Refer to	Noted	Date
Answered		

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUL 18 1951
SAN FRANCISCO, CALIFORNIA

July 16, 1951

IDAHO MARYLAND MINES CORPORATION
Russ Building, San Francisco, Cal.
Application for Exploration Loans
for the Development of Tungsten Reserves.

Hon. James Boyd, Director
Defense Minerals Administration,
United States Department of Interior,
Washington 25, D.C.

Dear Sir:

In connection with the above named subject, we submit the following:

PRELIMINARY STATEMENT

The Idaho Maryland Mines Corporation is a going concern engaged in exploring and producing gold and silver ores and processing them into gold and silver bullion at their mines in Grass Valley, Nevada County, California. Except for the period when the mines were shut-down under War Production Order L-208 during World War II, this corporation has continuously produced gold and silver bullion in substantial amounts since 1926, and it is currently producing bullion at the rate of approximately $2,000,000 annually.

The Company is currently producing from the Idaho Maryland group of claims and the Brunswick Consolidated group of claims, which are contiguous and connected by underground development. The Union Hill group of claims are also contiguous but no producing activities have been conducted within this group of claims since 1919 and the mine shaft and workings therein are filled with water. During World War I, before the phenomena of florescence of scheelite was known, the occurrence of scheelite was recognized within the Union Hill system of veins and several shipments of crude ore produced from this property were made in 1918. During World War II reconnaissance surveys were made within all of the properties owned by this corporation and the occurrence of scheelite was recognized throughout all their properties, but all of the evidence indicated a gradual concentration in the vicinity of the Union Hill system. In other words, the survey revealed that the higher grade of scheelite occurred in those workings which were closer to the Union Hill system. Exploration on the dumps which came from the Union Hill area evidenced the higher concentration of scheelite than on any of the other dumps in the district.

Scheelite occurs primarily within the quartz vein from which gold and silver are produced so that it may be said that any tungsten which should be recovered could be considered a bi-product of the yield of gold and silver. The ores of gold and silver would be mined, and commingled with these ores would be the tungsten minerals, and it is quite possible that the recovery of the gold and silver would be sufficient to pay for all the explorations and the production costs leaving the tungsten value as a bi-product profit.

For the past three years this corporation has retained the services of Dr. Carleton D. Hulin, one of the outstanding consulting geologists of America. Dr. Hulin is especially qualified as an expert in the specialized field of geology as it relates to the occurrence and deposition of tungsten minerals because he has for a number of years served the Bradley Mining Company in connection with their exploration and development of tungsten ore deposits at Stibnite, Idaho and at Patterson, Idaho. He also serves as consulting geologist for the Tungsten Mining Company at their mines in North Carolina. He serves also the Homestake Mining Company and a number of other large mining corporations. The corporation has also employed the services of Mr. H.B. Menardi of Western Machinery Company, as a metallurgical consultant to work out problems relating to the recovery of the tungsten minerals which are being produced currently from the mines being operated by Idaho Maryland. Upon the recommendations of Dr. Hulin and Mr. Menardi the company is now engaged in installing within the metallurgical plants of the company such equipment as they deem necessary to recovering a portion of the tungsten minerals which are components of the gold and silver ores now being treated.

From the foregoing it should seem clear to you that the application of Idaho Maryland Mines Corporation is in the nature of an application for a development loan as distinguished from a purely exploratory loan. In other words the company desires to explore within the confines of the Union Hill system where the chances of finding richer tungsten bi-products are higher than they are in other areas within the properties owned by the company.

We desire to emphasize these facts:

1. That the Company is a going concern ready immediately with its mine, its metallurgical plant, its employees and its staff to produce any tungsten minerals which may be associated with these gold and silver ores. Thus there would be no delay should the exploratory activities within the Union Hill system (which can be connected underground with only a small amount of drifting) start the flow of the discovered minerals into the channels of defense.

2. That the tungsten is a bi-product of the gold and silver ores so that a much lower grade of tungsten concentrate per ton of rock mined can be taken than in the ordinary case where no gold and silver values are recoverable. Furthermore the yield of tungsten would not have to pay any part of the amortization costs of the current underground and surface mine and metallurgical plant.

The Management of this corporation feels confident that explorations within the UnionHill area will result in the discovery of ore bodies of gold, silver and scheelite which can be mined and milled at a profit and yield a substantial contribution of the scheelite concentrates to the defense effort. We are mindful of the possible accusation that this application is made for a selfish purpose in order to insure the company against another foreclosure either by its creditors or by another War Production Order, similar to L-208, but the answer by this corporation to any such allegations would be a clear denial that selfishness dominates this application. We are cognizant of the deplorable dearth of tungsten. We believe this problem of securing an adequate supply transcends all other current problems of our defense effort, the draft, price regulations, amortization of war facilities, the war in Korea, the war in Europe, the British-Iranian controversy, etc., etc. Furthermore, we believe that we are immune from any war production order which may close the gold and silver mines because within the very near future we will be a producer of tungsten which will be produced as a bi-product from gold and silver ores being mined currently from veins in the vicinity of the Union Hill system.

Finally, although it is true that the mining operations are at the present time, due to inflation and the fixed price of gold, unable to reflect any substantial profits to support any substantial exploratory program, the company is not operating at a loss and it will not be forced to close down by creditors even though this application is denied.

The application of this corporation made herein is for a delegation by you of experts to consider with our experts the merits of our request for an exploratory loan and should they be convinced there is merit in our petition that an exploratory program be designed and a program of financing such a project with company funds and your loans be drafted, that such a design and draft be incorporated in a formal application to your office for approval. Our experts who would collaborate with your experts in such an investigation would be Dr. Carleton Hulin, Mr. H.B. Menardi and the President of this company, Mr. Albert H. Crane.

From the standpoint of procedure we are considering your ruling dated July 3, 1951 signed by Mr. Tom Lyon (DMA-210) denying our application for an exploration loan to reopen the Union Hill shaft and to examine and sample for tungsten the Greek Tunnel Vein --- as final.

We trust you will consider this communication as a new and separate application and we respectfully request you to give it a careful review and pray that you may grant our application.

Very truly yours,

IDAHO MARYLAND MINES CORPORATION

By - (Sgd) Granville S. Borden

Vice-President and Member
of Executive Committee

cc: Defense Minerals Administration,
Attention: Mr. Tom Lyon, Director Supply Div.

Mr. H.C. Miller, 1012 Flood Bldg.

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

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUL 11 1951
SAN FRANCISCO, CALIFORNIA

July 3, 1951

Memorandum

To: Landon F. Strobel, Executive Secretary

Through: Director, Supply Division

From: Manganese Branch

Subject: DMA - 210 Tungsten, Idaho Maryland Mines Corporation, Russ Building, San Francisco, California

Refer to	Noted	Date
	Walter	7/12
Answered		

Property: Union Hill mine
Grass Valley, California

Copy to Bailey 7/12

Proposal: The Idaho Maryland Mines Corporation proposes to examine and sample for scheelite the Greek Tungsten vein beneath the abandoned Cambridge shaft. At an estimated cost of $25,000, the Union Hill shaft will be re-opened to the 300-level, which is connected with the bottom of the Cambridge shaft. A map of workings in 1917 (U.S. G.S. Prof. Paper 194) shows a crosscut 340 feet long extending southwest from the 300-level drift of the Union Hill vein at a point 580 feet northwest of the Union Hill shaft. According to this map, the Greek Tungsten vein was opened on this level by 250 feet of drifting. On the 200-level, it is opened by 730 feet of drifting, and on the 150 intermediate level, by 150 feet of drift.

It is believed that the veins of the Union Hill mine were explored at depth from the Brunswick mine.

Occurrence of tungsten

The dump of the Cambridge shaft contains about 500 tons of quartz that averages $3.00 per ton in gold and is estimated to contain 0.2 to 0.4 percent of WO_3 as scheelite. The tungsten content was not analyzed when the dump was sampled. The Cambridge shaft was only 300 feet deep and is now caved.

The map of workings, published in USGS Prof. Paper 194, p. 97, suggests that the Cambridge shaft was sunk on the Cambridge vein, not the Greek Tungsten vein, and that the vein was stopped extensively. A note in the files of the Geological Survey, written in 1917 by F. L. Hess, reported some tungsten between the 200 and 300 levels of the Cambridge vein.

The total production of tungsten from the Union Hill mine in the period 1915-19 was 2,400 units of WO_3. This output came from

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

the Greek Tungsten vein from above the 600 level down to the 800 level. The Greek vein was opened on the 200, 300, 600, 800, 1000 and 1200 levels, but was not extensively explored laterally.

Conclusions

Tungsten in the Union Hill mine was recognized in the period 1910-18, and it seems reasonable to believe that the workings were carefully inspected for scheelite concentrations. Any ore containing more than 1.0 percent would have been mined. The ore milled averaged about 1.5 percent WO_3.

Scheelite is known at many different places in the Grass Valley district, down to a mile in depth. Despite exposures in many hundred miles of workings, no commercial tungsten ore is known to exist in the district. Therefore, it seems unlikely that exploration solely for tungsten will be successful.

The condition of the Union Hill shaft and workings is unknown. Mill tailings were pumped into the shaft for a period, and may fill much of the workings. The mine is now watered. Therefore, it may not be possible to estimate closely the cost of reopening the shaft to the 300-level, plus opening 1170 feet of drift and crosscut to the Greek Tungsten vein and another 1040 feet to the Cambridge vein.

Recommendation

It is recommended that the request for a loan to reopen the Union Hill shaft be denied because the past history of the district does not indicate that a workable tungsten deposit will be found.

George B. Holderer
Chief, Tungsten Branch

Approved:

Tom Lyon

Director, Supply Division

DMLemmon:bl

CC: Adm. Reading File
Mr. Strobel
Mr. Holderer
Regional Field Team (2)
Mr. Lemmon
Files

...er to	Noted	Date
	Nilu	7/12
Answered		

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

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUL 11 1951
SAN FRANCISCO, CALIFORNIA

July 3, 1951

Idaho Maryland Mines Corporation
Russ Building
San Francisco, California

In reply please refer to
DMA-210 Tungsten

Gentlemen:

The Defense Minerals Administration has carefully reviewed your application for an exploration loan to reopen the Union Hill shaft and to examine and sample for tungsten the Greek tungsten vein.

Although scheelite occurs in many places in the Grass Valley district, no workable tungsten deposits have been found. The chance of finding an appreciable amount of tungsten ore as a result of the proposed reopening and examination appears to be remote. Therefore, we must deny your application.

Very truly yours,

Copy to Bailey 7/12

Tom Lyon

Tom Lyon
Director, Supply Division