Arizona mine. Reportedly, the mine was worked first in the early eighties and, prior to 1900, all the underground work had been completed. In 1938, the American Smelting and Refining Company contracted the drilling of five vertical diamond drill holes.

The property is not credited with any production.

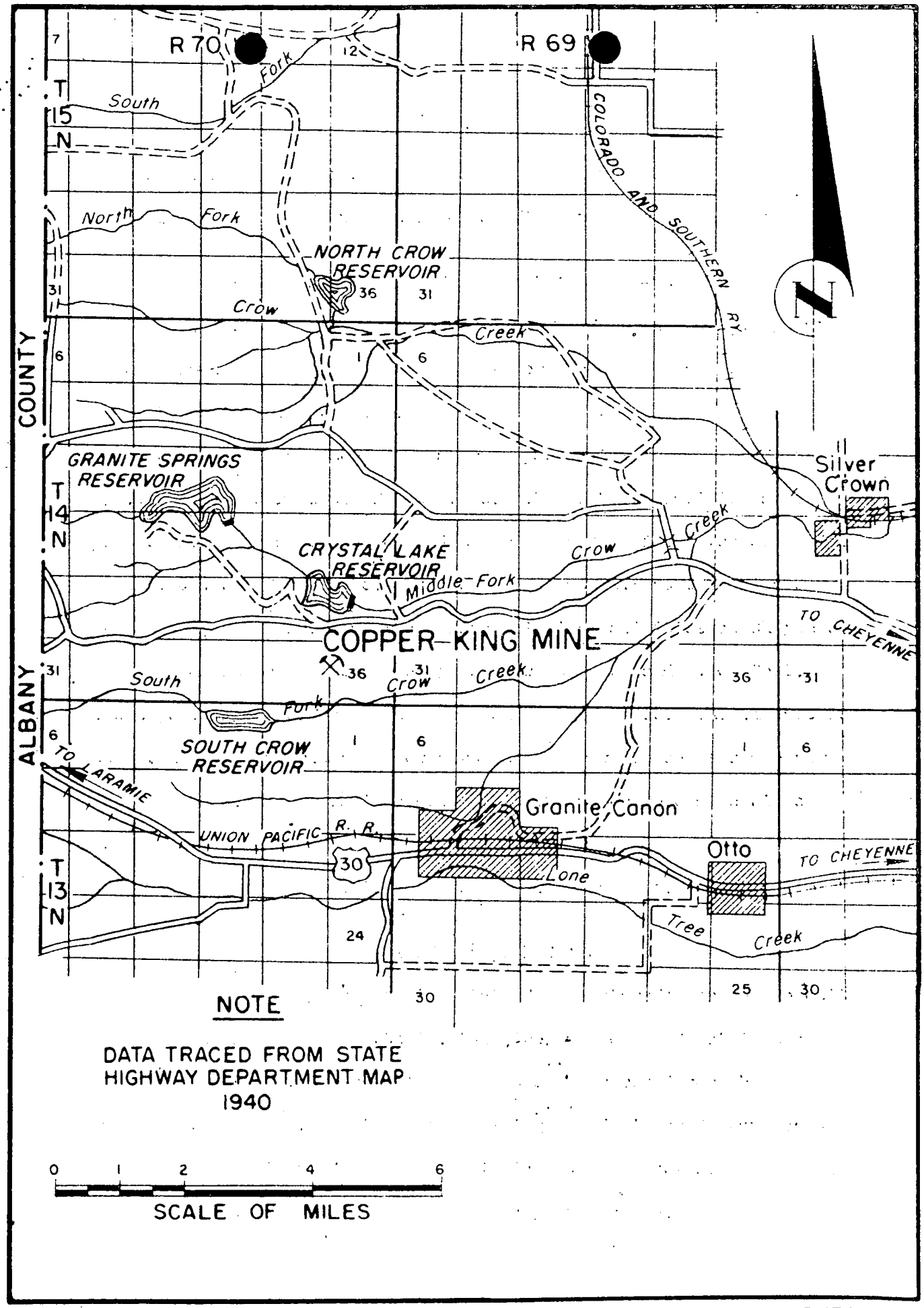

FIGURE 1- LOCATION MAP, COPPER KING MINE, LARAMIE COUNTY, WYOMING, DMEA 2655

OWNERSHIP AND EXTENT

The property, comprising all of sec. 36, T. 14 N., R. 70 W., 6th P. M., is leased from the State of Wyoming by H. E. Ferguson and P. W. Dinneen, Sr. The lease has 5 years remaining with an option for extension.

DESCRIPTION OF THE DEPOSITS

The deposit is in the pre-Cambrian complex which is characteristic of the Colorado Front Range and the Laramie Range. Rocks in the area are mostly granite with some gneiss and schist. The copper deposit is in a dike-like structure of pink granite or diorite bordered by gray granite. The higher mineralized portions are in extremely hard, siliceous rock. The mineralized zone contains many fractures and joints, some of which are filled with quartz. On the surface the rocks show greenish copper oxide staining, principally as crack and joint filling. Copper oxide staining was observed on the walls of the shaft. Chalcopyrite minerals were observed on the 80-foot level and at the bottom of the shaft. Chalcopyrite appeared to be concentrated in the extremely siliceous rocks and in the narrow cracks and joints. The granitic rock at the 130-foot level did not appear to contain any disseminated chalcopyrite.

The country rock is extremely hard and the only timber required in the shaft is for ladder support.

The ore zones will probably have to be determined by assay limits. The best assays from former diamond drill samples appeared consistently from holes 1 and 2 which were drilled in the most highly mineralized zone in line with the shaft. Hole 4, also drilled in line with the shaft

and holes 1 and 2, contained only one 10-foot interval with over 0.5 percent copper.

MINEABLE ORE RESERVES

The five diamond drill holes drilled by the American Smelting and Refining Company furnished samples which are probably the most representative of the deposit. The highest assay from any 5-foot sample interval was 1.36 percent copper. The average grade of material encountered in 965 feet of diamond drilling from three holes (Nos. 1, 2, and 4) west of the shaft is 0.061 ounce gold and 0.079 ounce silver per ton and 0.403 percent copper. Several grab samples taken from the shaft dump by W. E. Young, Bureau of Mines mining engineer, in 1950, assayed 0.12 ounce gold and 0.15 ounce silver per ton and 0.6 percent copper.

Underground development and diamond drilling have not indicated any reserves of commercial ore. The applicant's representative is of the opinion that, if holes were drilled at an angle, more joints and veinlets filled with gold and copper mineral would be encountered, which would probably be true if they were vertical. The examining team, however, observed joints and fractures at almost every angle in the underground workings and, if that is the case, vertical holes would prove as indicative as those drilled at an angle.

The applicant's representative estimates the deposit to contain 1,000,000 tons of indicated ore averaging 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper. The area assumed in the calculations is 400 feet long by 150 feet wide and, if considered as carrying to a depth of 200 feet, would yield the estimated 1,000,000 tons, using a factor of 12 cubic feet. The calculated grade is questionable.

PRESENT STATUS

Exploration and Development

The shaft is reportedly 157 feet deep but it is filled with water and debris to the 130-foot level. At the time of the examination, water was over boot tops on the 130-foot level except at the station, and the level could not be thoroughly examined (fig. 3, with geologic report). Actually, the mine makes very little water, the amount presently in the mine workings having collected in a period of 11 months.

Three adits are located on the property, one being outside the limits of the mineralized zone (fig. 2, with geologic report).

Five vertical diamond drill holes also shown on the figure have been drilled in or near the mineralized zone. Hole depths are: 1 - 500 feet, 2 - 300 feet, 3 - 200 feet, and 4 - 200 feet. Hole 5 was drilled outside the mineralized zone.

Mining and Milling Equipment

There are no mining or milling equipment, buildings, or other facilities on the property.

PROJECT PROPOSALS, WITH COSTS

Exploration and Development

The applicant proposes to explore the copper deposit by diamond drilling and requested financial assistance to drill 4,928 feet in twenty holes; the cost was estimated at $6.00 a foot, or a total of $29,568.00. Supervision, supplies, and hauling water would increase the cost to $37,906.20.

The applicant, at the time of the field examination, agreed to a modified proposal of 2,485 feet of diamond drilling in five holes as shown on figure 4.

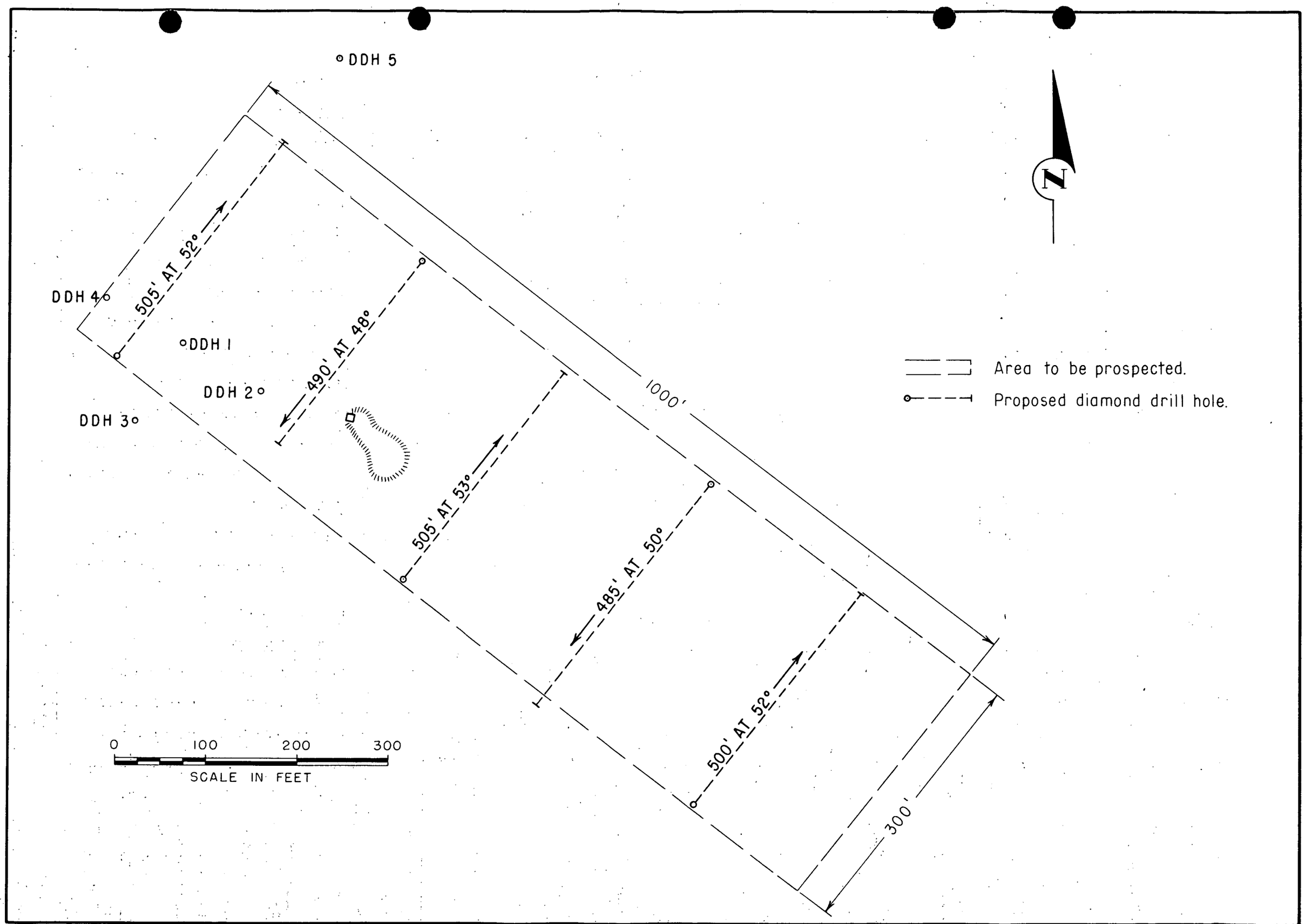

FIGURE 4.—MAP SHOWING PROPOSED DIAMOND DRILLING, COPPER KING MINE, LARAMIE COUNTY, WYOMING. DMEA 2655

Holes would be drilled in sequence as indicated on the map by the applicant.

Hole Number	Dip	Length Feet
6	-52°	505
11	-48°	490
14	-53°	505
19	-50°	485
22	-52°	500

A bid of $4.75 per foot was received by the applicant from Joy Manufacturing Company. This is presumed to be for AX bit and, as some BX bit size would probably have to be drilled, $5.25 is estimated as the average cost per foot. If an average of 20 feet of drilling a day were realized, it would require about 122 days for completion of the project.

2,485 feet of drilling at $5.25	$13,046.25
Supervision, sampling, splitting, and boxing core 1 man at $10.00 per day for 122 days	1,220.00
Hauling water 1 man at $12.00 per day for 122 days	1,464.00
Core boxes	375.00
Sample bags	100.00
Truck 122 days at $5.00 per day	610.00
Miscellaneous extra drilling costs such as casing and cementing	184.75
Total	$17,000.00

New Equipment and Facilities

No new equipment or facilities would be purchased. A truck would be rented for $5.00 a day to haul water.

Transportation

Good roads allow easy access to the property.

Manpower

Manpower could probably be recruited in the vicinity. Semiskilled labor in the area is being paid $1.62 an hour.

Power

Electric power transmission lines pass within 1/2 mile of the mine shaft. No power would be required for the exploration project.

Water

Some water is available from Crow Creek, 1/2 mile from the shaft. Additional water would have to be developed by drilling. Ample water is believed available for drilling on a one-shift-per-day basis.

Finances

The company has adequate money to finance 50 percent of the cost of the project.

PRODUCTION PLAN

The Copper King Mining Company does not contemplate operating the property. Mr. Ferguson, President, stated he hoped enough ore would be indicated by the exploration to interest some large mining company in purchasing the property.

Engineers or geologists of the Kennecott Corporation, the New Jersey Zinc Company, and the American Smelting and Refining Company have previously examined the deposit.

Mining Method

Open pit mining appears to be applicable. For a 1,000-ton-a-day operation, mining would cost about $1.50 a ton. After 500 feet of open pit mining, the underground block caving method would probably be applied.

Milling Method

The merits of the property are, in part, decided on by milling. As some oxide ore is reported to extend to the 130-foot level and probably 60 to 70 percent to the 80-foot level, provisions must be made for milling oxide ore or stripping the rock as waste.

For complete recovery of the copper, leaching methods would have to be used for the oxides, and, in addition, flotation equipment would be necessary for the sulfides.

A metallurgical report on tests made at the Intermountain Experiment Station of the Bureau of Mines, at Salt Lake City, on ore from the Copper King mine is quoted:

> "A head sample cut from the ore lot assayed 0.61 percent Cu, 5.4 percent Fe, 0.2 ounce Ag, and 0.1 ounce Au per ton.
>
> "Microscopic study of the ore showed that the copper was represented by small amounts of chalcopyrite, covellite, bornite, metallic copper, and malachite. These minerals were associated with a gangue composed chiefly of quartz associated with pyrite and magnetite. The ore minerals and pyrite are all finely crystalline, being 65-mesh and finer in size.
>
> "The chief metal value in the ore is gold and, as the ore is not only complex but finely crystalline, only flotation methods were tried. In the most successful test, the ore was ground in a ball mill at 50 percent solids to minus 65-mesh and the ore minerals floated and cleaned in two stages. First, the sulfide minerals were floated using xanthate collector, pine oil frother, and copper sulfate as an activator. The oxide minerals were then sulfidized with sodium sulfide activated with copper sulfate and collected with xanthate. The rougher concentrates were cleaned by reflotation. Test data are summarized in the following table.

Metallurgical Results

Product	Weight, percent	Assay, percent Cu	Fe	Oz./ton Au	Ag	Distribution, percent Cu	Fe	Au	Ag
Sulfide concentrate	1.0	27.0	24.0	4.15	7.1	44.3	4.4	44.7	32.7
Oxide concentrate	2.1	10.3	10.6	1.25	1.8	36.1	4.1	27.7	17.5
Combined cleaner tails	5.6	0.71	6.4	0.15	0.3	6.5	6.7	8.5	7.8
Rougher tail	91.3	0.09	5.0	0.02	0.1	13.1	84.8	19.1	42.0
Calculated heads	100.0	0.61	5.4	0.09	0.2	100.0	100.0	100.0	100.0
Combined concentrate	3.1	15.8	14.8	2.19	3.52	80.4	8.5	72.4	50.2

"The data given indicate that 80 percent of the copper, 72 percent of the gold, and 50 percent of the silver are recoverable in a combined sulfide and oxide concentrate assaying 15.8 percent Cu, 2.19 ounces Au, and 3.52 ounces Ag per ton."

The value of the ore represented by this test is calculated as follows:

Gold:	0.09 ounce x .72 (percent recovery) x $31.00	=	$2.00
Silver:	0.2 ounce x .50 (percent recovery) x $0.70	=	.07
Copper:	0.61 percent or 12.2 pounds x .80 (percent recovery) x $0.21	=	2.05
	Total value per ton		$4.12

The milling charge would probably be in excess of $2.50 a ton.

INDICATED PROFIT OR LOSS

Estimated mining and milling costs are $1.50 and $2.50 a ton, respectively, or a total of $4.00 a ton. Ore containing 0.09 ounce gold and 0.1 ounce silver per ton and 0.6 percent copper could yield

$4.12 a ton. In addition to mining and milling, such charges as royalty, concentrate freight costs, and smelter treatment of concentrates must be added.

A profit is not indicated under present economic conditions.

CONCLUSIONS

The Copper King deposit is reasonably large but very low grade. Although the applicant credits the property with about 1,000,000 tons of ore to a depth of 200 feet, averaging 0.097 ounce gold and 0.23 ounce silver per ton and 0.59 percent copper, available data indicates a smaller body of ore to this depth, assaying 0.06 ounce gold and 0.079 ounce silver per ton and 0.403 percent copper.

A project of diamond drilling for 2,485 feet at a total estimated cost of $17,000.00 would adequately explore and indicate the merits of the property.

The ore above 80 feet from the surface is predominately in oxide form and below 80 feet to 130 feet is a combination of oxide and sulfide minerals. Low-grade copper oxide ore adds considerable complexity to economical beneficiation.

Geologically, the attitude of joints and fractures controlling mineral deposition appeared to trend in almost any direction. It is doubtful if diamond drilling from the surface at an angle as proposed by the applicant would materially increase the grade of ore reserves.

The Copper King Mining Company expressed no desire to operate the property but prefers to sell its interests. There is at present no prospective purchaser although at least three large operating mining companies have made examinations.

Economically, a profit is not indicated from an operation at the property at the present time. However, in the foreseeable future, economic conditions may change and the demand for critical minerals may become sufficient to make the deposit worthy of consideration as a source of copper or gold.

RECOMMENDATIONS

The application is recommended for denial.

amh

FILE COPY
SURNAME:

200

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

Mr. W. H. King
Executive Officer
Region IV
Bureau of Mines
224 New Customhouse Building
Denver 2, Colorado

AUG 20 1952

Dear Mr. King:

Enclosed herewith are three copies of Application Form MF-103 submitted by the Copper King Mining Company, Docket No. DMEA-2655, which we are forwarding to you for processing under your delegation of authority.

In view of the location of the proposed project on state-owned lands, we are also enclosing a memorandum written by Mr. Ernest Wm. Ellis of this office, which sets forth the procedure recommended for handling of this application, together with the documents referred to in Mr. Ellis' memorandum. The document entitled "Application for Loan Under the Defense Production Act" is not a part of the official application. However, it contains some information not in the current Form MF-103 which may be useful to you.

Mr. Ellis would like to have the document, "Application for Loan Under the Defense Production Act", returned to him, when you no longer need it.

Sincerely yours,

signed

Wingfield Chamberlain, Acting Chief
Operations Control & Statistics Div.
Defense Minerals Exploration
Administration

Enclosures

WChamberlain/meb
8-19-52
cc to: Adm.Reading File
Mails & Files Br.
Mr. Ellis

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

August 18, 1952

Memorandum

OK
Com

To: Robert E. Adams, Chief
Operating Control & Statistics Division

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-2655 (Copper)
Copper King Mining Co. (State-owned land)
Laramie County, Wyoming

After a discussion with Legal as to the method of handling the above-captioned docket, it is recommended that the application be forwarded to Region IV to be handled under that Region's delegation of authority, but with this proviso:

(1) If Region IV recommends a contract in the approximate amount of that requested by the Applicant, Region IV will proceed to draw up such a contract under its delegation of authority. However, such contract is to be submitted to Washington, before it is signed, for the sole purpose of placing the contract before the Policy Committee in order that a decision may be reached regarding the waiver of the Owner's Consent to Lien requirement on state-owned land. It is to be noted here that the State is apparently unable to submit an Owner's Consent to Lien.

(2) If Region IV recommends a denial, then the application, of course, will be treated as any like application falling within Region IV's delegation of authority.

In addition to the current application, it is suggested that the information entitled "Application For Loan Under The Defense Production Act", submitted under docket No. DMA-647, and a copy of map "A" and map "B" be sent to the Field. This information is to be returned to Washington when a proposed contract (if any) is sent to this office.

Ernest Wm. Ellis

Ernest Wm. Ellis

700
FILE COPY
SURNAME:

Ellis

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

August 18, 1952

Memorandum

To: Robert E. Adams, Chief
Operating Control & Statistics Division

From: Ernest Wm. Ellis, Chief
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EWEllis/gla 8-18-52 Ernest Wm. Ellis
cc to: Adm. Reading File
Docket
Mr. Ellis
DMEA Field Team, Region IV(2)

Mr. Harry E. Ferguson
Copper King Mining Co.
408 Boyd Building
Cheyenne, Wyoming

Subject: DMEA-2655
Re: Exploration Assistance
Copper King Mine
August 19, 1952

My dear Mr. Ferguson:

The receipt of your application dated August 7, 1952, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2655 and referred to Mr. W. H. King, Executive Officer, DMEA Field Team, Region IV, Bureau of Mines, 224 New Customhouse Building, Denver 2, Colorado.

All of the material from your previous application has been transferred to the new docket, DMEA-2655.

Kindly refer to DMEA-2655 in any future correspondence relating to your application.

Sincerely yours,

SIGNED
Wingfield Chamberlain
Acting Chief, Operation's
Control and Statistics Division

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-2655
Metal or Mineral
Date Received 8-8-52
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: Copper King Mining Co. 408 Boyd Building, Cheyenne, Wyoming Incorporated in the State of Wyoming. President, Harry E. Ferguson, Box 621, Cheyenne, Vice-President, Andrew E. Roedel, Box 337, Cheyenne, Secretary, Patrick W. Dinneen, Sr., 3716 Warren Ave., Cheyenne, Treasurer, Harry E. Ruckman, 213 W. 6th Ave., Cheyenne.

(*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.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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 All of Section 36, Township 14, Range 70w., Laramie County, Wyoming.

(*b*) State any mine name by which the property is known. Copper King 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.

(*e*) If you own the land, describe any liens or encumbrances on it

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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 project.*—(*a*) [redacted]e the mineral or minerals for which you wi[redacted] explore Copper, gold and silver

(*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 Three 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 [ ] 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 _____, 195__

Copper King Mining Co.
(Applicant)

By Harry E. Ferguson President

Patrick W. Dinneen Jr. Secretary

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

4. Physical description.

(a) Prior to 1900 the property was developed by a shaft 157 feet in depth. Drifts were driven on the 80 and 130 foot levels from this shaft, amounting to about 300 feet. Tunnels were driven into the hill at various points within a one -half mile radius of the shaft, the total amount of tunnel work being about 800 feet. During 1938 the property was developed by 1000 feet of vertical diamond drilling within the mineralized dyke and 400 feet of diamond drilling outside of the heavily mineralized area. The Copper King Mining Co. was not interested in any previous exploration operations.

Ladders have been installed in the shaft and all drifts and tunnels are accessible for examination purposes.

(b) There are no records of past production.

There is an ore reserve indicated by diamond drill holes and by sampling of the shaft and drifts, This reserve is in a zone 150 feet wide and 400 feet long and 200 feet in depth, and will provide one million tons of ore. The ore averages .5% copper, .097 oz. in gold and .23 oz. in silver.

(c) The area to be explored consists of a mineralized dyke extending east and west from the main shaft for a distance of about 2000 feet and 300 feet in with. It is believed that a higher average grade for the whole structure will result from new drilling pointed mainly across the structure instead of vertically in the structure as are the present holes.

The enclosed map will show the area to be developed, the location, direction, and depth of diamond drilling. In a previous application (Docket No. DMA-647) copies of the drill logs, a report on the Arizona Mine (correct name is the Copper King) by C.E. Jamison, and maps were enclosed.

(d) The property is one mile from a good county road, and an automobile may be driven to all sections of the area to be developed. The mine is 22 miles west of Cheyenne, 10 miles west of Silver Crown on the Colorado and Southern Railway, 3 miles north of Granite Canon and 8 miles east of Buford. Granite Canon and Buford are both on the Union Pacific Railway and U.S. Highway 30.

(e) It is believed that employees can be found locally, several men have inquired about obtaining employment. Several firms in Cheyenne and Denver have telephoned or written, saying that they could supply the necessary materials, supplies, and equipment.

Water is available in Crow Creek within one-half mile from the mine. Additional water can be developed 500 to 1000 feet in any direction from the property.

Electrical power (Public Service Co.) is available one-half mile north of the mine.

(b) The diamond drilling will block an area 1000 feet long, 300 feet wide, and 200 feet deep. Estimating that 12 cubic feet would equal a ton, the proposed work will provide approximately 5,000,000 tons of ore. The boundary lines on each side of the area are the approximate contact of the diorite dyke and the gray granite, however the location of the drill holes may be shifted to the north or south as the drilling progresses. (See enclosed map of the area and cross sections).

(d) The Copper King Mining Co. will be managed by:
Andrew E. Roedel, owner and manager of the A.E. Roedel Drug Company, and a director of the Stock Growers National Bank of Cheyenne.
Patrick W. Dinneen, Sr. a licensed real estate broker in Wyoming and Colorado.
Harry E. Ruckman, owner and manager of the Pepsi-Cola Bottling Company of Cheyenne.
Harry E. Ferguson, employed for over twenty years by the City of Cheyenne, in charge of collection, storage and transporation of water.

Harry E. Ferguson, a life time resident of the Silver Crown mining district, will direct the operations, with Theodore L. Johnston of Laramie, Wyoming the consulting engineer.
Mr. Johnston has assisted in the development of the property during the past year. He is a stockholder in the company, and will not receive a salary or fee for his services.

6. Estimate of Costs.

(a) Independent contracts	
4,928 feet of diamond drilling at $6.00 per foot	$29,568.00
Supervision, splitting and logging core at $ .10 per foot	492.80
Hauling water at $ .01 per gallon	246.40
(b) Labor, supervision, consultants.	
None.	
(c) Operating materials and supplies.	
Material for core boxes.	$695.00
1000 sample bags for core and sludges at $ .20	$200.00
(d) Operating equipment.	
Truck rental at $5.00 per day for 60 days.	$300.00
(e) Rehabilitation and repairs.	
None	
(f) New buildings, improvements, installations.	
None.	
(g) Miscellaneous.	
Assaying of core and sludges at 10 foot intervals for copper, gold and silver. 3000 assays at $1.00 each.	$2958.00
NOTE.— It is believed that a special rate on assaying may be obtained.	
	$34,460.20
(h) Contingencies.	
Ten percent of the total estimate of costs.	$3,446.00
Total	$37,906.20

7.
(b) The Copper King Mining Co. is selling 2,900 shares of common stock at $10.00 per share.

$ 9,000.00 deposited in the Stock Growers National Bank at this date.

Check on [redacted] 4/3/[illegible]
DMA 647 (Copper)
for latest
correspondence from
applicant. —
Did he send in
Expev application?

[illegible]

Harry Ferguson

[illegible]

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

Memorandum for Files April 10, 1952

Subject: DMEA-647 - Harry Ferguson

Hofflund and I discussed this case with Mr. Rose, at his request. The Attorney General for the State of Wyoming prepared a subrogation agreement in lieu of an owner's consent to lien. Hofflund prepared a memorandum pointing out why a subrogation agreement as proposed would be unacceptable. Rose concurred with Hofflund's opinion.

Rose wondered if we should establish a new policy whereby our usual requirement of subordination would be waived in the case of State-owned lands where State laws prohibit such subordination agreements. He made it clear that he did not wish an exception made in this particular case. Hofflund pointed out that no new policy need be established, nor would an exception be involved in this case, since we do waive subordination agreements in many instances.

Upon inspection of this file it was noted that a definite request for exploration has not been made by the applicant. I discussed the matter with Jack East, who phoned Denver and instructed that office to immediately mail the applicant forms MF-100 and 103, and to also request the applicant to furnish a copy of his lease from the State of Wyoming. Jack also instructed his office to assist the applicant in the preparation of the forms and the outlining of a definite exploration project.

Acting Administrator

FILE COPY
SURNAME:

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

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C. O. Mittendorf (fw)

Acting Administrator

COMittendorf/fw

cc: Admr. Reading File
Mails & Files

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

224 New Customhouse
Denver 2, Colorado

April 9, 1952

Mr. Harry E. Ferguson
Box 621
Cheyenne, Wyoming

Dear Mr. Ferguson:

Enclosed are forms MF-100, MF-103, DMEA-1 and Questions and Answers. It is suggested that you complete the forms MF-100 and MF-103 in quadruplicate and forward them to this office. We may be able to assist you in obtaining a contract for DMEA exploration assistance in connection with the work you wish to do on the Copper King Mine.

Please submit your plan of operation and maps illustrating the work you contemplate. May we also have a copy of the lease which you have with the State of Wyoming on the Copper King Mine. A photostatic copy would be acceptable.

In case you have difficulty completing these forms, you might wish to call at this office and we will assist you.

Very truly yours,

W. H. King

W. H. King, for
J. H. East, Jr.
Executive Officer
Field Team, Region IV

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 14 1952

Enclosures

cc: C. O. Mittendorf (2)

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

224 New Customhouse
Denver 2, Colorado

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W. H. King

W. H. King, for
J. H. East, Jr.
Executive Officer
Field Team, Region IV

Enclosures

cc: C. O. Mittendorf (2)

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

OFFICE OF THE
ASSISTANT SECRETARY

April 4, 1952

Air Mail--Special

My dear Pat:

I have a teletype today from J. H. East, Jr., Regional Director, Bureau of Mines, Denver, Colorado. He indicates that the State of Wyoming cannot enter into subordination or consent to lien agreements in re your application for exploration loan in Wyoming.

This then is to advise you that I will have a policy meeting on this subject this coming Monday with an eye to relieving you of this requirement since it is my opinion that the Defense Minerals Exploration Administration will have to make some adjustment to the arrangements concerning applications on State lands.

I will keep you informed as to progress and you may expect that the matter will be resolved in the immediate future.

The teletype to which I refer indicates that a representative from the State of Wyoming will be in to submit a counter-proposal this coming week. I see no necessity for his coming if that is his only purpose because, as I say, I am confident we will be able to take care of it just as soon as I can call a conference on Monday.

My warm personal regards.

Sincerely,

Robert R. Rose,

Robert R. Rose, Jr.
Assistant Secretary

Mr. Patrick W. Dineen, Sr.
210 West 23d Street
Cheyenne, Wyoming

RRRose:law

Copy to Mr. C. O. Mittendorf

Mr. Johnson says: 3/19/52

Re: DMA-647 - Cheyenne, Wyoming.

We received docket from DMPA and these people have not filed an application for exploration with us. But we found that there was a question of Subordination Agreement, so we wrote to them asking about it, to call their attention to the fact that it would be necessary, if they did file an application, In order to be able to make a contract, we would have to have that or a guarantee. Have not heard from that.

Information in the file is that this property has been drilled by the Bureau of Mines some time ago (before there was a DMA) and Bureau thought it had possibilities. Were inclined to favor it.

4/2/52
Talked via phone with Jack Rash. He has not heard from Riedel - Sent him owners consent to lien - but no response. Informed Rose accordingly.
CM

FILE COPY
SURNAME:

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

MAR 1 0 1952

Mr. Patrick W. Dinneen

Cheyenne, Wyoming

Re: DMA-647

Dear Mr. Dinneen:

Your letter dated February 25 and addressed to Mr. Robert S. Palmer, at Washington, D. C., has been referred to the Defense Minerals Exploration Administration for consideration. The problem you cite concerns the inability to obtain a signed Subordination Agreement from the State of Wyoming, which is necessary before the subject exploration application can be finalized.

I wish to advise you that on March 4, 1952 Mr. J. H. East, Jr., Executive Officer of Region IV, brought the matter to our attention and furnished us with a copy of Mr. John Riedel's letter which set forth the position of the Commissioner of Public Lands and Farm Loans for the State of Wyoming. Immediately after knowledge of the situation, we referred the matter to our Chief Counsel for his consideration. It was the opinion of our legal staff that the State of Wyoming would probably have no difficulty in executing an Owner's Consent to Lien, which is a new type of agreement that has replaced the Landlord's Subordination Agreement to which they raise objections.

We have requested Mr. East to contact Mr. John Riedel to ascertain whether or not the State of Wyoming feels that it can execute the new form. Further action in the case is awaiting advice from the Regional Office.

Sincerely yours, 3/18

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

COMittendorf/fw/pa

cc: Mr. Robert S. Palmer
Mr. Julian W. Feiss
Admr. Reading File
Docket File

DEFENSE MATERIALS PROCUREMENT AGENCY
WASHINGTON 25, D. C.

March 12, 1952

Memorandum

To: Mr. C. O. Mittendorf, DMEA

From: Julian Feiss, DMPA

Subject: Letter to Robert S. Palmer from Patrick W. Dinneen, Sr., dated 2/25/52

The accompanying communication addressed to Bob Palmer has just come into our office. In view of the fact it apparently involves a subordination agreement and appears to involve an exploration item, I am transmitting it over to you.

I would suggest that Mr. Palmer be informed of any action that might be taken on this. He is one of our consultants for Howard I. Young at the present time. If you think it more desirable to transmit this directly to Mr. Palmer there would be no objection, but I expect that in view of the docket number as indicated, you will wish to look it over first and take appropriate action. Mr. Palmer's address is as follows:

Mr. Robert S. Palmer
Executive Director
The Colorado Mining Association
204 State Office Building
Denver 2, Colorado

J. W. Feiss

Julian W. Feiss

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 13 1952

210 West 23rd Street
Cheyenne, Wyoming
February 25, 1952

Mr. Robert S. Palmer
Executive Director
The Colorado Mining Association
7029 General Service Building
Washington 25, D.C.

Dear Bob:

Re: your very kind letter of February 15, 1952. I am enclosing a copy of the letter from the Board of Land Commissioners of the State of Wyoming to the United States Department of the Interior. Any assistance that you may give us in this matter will be greatly appreciated. Our number is Docket No. D.M.A. 647.

With kindest regards, we remain

Harry E. Ferguson and Patrick Dinneen, Sr.
By Patrick W Dinneen Sr

Enclosure

P.S. I sent a copy to Robert E. Rose, Assistant Secretary of the Interior. When he was in Cheyenne, February 21st, he said to send it to him and he would do all he could to help matters along. I did not send one to Mr. Mittendorf.

COPY

February 19, 1952

United States Department of the Interior
Bureau of Mines
1600 East First South Street
Salt Lake City 1, Utah

ATTENTION: Stephen R. Wilson, Chief
Utah-Wyoming Branch - Mining Division

Re: Lease No. O-5169
Lode Mining Lease - Gold, Silver & Copper
All Section 36-12-70
Harry E. Ferguson & Patrick W. Dinneen Sr.
LAND LORD'S SUBORDINATION AGREEMENT

Dear Mr. Wilson:

At the request of Harry E. Ferguson and Patrick W. Dinneen, Sr. the matter of the Landlord's Subordination Agreement was taken up with the Attorney General, Mr. Harry S. Harnsberger. In the opinion of Mr. Harnsberger, the Board could not assume liabilities as suggested in the Subordination Agreement, because the Board does not have authority to assume liabilities. It would require an act of legislature through an enabling act to provide the proper authority.

The Attorney General further stated, that the Land Board could not sign an agreement that would inhibit the State from collecting rentals or royalties, nor has the Board the authority to waive rental or royalty rights to the Government or its agents.

Mr. Dinneen and Mr. Ferguson requested this office to advise you regarding the above and having in view some other way of complying with your requirements.

I believe, you will find in the lode mining lease, signed by Dinneen and Ferguson, that they may make assignments of the lease, which would transfer all obligations and which are binding upon the assignee, with the approval of the Board of Land Commissioners.

Under that section of the lease, I can see where your requirements, as set out in your Subordination Agreement, could be covered and give you the protection you seek by the Subordination Agreement.

Since we can not complete form MF-202, I suggest a further exploration of the lode mining lease now in effect for a solution of this problem. For the good of the State of Wyoming, we are very much interested in the mining operations contemplated by Dinneen and Ferguson and, therefore, will entertain any suggestion from you or the principals that will offer a solution.

It is possible to add a section to the lease or modify any section in the lease, which will fulfill your demands, always subject to the approval of the Board of Land Commissioners.

Very truly yours,

John Riedel
Commissioner

JR/vh

PAT DINNEEN Realtor
210 WEST 23RD STREET
CHEYENNE, WYOMING

CHEYENNE, WYO.
FEB 27
10-AM
1952

AIR MAIL
6¢

Mr. Robert S. Palmer
Executive Director
The Colorado Mining Association
7029 General Service Building
Washington 25, D.C.

Missent to Chicago, Ill

FILE COPY
SURNAME:

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

March 11, 1952

Not stripped in R v R.

Memorandum

To: J. H. East, Jr., Executive Officer, DMEA Field Team, Region IV

From: Chief Counsel

Subject: Copper King Mine, Laramie County, Wyoming — Subordination Agreement DMEA-647

Your memorandum of March 4 to Mr. Mittendorf has been sent to me for reply.

I understand from your memorandum and from the attached copy of a letter dated February 19 from the State of Wyoming Commissioner of Public Lands and Farm Loans to you, that the State feels that it cannot execute the Landlord's Subordination Agreement.

I gather from the correspondence that the State officials have seen only the old form of subordination agreement, and that the new form of Owner's Consent to Lien, set forth in DMEA Circular 7 has not been presented to the State for its use. I believe that you would find that the State would have no difficulty in executing the new form, and therefore suggest that before we explore the matter any further, you ascertain if this is not the case.

DMEA 1 (formerly MO-5) was published today, the new contract forms have been approved, and we will shortly be able to distribute, for your more convenient use, printed forms of the Owner's Consent to Lien.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

JLHofflund/bjl

Copy to: Mails & Files
Admin. Reading File
J. L. Hofflund
Chron.

UNITED STATES 13771

DEPARTMENT OF THE [redacted]RIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REFERENCE SLIP

MAR 1 0 1952

DATE.....

REFERRED TO:

1. ~~Code 100~~
2. .....
3. .....
4. ~~Hoffman~~

FOR:

.....Action	.....Recommendation
.....Approval	.....Record
.....Comment	of.....
.....Conference	.....Referring
.....Consideratio	to.....
.....Filing	.....Ready for signa-
.....Instructions	ture of.....
.....Investigation	.....Rewriting
.....Initials	.....Signature
.....Mailing	.....Suggestions
.....Previous correspondence	.....Your informtion

RECEIVED
MAR 10 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

REMARKS:.....

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initial of sender

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

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

224 New Customhouse
Denver 2, Colo.

March 4, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952
xno. 3/12/53

Memorandum

To: C. O. Mittendorf

From: J. H.East, Jr., Executive Officer, Field Team, Region IV

Subject: Copper King mine, Laramie County, Wyoming

The lessees of the Copper King mine, Laramie County, Wyoming are attempting to make application for DMEA exploration assistance, but they find that the owner, The State of Wyoming, cannot give them a subordination agreement.

Our engineers have examined the property and recommended a Bureau drilling program before DMA was organized. We believe the property has possibilities and we would like very much to see the exploration program activated. Please give us any information or suggestions that will help in this matter.

A copy of a letter from Mr. John Riedel, Commissioner, State of Wyoming, Office of Commissioner of Public Lands and Farm Loans, to Mr. S. R. Wilson, Chief, Utah-Wyoming Branch - Mining Division, Salt Lake City, Utah, concerning the problem is attached.

J. H. East, Jr.

J. H. East, Jr.

Enclosure

John Riedel, Commissioner COPY F. Rogers, Deputy Commissioner

STATE OF WYOMING

Office of

Commissioner of Public Lands and Farm Loans

Cheyenne

February 19, 1952

MAR 10 1952

United States Department of the Interior
Bureau of Mines
1600 East First South Street
Salt Lake City 1, Utah

ATTENTION: Stephen R.Wilson, Chief
Utah-Wyoming Branch - Mining Division

Re: Lease No. 0-5169
Lode Mining Lease - Gold, Silver & Copper
All Section 36-12-70
Harry E. Ferguson and Patrick W.Dinneen, Sr.
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Mr. Dinneen and Mr. Ferguson requested this office to advise you regarding the above and having in view some other way of complying with your requirements.

I believe, you will find in the lode mining lease, signed by Dinneen and Ferguson, that they may make assignments of the lease, which would transfer all obligations and which are binding upon the assignee, with the approval of the Board of Land Commissioners.

Under that section of the lease, I can see where your requirements, as set out in your Subordination Agreement, could be covered and give you the protection you seek by the Subordination Agreement. Since we cannot

complete form MF-202, I suggest a further exploration of the lode mining lease now in effect for a solution of this problem. For the good of the State of Wyoming, we are very much interested in the mining operations contemplated by Dinneen and Ferguson and, therefore, will entertain any suggestion from you or the principals that will offer a solution.

It is possible to add a section to the lease or modify any section in the lease, which will fulfill your demands, always subject to the approval of the Board of Land Commissioners.

Very truly yours,

/S/ John Riedel
Commissioner

JR/vh

cc: Harry E. Ferguson
Box 621, Cheyenne, Wyoming

Docket Control Center

December 19, 1951

Chief, Copper Branch
Director, Program Development

Application for a Production Loan of Mr. Henry Ferguson, Box 681, Cheyenne, Wyoming, DMA-647, Commodity-Copper

This application is to be withdrawn as a production loan and transferred to Defense Minerals Exploration Administration in care of Mr. E. W. Ellis, Room 4070 New Interior Building, since the applicant will apply for aid for an exploration project at a future date.

Transmitted herewith is the complete file consisting of:

1 Application for loan
1 Diamond Drill Hole No. 1
1 Report on the Arizona Mine 1912
1 DMA Referral of application for Government aid
5 Letters to H. Ferguson from
  Tom Lyon, Feb. 19, 1951
  J. B. Gowen, April 10, 1951
  J. B. Gowen, April 19, 1951
  Tom Lyon, Aug. 30, 1951 (2 copies)
  J. B. Gowen, Sept. 21, 1951
2 Letters from H. Ferguson to
  Tom Lyon, Sept. 18, 1951
  J. B. Gowen, Oct. 31, 1951
2 Letters to Hon. Joseph C. O'Mahoney from
  R. J. Hofman, Feb. 8, 1951
  James Boyd, Feb. 27, 1951
1 Report on Arizona Group
2 Maps on Copper King Mine

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

FRC 12/28

Attachments

Approved:

A. B. Parsons

Tom Lyon, Director
Program Development Division

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1952

WVaughn:as
12/19/51
cc: Young
Feiss
Douglas
Lyon
Gowen
Field Team IV
DMPA-Files

647

Box 621
Cheyenne, Wyoming
October 31, 1951.

Mr. J. B. Gowen, Chief
Copper Branch
Defense Minerals Administration
United States Department of the Interior
Washington 25, D. C.

Dear Mr. Gowen:

We have recently completed pumping water from the shaft and drifts of the Copper King Mine.

An examination of the mine will be made by the Bureau of Mines (Region IV) at an early date.

We will then organize a mining company and sell sufficient shares to local investors in order to match the amount requested in an application for exploration assistance.

Yours very truly,

Harry Ferguson

Harry Ferguson

OFFICIAL FILE COPY

To	Init.	Date
310	87	11/5
Rec 310	PK	11/5

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

October 5, 1951

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

RE: DMA-647

My dear Mr. Ferguson:

Reference is made to your application for a loan under Section 302 of the Defense Production Act of 1950, filed with the Defense Minerals Administration on February 12, 1951. The proper loan application forms NSRB-146, MF-101, or MF-102 have not been filed by you as a part of your application.

This Administration will accept properly completed loan application forms NSRB-146, MF-101 or MF-102 on your present application up to October 12, 1951. Unless properly completed forms are filed with this Administration on or before that date your application will be considered withdrawn.

If you wish to make application for a loan under Section 302 of the Defense Production Act subsequent to October 12, 1951, your application should be filed with the Reconstruction Finance Corporation in accordance with Executive Order 10281, dated August 28, 1951.

This letter supersedes any previous instructions you may have received regarding the filing of loan application forms with this Administration.

Sincerely yours,

Tom Lyon, Director
Supply Division

This application is being considered for exploration aid.
Straight loan converted to exploration loan.

J R Gowen

5904

310

FILE COPY
SURNAME:

Gowen

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

A. E. R.

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

Re: Docket No. DMA-647

Dear Mr. Ferguson:

This is to acknowledge your letter of September 10, 1951 requesting some additional information.

Regulations require that before the Government will guarantee a private loan one must have a proven ore body of sufficient tonnage and grade to amortize the loan in a given period of time. Since your property is still in the exploratory stage as evidenced by your application requesting in part funds for diamond drilling to explore known mineralized structures, it is doubtful whether you could qualify for this type of assistance. Therefore, if you wish to apply for exploration aid we would be glad to consider your application. With this application should be included evidence showing your rights to the land.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

JBGowen (9/21/51)
Copy to: Administrator's Reading File
Executive Officer, Region IV
Copper Branch
Files - DMA Docket

Cheyenne, Wyoming
September, 10,1951

Mr. Tom Lyon, Director
Supply Division
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

DMA-647

Dear Mr. Lyon:

Thank you for your letter of August, 30, 1951 regarding my application for a loan.

The property involved is owned by the State of Wyoming (school section) therefore I am unable to secure a subordination agreement, in order to preserve a Government lien on the property.

Under instructions on Form MF-100 Government guarantee of a private loan, is listed as one form assistance. Would this form of assistance apply to this property?

This property was examined and approved by the Bureau of Mines (Region 1V) in October 1950.

It is my belief that the property would have been core drilled this year, if the Bureau of Mines core drilling program had been continued.

NT Wade
has nothing
on this property.

Very truly yours,

Harry Ferguson

Harry Ferguson
Box 621
Cheyenne, Wyoming

SEP 14 10 01 AM '51
DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D.C.

310

Surname: Gowen

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

AUG 30 1951

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

RE: Docket No. DMA-647

Dear Mr. Ferguson:

In reviewing your application for a loan we find that you have not submitted sufficient information to enable us to determine the merits of your request. In order to expedite the handling of this matter and to enable us to evaluate your request, it is requested that you fill in completely the attached loan application form and return it to this office within 60 days from the date of this letter.

In the event we do not hear from you regarding this matter within 60 days we will assume that you are not now interested in such a loan. Should we not receive the additional information requested herein we will record your application for a loan as withdrawn.

This action will not, however, preclude you from submitting at a later date a completed application for a loan or an application for any other type of assistance that may be available under the provisions of the Defense Production Act.

Sincerely yours,

Tom Lyon
Tom Lyon, Director
Supply Division

J.F. 8/30

Attch.

8/29/51
Copy to: Adm. Reading File
Reports and Records Branch
Executive Officer, DMA Field Team IV
Copper Branch
Files - Docket No.

FILE COPY
SURNAME:

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

April 19, 1951

Docket No. DMA-647

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

Dear Mr. Ferguson:

Enclosed herewith is a copy of a press release dated April 11, 1951, a copy of the pertinent regulations, Form MO-5, also five copies each of the Form MF-100 (General Technical Data) and Form MF-103 (Application for Aid for an Exploration Project).

Very truly yours,

J. B. Cowen
J. B. Cowen, Acting Chief
Copper Branch, DMA

Enclosures

JBCowen:bal

Copy to: Executive Secretary
Copper Branch
Files

Owner 647

856

FILE COPY
SURNAME:

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

April 10, 1951

Re: Docket No. DMA-647

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

Dear Mr. Ferguson:

A study of your loan application for the Copper King Mine, Laramie County, Wyoming, indicates that this should be considered as an exploration project for which direct loans are not being made. The enclosed press release of February 20, 1951 describes in general terms a program for assistance in exploration work which we hope will soon be put into effect. The assistance will be on the basis of matching funds. If after studying the attached notice you wish to apply for assistance on such basis, we will gladly send you the regulations and application forms when they become available.

You mention recent examinations by the American Smelting and Refining Company, Kennecott Copper Corporation, and New Jersey Zinc Company. It might be helpful to see their reports. Would you authorize us to approach these companies for this purpose?

Very truly yours,

J. B. Gowen
J. B. Gowen, Acting Chief
Copper Branch, DMA

Enclosure

JJCollins:pf

Copy to: Executive Officer, DMA Field Team, Region IV,
224 New Customhouse, Denver 2, Colorado
Executive Secretary
Copper Branch
Files

Owner 647

856

FILE COPY
SURNAME:

Johnson
Copy on

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

February 27, 1951

Re: Docket No. DMA-647

Hon. Joseph C. O'Mahoney
United States Senate
Washington 25, D. C.

My dear Senator O'Mahoney:

This is in reply to a recent inquiry from your office concerning an application by Mr. Harry Ferguson, Box 621, Cheyenne, Wyoming, for a loan under the Defense Production Act. The matter was brought to your attention by letter dated February 8, 1951, addressed to you by R. J. Hofmann, President, The American National Bank, Cheyenne, Wyoming. Mr. Hofmann sent you a copy of the application submitted by Mr. Ferguson.

Mr. Ferguson's application was received by the Defense Minerals Administration, February 12, 1951, was assigned Docket Number DMA-647 and was acknowledged in a letter to Mr. Ferguson dated February 19. It has been referred to the Copper Branch for consideration. Review of the application shows that it is for the initial purpose of exploring mineralized areas that have as yet been only partly explored. The project is not yet in the stage when a loan for production purposes should be considered, but rather is an exploration project. We will, therefore, send Mr. Ferguson full details of the Defense Minerals Administration exploration program so that he may decide whether or not he wishes to apply for assistance thereunder.

Your interest in this matter is appreciated. Mr. Hofmann's letter is returned herewith.

Sincerely yours,
JAMES BOYD

Administrator
Defense Minerals Administration

Enclosure

CHJohnson:pf

Copy to: Mr. Thos. H. Miller
Executive Officer, DMA Field Team, Region IV,
224 New Customhouse, Denver, Colorado
Executive Secretary, DMA
Copper Commodity Committee
Files

DMA 647

856

THE AMERICAN NATIONAL BANK
OF CHEYENNE

R. J. Hofmann
President

CHEYENNE, WYOMING

February 8, 1951

The Honorable Joseph C. O'Mahoney,
Senator from Wyoming,
Senate Office Building,
Washington 25, D. C.

Dear Joe:

Harry Ferguson has asked me to forward to you the enclosures which I believe are self explanatory.

Harry has lived in the Silver Crown area all his life and feels that there is sufficient copper in that territory to justify expenditure by the Bureau of Miles to diamond drill and determine definitely whether or not it would be feasible to mine and mill the ore.

As I understand it, they have made application to the Bureau of Mines and would like to have any help that you may be able to give them in bringing this matter to a head. I do not know a great deal about the practicability of this matter but there is a possibility that something could develop that would be of benefit to the war effort.

Kindest personal regards from Bess and myself to you and Mr. O'Mahoney.

Yours very truly,

/s/ Rudy

President

RJH:cjz
Encl'

February 19, 1951

Mr. Harry Ferguson
Box 621
Cheyenne, Wyoming

DMA - 647
The Copper King Mine
Laramie County, Wyo.

Dear Mr. Ferguson:

Your application for a loan has been received and assigned the above docket number (DMA - 647). All future correspondence should bear this number.

We will consider your application at the first opportunity and let you know what decision has been reached.

Very truly yours,

Tom Lyon

Tom Lyon, Chief
Copper Branch

TLyon/apd

CC - Executive Secretary
Executive Officer, Field Team, Region IV
Copper Commodity Committee
Files

United States Senate

MEMORANDUM

Mr. Feiss:

Attached is self-explanatory. Would you please secure report for Senator O'Mahoney on progress of application of Mr. Ferguson for diamond-core work on his properties which apparently has been filed with Bureau of Mines.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 2/19

REFERRED TO:
1. Mr. Lyon
2.
3.
4.

FOR:

_____ Action

_____ Approval

_____ Comment

_____ Recommendation

* Reply for signature of Boyd

_____ Your information

REMARKS: Copy for Stuart
" " Files.
" " Field Office
" " Tom Miller

Check (X) before the items needing attention.

L.J.S.
Initials of sender.

Interior - Bureau of Mines, Pittsburgh, Pa.

THE AMERICAN NATIONAL BANK
OF CHEYENNE

R. J. Hofmann
President

CHEYENNE, WYOMING

February 8, 1951

COPY

The Honorable Joseph C. O'Mahoney,
Senator from Wyoming,
Senate Office Building,
Washington 25, D. C.

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Kindest personal regards from Bess and myself to you and Mr. O'Mahoney.

Yours very truly,

/s/ Rudy

President

RJH:cjz
Encl'

THE AMERICAN NATIONAL BANK
OF CHEYENNE

R. J. Hofmann
President

CHEYENNE, WYOMING

February 8, 1951

COPY

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Senate Office Building,
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Yours very truly,

/s/ Rudy

President

RJH:cjz
Encl'

DEFENSE MINERALS ADMINISTRATION

Mr. Richardson

Referral of Applications for Government Aid

Docket No. DMA-647

Commodity: Copper

Name of Applicant: Mr. Harry Ferguson

Address of Applicant: Box 621
Cheyenne, Wyoming

Name of Property: The Copper King Mine

Location of Property: Laramie County, Wyoming

Nature of Application: Loan

Action Dates

Application: No date shown on application

Received: 2/12/51

Acknowledged:

Referred to ~~COPPER AND MOLYBDENUM~~ Committee: 2/16/51

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Joplin, Missouri

OFFICIAL BUSINESS

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

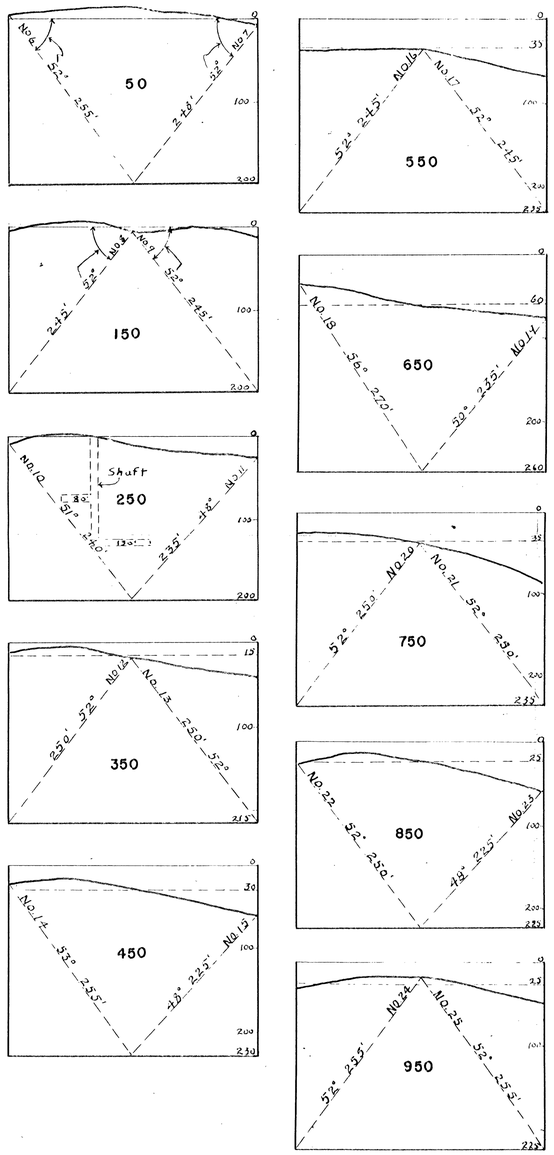
JOPLIN
AUG 11
10 AM
1952
MO.

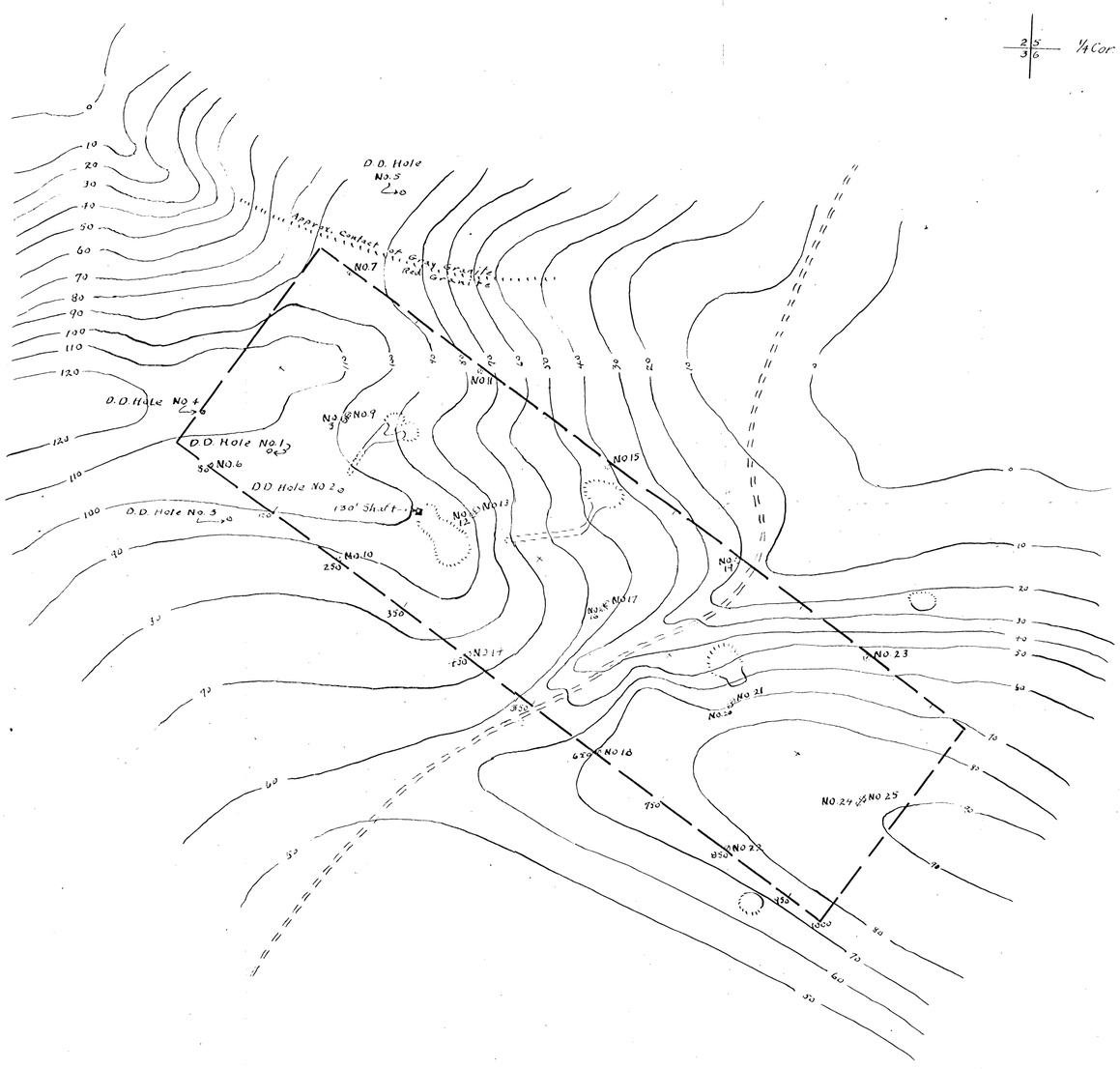
Operating Committee
Defense Minerals Exploration Administration
U. S. Department of Interior
Washington 25, D. C.

ELEVATIONS OF 100 FT. SECTIONS

DEPTH AND DIP OF DIAMOND DRILL HOLES

SHAFT COLLAR ELEV. = 0.





PROPOSED
DIAMOND DRILL
EXPLORATION OF
COPPER KING MINE

SILVER CROWN MIN. DIST.
LARAMIE COUNTY
WYOMING
SEC. 36. T14N. R70W.
1" = 100' T.L.J MAY 52

AREA TO BE EXPLORED